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INTERNATIONAL METEOROLOGY

FOR THE MONTH OF JANUARY, and February 1882.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 1, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.13	765.2	63.0	17.2	86	sw.			3		0			0	0	clear	Moiroud.
Algiers			30.20	767.0	58.6	14.8	76	w.			1		0			0	0	clear	Nicolas.
La Calle			30.24	768.1	65.1	18.4	80	wnw.			2		1			0	0	pretty fair	Fonfréde.
Tunis			30.24	768.2															Jacques.
Sfax																			Gau.
Saida			30.22	767.6	50.4	10.2	58	w.			3		0			0	0	clear	Perès.
Tebessa			30.29	769.4	50.7	10.4	58	ssw.			1		0			0	0	clear	Derché.
Geriville					45.3	7.4	83	w.			1		2			0	0	fair	Lonchamp.
Laghouat			30.32	770.1	48.2	9.0	61	s.			1		0			0	0	clear	Herbin.
Biskra			30.30	769.5	56.1	13.4	69	se.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.81	757.2	29.90	759.4	51.5	10.8	75	sw.	14	6.3			4			0.02	0.5	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.59	751.6	30.17	766.2	37.4	3.0	93	e.			1		5			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.34	745.1	30.15	765.7	29.1	—1.6	100	wsw.	3.1	1.4			10			0	0		Dr. Wierzbiski.
Eperies	29.24	742.8	30.18	766.5	28.4	—2.0	96	s.			1		10			0	0		Julius Mikolik.
Gratz	28.82	732.1	30.13	765.2	32.9	0.5	78	s.			2		3			0	0		Andreas Rospini.
Hermannstadt	28.76	730.5	30.29	769.3	26.2	—3.2	87	se.			1		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.70	728.9	30.12	765.1	25.9	—3.4	98	ene.			1		10			0	0	dense fog	The Staff.
Lemberg	29.08	738.5	30.12	765.0	30.2	—1.0	69	e.			1		0			0	0		Dr. T. Stanecki.
Pola	30.04	763.0	30.15	765.9	51.6	10.9	93	calm			0		10			0	0		I. R. Hydrographic Office
Szathmar	29.74	755.3	30.21	767.3	32.2	0.1	90	e.			1		6			0	0		Joseph Midlinszky, S. J.
Szegedin	29.90	759.4	30.20	767.0	31.1	—0.5	94	ne.			3		3			0	0	light fog	Karl Stancel.
Trieste	30.09	764.3	30.19	766.9	48.9	9.4	92	calm			0		10			0	0		Rieder.
Vienna	29.41	747.0	30.17	766.4	27.9	—2.3	98	calm			0		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	29.35	745.5	29.45	748.0	40.0	4.4	81	w.	4	1.8			8			0.200	5.1	misty	W. Boswell.
Armagh, Observatory	29.40	746.7	29.64	752.8	40.4	4.7	79	ssw.	15	6.7									S. Call.
Bidston, Liverpool Obs'y			29.66	753.4	37.3	2.9	96	w.	22	9.8			10					raining	John Hartnup.
Bolton, Sharples	29.07	738.4	29.60	751.8	38.9	3.8	100	wsw.	18	8.0			10					raining	Thomas Mackereth.
Bradford, Yorkshire																0.39	9.9		J. McLandsborough, F.R.A.S.
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	83.0	28.3	70	ne.			2		6					gloomy	Pvt. J. Surgenor.
Cardington			29.72	754.9	45.0	7.2	88	s.			1.0		10					overcast	John McLaren.
Chatham, School M. E.	29.72	754.9	29.86	758.4	49.1	9.5	77	sw.			4		3					d. clouds	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.58	751.3	29.81	757.2	45.9	7.7	93						10					raining	The Staff.
Fort Napier, Natnl	27.69	703.3	29.90	759.4	63.4	17.4	93	ne.			3		9					overcast	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.68	753.9	29.91	759.7	86.0	30.0	55	sw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			29.67	753.6	46	7.8	92	sw.			3		10			0.17	4.3	raining	J. O'Donaghue.
Gibraltar, Mediterranean	30.04	763.0	30.09	764.3	60.4	15.8	87	e.			4		7					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	29.26	743.2	29.46	748.3	38.9	3.8	90	sw.			4		8 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.64	752.8	29.82	757.4	48.1	8.9	81	ssw.			3		9					cloudy	The Staff.
Guernsey	29.58	751.3	29.88	758.9	46.5	8.1	96	s.			1		8					overcast	A. Collenette, F. M. S.
Kew, Observatory	29.78	756.4	29.82	757.4	47.2	8.4	84	ssw.	24	10.7			10					threatening	The Staff.
Leicester, Museum	29.37	746.0	29.63	752.6	46.0	7.8	92	sw.			4		10					drizzling	J. C. Smith.
Malta, Mediterranean	30.13	765.3	30.21	767.3	64.8	18.2	65	se.			2		2					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.16	766.1	30.20	767.1	62.5	16.9	71	sw.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.14	740.1	29.67	753.6	45.0	7.2	93	s.			3		10					raining	John Mac Email.
Oxford, Radcliffe Obs'y	29.52	749.8	29.75	755.6	46.7	8.2	81	s.			4		10					squally	The Staff.
Plymouth	29.71	754.6	29.79	756.7	49.8	9.9	95	s.			2		10					raining	John Merrifield.
Sandwick Manse, Orkneys			29.33	745.0	41	5.0	87	wsw.	28	12.5			7					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.17	766.3	30.23	767.8	50.2	10.1	73	sw.			2		1					blue sky	W. H. Lyne
Sheffield	29.32	744.7	29.60	751.8	45.0	7.2	99	s.			2		10			0.07	1.8	raining	W. F. Cooper.
Silloth Rectory	29.55	750.6	29.58	751.3	35.5	1.9	96	w.			3		4			0.286	7.3	raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.62	752.3	37.5	3.1	85	w.	20	8.9			10					raining	Rev. S. J. Perry.
Stratfield Turgiss	29.58	751.3	29.80	756.9	46.4	8.0	91	sw.			2		10					drizzling	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.78	756.4	29.86	758.4	52	11.1	79	sw.			6		10					raining	W. Newcombe.
Valencia, Observatory	29.80	756.9	29.82	757.4	47.7	8.7	74	w.	20	8.9			10					d. clouds	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.60	751.8	29.64	752.8	32	0.0	77	sw.	9	4.0			10 s			0.030	0.8	cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	29.50	749.3	29.56	750.8	28	— 2.2	77	s.	7	3.1			10 ks		s.	0	0	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.59	751.6	29.61	752.1	15	— 9.4	83	nw.	35	15.6			10 n		w.	inap.	inap.	light snow	J. McWilliams.
Fort Garry, Manitoba*	29.43	747.5	30.41	772.4	—20	—28.9	100	s.	4	1.8		0	0			0	0	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.62	752.3	29.76	755.9	34	1.1	81	s.	8	3.6			10 k			0.027	0.7	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.58	751.3	29.94	760.5	9	—12.8	69	n.	5	2.2			10 s			0.10	2.5	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.67	753.6	29.89	759.2	4	—15.6	96	nw.	18	8.0		0	0			0.01	0.3	clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.28	743.7	30.07	763.8	— 8	—22.2	58	n.	6	2.7		0	0			0.08	2.0	clear	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.17	740.9	29.91	759.7	19	— 7.2	85	ne.	8	3.6		10 k	0	w.		inap.	inap.	cloudy	H. Morgan.
Port Stanley, Ontario	29.24	742.7	29.92	760.0	19	— 7.2	84	n.	6	2.7			10 n		nw.	inap.	inap.	cloudy	M. Payne.
Quebec, Quebec*	29.40	746.7	29.75	755.6	8	—13.3	91	w			1		10 n		calm	0.20	5.1	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.49	749.0	30.01	762.2	— 9	—22.8	82	calm	0	0		0	0			0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.22	742.2	30.00	762.0	7	—13.9	96	ne.	13	5.8			10 s			0.35	8.9	cloudy	K. Stewart.
St. Andrews, N. B.	29.60	751.8	29.65	753.1	30	— 1.1	74	wnw.	8	3.6		0	0			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	29.68	753.9	29.75	755.6	34	1.1	82	sw.	12	5.4		0	5 ks		sw.	0	0	fair	T. C. Hill, C. E.
Toronto, Ontario*	29.55	750.6	29.97	761.2	8	—13.3	80	n.	30	13.4			10 n		w.	0.16	4.1	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	29.69	754.1	29.76	755.9	35	1.7	85	w.	22	9.8		8 k	0	w.		0.05	1.3	fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.68	753.9	29.94	760.5	36	2.2	100	sw.	0	0		fg.	fg.			0.35	8.9	raining	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Cape St. Francis Lt. House	30.13	765.3	30.16	766.1	69.6	20.9	75	e.	17.1	7.6			10 s			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.98	761.5	30.02	762.5	77.8	25.4	63	ssw.	32	14.3		2	2			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Sub-Series.																			
Hankow	30.38	771.6	30.67	779.0	39.1	3.9	74	ese.			2		5			0	0	½ covered	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.52	775.1	30.54	775.8	32.0	0.0	85	ese.	1.8	0.8		0	0			0	0	clear	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Clouds. Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.94	760.5	29.99	761.7	37.8	3.2	97	s.	18	8			10					foggy	Oversergent Fischer.
Fanöe	29.84	757.8	29.85	758.3	37.0	2.8	96	s.			4		2						Overloerer Lauridsen.
Godthaab, Greenland	29.29	744.0	29.34	745.1	13.6	—10.2	90	nne.			4		1						S. Kleinschmidt.
Stykkisholm, Iceland	29.11	739.3	29.15	740.4	28.0	—2.2		e.			2		0						A. O. Thorlacius.
Thorshavn	29.05	737.9	29.09	738.8	35.6	2.0	87	wnw.	18	8			4						Overloerer Bergh.
Vestervig	29.73	755.2	29.82	757.5	38.3	3.5	98	s.			6		10					foggy	Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.30	744.3	29.98	761.4	43.9	6.6	91	sse.			1	0	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.44	747.8	29.99	761.8	32.0	0.0	81	n.			2					0	0		M. Nicot, Director.
Arras, Engineer School	29.70	754.3	29.96	761.0	40.5	4.7	93	ssw.			2	c	k		se.	0	0		M. Klein, Commandant.
Avignon, Normal School	30.00	762.0	30.08	764.0	53.6	12	67	ese.			1		5		sse.	0.020	0.5	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.48	748.7	30.05	763.2	44.6	7.0	77	se.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	29.74	755.4	30.02	762.4	37.8	3.2	91	ssw.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.13	765.2	36.5	2.5	93	n.			1		0			0	0		M. Gobin, Director.
Bordeaux, Observatory	29.76	755.9	30.03	762.8	39.7	4.3	97	se.			1		fg			0.008	0.2	dense fog	M. Rayet, Director.
Bourges, Normal School	29.47	748.4	30.02	762.5	52.7	11.5	86	se.			1		1		se.	0	0	clear	M. Postel, Director.
Brest, Naval Observatory	29.69	754.1	29.93	760.3	49.3	9.6	95	sw.			1		10		sw.	0	0		M. de Kennaree, Dir.
Caen, Normal School	29.85	758.3	29.93	760.3	40.6	4.8	81	s.			1		2		ssw.	0	0	slightly cl'dy.	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.79	756.6	30.11	764.9	44.2	6.8	74	ssw.			1	1	1	se.	se.	0	0	clear	M. Jadot, Director.
Charleville, Normal School	29.52	749.7	30.09	764.3	42.4	5.8	61	e.			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.67	728.1	30.03	762.8	51.3	10.7	63	s.			2		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.25	743.0	30.14	765.6	36.5	2.5	97	ese.			1		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.18	741.2	30.10	764.6	41.0	5.0	78	e.			1	2 c		e.	e.	0	0	slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.53	699.3	30.15	765.9	37.4	3.0	72	n.			2		4		s.	0.35	9.		M. Jeangirard, Director.
Grésque, du. Rhone	28.98	736.0	30.12	765.0	49.5	9.7	58	se.			2		10		se.	0.598	15.2	covered	M. Kina, Director.
Grenoble, Normal School	29.35	745.5	30.15	765.9	37.0	2.8	86	ese.			1		cn			0	0		M. Ablard, Director.
Guéret, Normal School	28.43	722.0	30.05	763.3	47.3	8.5	52	sw.			1		2			0	0	slightly cl'dy	M. Rivoire, Director.
Lamballe, Normal School	29.67	753.5	29.94	760.5	44.1	6.7	97	se.			1		2		se.	0	0	light fog	M. Ollitrault, Director.
Lescar, Normal School	29.47	748.6	30.04	763.0	54.3	12.4	43	nne.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.90	759.5	30.00	762.1	52.7	11.5	86	se.			1		8		se.	0	0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.04	737.6	30.13	765.3	43.2	6.2		ese.			1		0			0	0	foggy	M. André, Director.
Mans, Normal School	29.72	754.8	30.04	762.9	41.7	5.4	98	s.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	29.82	757.5	30.10	764.4	53.2	11.8	76	se.			0.1		5		ssw.	0.256	6.5		M. Stephan, Director.
Montlouis l'Instituteur	24.76	628.9	29.60	751.9	34.7	1.5	69	sw.	15.0	6.7			5		w.				M. Cave, for Dr. Fines.
Montpellier, Normal School	29.93	760.3	30.04	763.1	53.6	12	86	ne.			3		10		se.	0.571	14.5	light rain	M. Galzin, Director.
Nancy, Normal School	29.31	744.4	30.13	765.2	35.2	1.8	93	nw.			1	0	0			0	0	foggy	M. Hasse, Director
Nantes, Observatory	29.85	758.1	30.01	762.2	48.0	8.9	78	se.			0–1	8 c	0			0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	29.93	760.3	30.05	763.2	48.7	9.3	84	calm	0	0			1			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.20	538.5			21.6	—5.8		n.			1		0			0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.03	737.3	30.11	764.8	48.2	9.0	65	n.			1			n.	n.	0	0		M. Tallieu.
Puy de Dôme Obs'y, Summit	25.09	637.2			32.0	0.0	97	s.			3		8		ssw.	0.012	0.3	¾ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.00	762.1	30.04	762.9	48.4	9.1	81	calm			0		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.72	754.8	29.94	760.4	44.6	7	83	s.			1		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	27.92	709.1	30.13	765.2	41.7	5.4	66	se.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	29.88	759.0	29.93	760.2	38.5	3.6	90	nnw.			1		5			0	0	cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.81	757.1	29.97	761.1	46.6	8.1	90	sw.			1		5		sw.	0.098	2.5	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.85	758.3	30.02	762.5	43.9	6.6	74	ssw.			1		0			0	0	clear	M. Renou, Director.
Toulouse, Observatory	29.35	745.4	30.07	763.8	42.8	6.0	100	se.			1		0			0	0	clear	M Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.51	749.5	30.00	762.0	43.5	6.4	82	sw.			2					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series. Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.23	742.4	30.08	764.1	26.6	—3.0	88	calm			0	0	5s			0	0	foggy	Prof. Dr. Hoh.
Berlin	29.85	758.1	30.03	762.8	34.0	1.1	83	s.			1		3			0	0		Prof. Dr. Arndt.
Breslau	29.55	750.6	30.08	764.1	30.9	—0.6	83	ssw.			2		2			0	0		Royal University Obs'y.
Carlsruhe	29.66	753.4	30.13	765.2	25.2	—3.8	100	s.			1		10			0	0	dense fog	Albert Senz.
Cassel	29.29	743.9	30.00	762.0	30.9	—0.6	86	s.			2		2	s.		0	0		Dr. H. Möhl.
Frankfort on the Main	29.73	755.2	30.12	765.1	25.7	—3.5	95	ssw.			1		10			0	0		Physical Society.
Friedrichshafen	28.64	727.4	30.15	765.8	29.1	—1.6	100	ne.			1		10			0	0	foggy	Wilhelm, Chief Tel.
Hamburg	29.89	759.2	29.98	761.6	32.7	0.4	96	sse.			2		3	sw.		0	0	hazy	E. Preller.
Kiel	29.95	760.6	29.96	761.0	36.7	2.6	84	ssw.			2		3			0.004	0.1		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.62	752.4	30.06	763.5	33.3	0.7	76	s.			1		5	s.		0	0		H. Leppig, Asst.
Magdeburg	29.84	757.9	30.04	763.0	30.2	—1.0	98	e.			1	6 c	0			0	0	dense fog	Dr. Assmann.
Memel	30.02	762.5	30.07	763.7	38.8	3.8	78	w.			3		10 s						Issermann.
Munich	28.21	716.4	30.07	763.8	24.6	—4.1	95	n.			1		0			0	0	foggy	Central Station.
Neufahrwasser	30.06	763.4	30.09	764.3	34.3	1.3	94	s.			1		10			0.016	0.4	foggy	A. Lothes.
Neustadt, Palatinate	29.56	750.9	30.09	764.3	24.1	—4.4		w.			1		10			0	0		Dicknether.
Stuttgart	29.11	739.3	30.04	763.1	31.6	—0.2	78	ne.			1		4	sw.		0	0		Prof. Dr. Schoder.
Wustrow	29.99	761.8	30.02	762.4	33.3	0.7	96	se.			2		5			0.020	0.5		Profs. Brandes & Reimer
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.89	759.3	30.29	769.4	55.3	12.9		n.			0.5		4			0.012	0.3	misty	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Deesa	29.52	749.7	29.99	761.7	82.7	28.2	46	sw.	8.5	3.8						0	0	blue sky	
Bombay	29.88	759.0	29.92	760.0	83.7	28.7	65	nw.	14	6.3		0				0	0	blue sky	
Poona, Yarrowda	28.07	712.9	29.91	759.6	85.3	29.6	20	e.	9	4.0		0				0	0	blue sky	
Belgaum	27.38	695.5	29.91	759.8	78.5	25.8	47	ne.	10	4.5		3		ne.		0	0	d clouds	
Lahore	29.29	744.0	30.07	763.7	62.6	17.0	47	calm	0.3	0.1		0				0	0	blue sky	
Roorkee	29.11	739.5	30.04	763.1	67.2	19.6	37	nw.	2.5	1.1		0				0	0		
Agra	29.50	749.3	30.08	764.2	69.2	20.7	40	nw.	3.3	1.5		0				0	0		
Nagpur	28.96	735.6	30.01	762.3	79.0	26.1	37	calm	2.8	1.2		0				0	0	blue sky	
Jubbulpore	28.73	729.8	30.14	765.5	64.9	18.3	37	calm	0.7	0.3		0				0	0	blue sky	
Lucknow	29.61	752.1	30.00	761.9	70.2	21.2	46	wsw.	4.6	2.1		0				0	0	blue sky	
Allahabad	29.74	755.5	30.07	763.8	65.8	18.8	66	calm	1.3	0.6		0				0	0	blue sky	
Patna	29.89	759.1	30.08	764.0	69.1	20.6	47	w.	2.3	1.0		0				0	0	blue sky	
Hazaribagh	28.01	711.4	30.08	763.9	66.6	19.2	40	nw.	4.7	2.1		0				0	0	blue sky	
Cuttack	29.99	761.7	30.07	763.8	72.0	22.2	63	ene.	0.6	0.3		1				0	0	blue sky	
Calcutta, Alipore	30.04	763.0	30.06	763.5	66.5	19.2	79	nne.	1.0	0.4		0				0	0	blue sky	
Dhubri	29.93	760.2	30.05	763.3	68.2	20.1	60	calm	2.8	1.2		0				0	0	blue sky	
Chittagong	29.95	760.8	30.05	763.2	69.9	21.1	89	w.	1.7	0.8		2				0	0	blue sky	
Sibsagar	29.73	755.1	30.08	764.1	60.3	15.7	85	ne.	1.7	0.8		0				0	0	blue sky	
Jeypore	28.59	726.1	30.06	763.6	72.1	22.3	42	w.	2.9	1.3		0				0	0	blue sky	
Zanzibar, Africa	29.89	759.2			82.6	28.1	78	sw.	2.8	1.3		4				0.03	0.8	d. clouds	
Trichinopoly	29.65	753.1			80.4	26.9	80	sse.	1	0.4		4				0	0	d. clouds	
Bellary	28.45	722.6			84.0	28.9	47	se.	4.1	1.8		4 k	6	wnw.		0	0	gloomy	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.77	756.1	30.19	766.8	47.1	8.4	85	calm	0	0			9			0	0		Prof. Giovanni Clodig.
Milan	29.67	753.6	30.21	767.3	37.0	2.8	97	w.	1.7	0.8			10			0.130	3.3		Prof. Schiaparelli.
Padua	30.28	769.0	30.39	771.9	41.4	5.2	98	n.	8.7	3.9			10			0.051	1.3		Prof. Dott. Lorenzoni.
Moncalieri	29.25	743.0	30.21	767.2	39.9	4.4	92	nw.	3.1	1.4			10			0.217	5.5		Prof. P. F. Denza.
Genoa	29.96	761.0	30.16	766.0	44.6	7.0	77	n.	4.2	1.9			10	sw.		0.598	15.2		Prof. G. M. Garibaldi.
Mondovi	28.22	716.9	30.22	767.5	39.7	4.3	82	w.			2		7			0	0		Prof. D. C. Bruno.
Pesaro	30.12	765.1	30.17	766.4	41.5	5.3	95	n.	3.1	1.4			10			0	0		Prof. Luigi Guidi.
Florence	29.91	759.8	30.18	766.5	50.5	10.3	90	n.			2		10			0.197	5.0		Prof. Costantino Pitter.
Leghorn	30.06	763.4	30.14	765.6	49.3	9.6	84	e.	8.0	3.6			9	s.		0.307	7.8		Prof. P. Monte.
Rome	29.96	761.0	30.14	765.5	54.0	12.2	79	calm	0	0			9			0.768	19.5		Prof. P. S. Ferrari.
Lecce	30.01	762.3	30.27	768.9	57.6	14.2	74	sse.	11.2	5.0			7	s.		0	0		Prof. C. de Giorgi.
Cosenza	29.33	745.0	30.24	768.1	55.8	13.2	69	sse.	3.1	1.4			10	se.		0	0		Prof. D. Conti.
Cagliari	29.93	760.3	30.13	765.2	59.0	15.0	70	s.			2		6	nw.		0	0		Prof. A. Pacinotti.
Palermo	29.95	760.7	30.20	767.1	52.7	11.5	88	nw.	11.2	5.0			10	wsw.		0	0		Prof. G. Ciaccialore.
Syracuse	30.17	766.3	30.21	767.4	58.8	14.9	86	se.	4.2	1.9			9	s.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.66	753.3	30.19	766.9	54.5	12.5	82	nw.	7.4	3.3			10	sw.		0.264	6.7		Prof. T. Brioschi.
Stelvio	22.13	562.2			22.6	— 5.2	85	e.			2		10			0.236	6.0	misty	Prof. P. F. Denza.
Valdobbia	22.13	562.2			24.3	— 4.3	71	se.			2		10			0	0	covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.14	765.5	30.17	766.3	25.0	— 3.9	92	sw.					10 n					snowing	
Hakodate	30.11	764.8	30.12	765.0	24.3	— 4.3	64	nw.	2.4	1.1			9			0	0	overcast	
Hiroshima, I. M. Obs'y	30.30	769.6	30.32	770.1	39.3	4.1	81	ne.	3.1	1.4		ck	10 s			0	0	covered	K. Sasaki.
Kanazawa	30.40	772.1	30.51	774.9	32.4	0.2	96					ck	10 s		w.			cloudy	S. Endo.
Kioto	30.13	765.3	30.31	769.9	37.2	2.9	85	w.	0.8	0.4			10 s		s.	0.020	0.5	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.18	766.6	30.39	771.9	33.9	1.1	84	n.	0.4	0.2		0	0			0	0	clear	S. Takehayashi.
Neegata	30.23	767.8	30.27	768.8	37.2	2.9	62	wnw.	13.5	6.0		8 ck	0	w.		0.035	0.9	cloudy	
Nobiru	30.17	766.3	30.19	766.8	25.5	— 3.6	89	nnw.	4.4	2.0		ck	6 s	nw.		0	0	fair	H. Midzushina.
Supporo					22.5	— 5.3	47	w.	12.0	5.4			10			0.025	0.6	covered	
Tokei Obs'y, Yeddo	30.16	766.0	30.23	767.8	32.5	0.3	64	nnw.	3.5	1.6		0	0			0	0	clear	The Staff.
Wakayama	30.27	768.8	30.33	770.4	39.4	4.1	75	se.	1.3	0.6		ck	10 ks		s.	0	0	cloudy	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.86	758.4	30.04	763.0				e.	18.5	8.3						0.02	0.5		Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.76	603.5	29.98	761.5	47.3	8.5	58	calm	0	0		8 cs	0			0	0	foggy	Vicente Fernandez.
Leon	24.53	623.0	30.46	773.7	42.5	5.8	82	nw.			2	4 c	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.72	754.9	29.98	761.6	65.5	18.6	63	e.			1	1 cs	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.16	588.4	30.43	772.9	37.8	3.2	58	calm	0	0		0	0			0	0	fair	The Staff.
Morelia	24.01	609.9	30.16	766.2	50.5	10.3	54	sw.			1	2	3 ks	sw.	sw.	0.01	0.3	fair	M. Tena, M. D.
Pabellon, Aguascalientes	24.01	609.8	30.19	766.7	37.9	3.3	71	calm			0	0	0			0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.47	596.1	30.52	775.1	37.0	2.8	69	n.	0.2	0.1		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.29	617.1	30.07	763.7	39.5	4.2	53	ne.			1	4 c	0	w.		0	0	clear	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz													2 s						Prof. J. Rossell.
Zacatecas	22.61	574.5	30.44	773.2	41.4	5.2	64					0	2 s		w.	0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.93	760.1	29.93	760.1	41.0	5.0		s.			4					0	0		
Groningen	29.85	758.2	29.91	759.6	38.5	3.6		s.			1					0	0		
Helder	29.87	758.6	29.87	758.6	38.5	3.6		s.			4					0.079	2.0		
Hellevoetsluis	29.91	759.8	29.91	759.8	39.6	4.2	95	ssw.			3					0	0		
Utrecht	29.88	758.9	29.93	760.1	40.5	4.7	84	s.			2		2			0	0	lightly cl'dy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.44	747.8	29.50	749.4	42.8	6.0	70	s.	27	12			10			0.843	21.4		
Brono	29.60	751.9	29.64	752.9	27.0	— 2.8	53	e.	9	4			10			0.087	2.2		
Christiania	29.63	752.5	29.78	756.4	30.0	— 1.1	96	calm	0	0			10			0	0	foggy	
Gjæsvær	29.74	755.5	29.77	756.1	21.6	— 5.8		sw.			4		0						
Lodingen	29.77	756.1	29.82	757.3	13.3	—10.4	83	ne.			2		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					57.2	14.0	78	nnw.	9.8	4.4			4			0	0		Dr. J. A. Sampaio.
Campo Major	28.97	735.7	29.98	761.4	53.2	11.8	76	se.	4.9	2.2			10			0.205	5.2		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.82	757.5	29.91	759.8	61.2	16.2	50		0.7	0.3			6			0.197	5.0	raining	Capt. D. A. de Cunha.
Lisbon, Observatory	29.54	750.4	29.91	759.6	54.7	12.6	91	se.	3.8	1.7			10			0.555	14.1		The Staff.
Ponta Delgada, Azores	30.27	768.9	30.34	770.7	56.8	13.8	84	nne.	22.4	10.0			3			0.098	2.5		
Saint Paul de Loando	29.66	753.3	29.86	758.4	80.6	27.0	96	w.	2.5	1.1			1	sse.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.62	726.9	29.81	757.2	— 1.8	—18.8		wsw.	13	6		0	5 ks			0.031	0.8		Major K. Lasarew.
Archangel	29.85	758.3	29.87	758.8	0.1	—17.7	89	calm	0	0			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.37	771.3	30.28	769.2	34.7	1.5	91	sw.	9	4		10 cp	0			0.031	0.8	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.01	736.9	29.54	750.2	21.0	— 6.1	88	wsw.	13	6			10			0.043	1.1		Meteorological Obs'y.
Dorpat	29.68	753.9	29.93	760.3	34.2	1.2	94	wsw.	9	4			10 s			0.059	1.5		Observatory.
Ekaterinburg	28.61	720.8	29.65	753.2	0.1	—17.7	79	wnw.	7	3			2 s			0	0		Meteorological Obs'y.
Kasan	29.58	751.3	29.88	758.9	1.2	—17.1	84	n.	2	1			0			0.004	0.1		Observatory.
Kertch	30.21	767.3	30.23	767.8	45.3	7.4	88	calm	0	0			10 n			0	0		Lagorio & Sastyrez.
Kieff	29.41	747.0	30.08	764.0	29.1	— 1.6	88	wsw.	7	3		c	1 ks			0	0		Observatory.
Lugan	29.95	760.8	30.17	766.2	30.9	— 0.6	85	w.	9	4			10			0	0		Meteorological Obs'y.
Moscow	29.33	745.0	29.82	757.5	35.1	1.7	82	s.	7.8	3.5			10 s			0	0		Meteorological Obs'y.
Nikolaiev	30.16	766.1	30.23	767.9	35.6	2.0	96	calm	0	0			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor.	29.73	755.1	29.82	757.3	— 9.4	—23.0	71	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.25	768.4	30.39	772.0	24.4	— 4.2	57	calm	0	0			0			0	0		Physical Observatory.
St. Petersburg	29.74	755.5	29.76	755.9	32.5	0.3	80	nw.	20	9			10ks;n			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.82	732.1	30.49	774.5	32.7	0.4	96	calm	0	0			10			0.118	3.0	snowing	Teich, A. M.
Tiflis	29.02	737.0	30.49	774.4	45.5	7.5	57	se.	2	1			0			0	0		Physical Observatory.
Warsaw	29.65	753.2	30.10	764.5	31.6	— 0.2	87	sw.	2	1			10k;ks						Astronomical Obs'y.
Wilna	29.66	753.3*	30.10	764.4	33.4	0.8	94	sw.	2	1			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.30	744.2	29.60	751.9	14.7	— 9.6	89	s.	4	2			10			0.020	0.5		M. O. Marks
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.34	745.2	45	7.2	92	s.			4		10			0.5	13.	gloomy	J. Youngclause.
North Unst, Shetland Isl'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.93	760.3	30.03	762.8	54.0	12.2	51	sw.	2.7	1.2			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.93	760.1	29.98	761.6	58.8	14.9	48	se.	4.5	2.0		3	2	e.		0	0	cloudy	Prof. Manuel de Naverau.
Burgos, Met. Obs'y	27.00	687.3	30.09	764.3	46.0	7.8	61	s.	6.3	2.8		0	8			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.85	707.5	30.14	765.6	45.0	7.2	80	ne.	5.6	2.5		0	9			0.004	0.1	almost cov'd	The Staff.
Murcia, Met. Obs'y	30.00	762.1	30.15	765.9	54.3	12.4	70	w.	0.9	0.4		2	3	e.		0	0	clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.97	735.7	29.89	758.4	57.0	13.9	67	se.	8.7	3.9		4	4	s.		0.039	1.0	almost cov'd	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.08	764.1	30.15	765.9	57.0	13.9	85	ese.	3.6	1.6		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.95	760.8	30.01	762.2	78.0	25.6	80	ene.	0	0		0	1 ck			0.232	5.9	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.93	760.3	30.03	762.8	60.4	15.8	65	ese.	15.5	6.9		4	6	sw.	se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	29.99	761.8	30.08	764.1	69.8	21.0	95	calm	0	0		6 ks	2 k	se.	se.	0	0		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Ids	29.93	760.2	30.06	763.5	73.9	23.3	91	nw.	6.3	2.8			10 k		ne.	inap.	inap.	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.01	762.2	30.05	763.2	— 5.8	—21.0	86	n.			2		0			0.087	2.2		
Umea	30.02	762.5	30.07	763.8	13.3	—10.4	93	nnw.			2		10			0	0		
Hernosand	29.95	760.6	30.00	761.9	18.9	— 7.3	87	calm			0		10			0	0		
Stockholm	29.77	756.1	29.95	760.6	30.9	— 0.6	92	e.			2		10			0	0		
Wisby	29.88	759.0	29.94	760.5	37.4	3.0	93	w.			2		5			0	0		
SUB-SERIES.																			
Upsala	29.85	758.3	29.94	760.5	29.5	— 1.4	92	ene.	4.5	2.0			5	wsw.	e.	0.012	0.3		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.69	728.6	30.20	767.0	26.8	— 2.9	100	calm			0					0	0	foggy	The Observatory
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.29	769.4	50.0	10.0	63	sw.	9	4.0			0			0	0		The Observatory.
Valona			30.28	769.2	59.5	15.3		w.			1		5			0	0	cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.29	769.4	62.8	17.1	68	n.			1	0	0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	29.81	757.2	29.99	759.4	29	— 1.7	77	ne.	5	2.2		0	5 ks		nw.	0	0	fair	
Alpena, Michigan	29.37	746.0	30.08	764.0	7	—13.9	76	nw.	12	5.4			10 s			0.17	4.3	cloudy	
Atlanta, Georgia	28.72	729.5	29.95	760.7	32.0	0.0	78	nw.	23	10.3			10 k		nw.	0.03	0.8	cloudy	
Atlantic City, New Jersey	29.91	759.7	29.92	760.0	26	— 3.3	77	sw.	2	0.9		0	8 s			0	0	cloudy	
Augusta, Georgia	29.62	752.3	29.82	757.4	42.3	5.7	74	w.	12	5.4			10 s		w.	0.05	1.3	cloudy	
Baltimore, Maryland	29.86	758.4	29.91	759.7	30	— 1.1	68	calm	0	0			10 s			0	0	cloudy	
Barnegat, New Jersey	29.89	759.2	29.91	759.7	23.0	— 5.0	88	w.	4	1.8		0	2 k		w.	0	0	clear	
Bismarck, Dakota	28.21	716.5	30.21	767.3	3	—16.1	76	e.	12	5.4			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.36	694.9	30.29	769.4	22	— 5.6	91	nw.	2	0.9			10 s		calm	0	0	cloudy	
Boston, Massachusetts	29.68	753.9	29.84	757.9	27.3	— 2.6	76	w.	13	5.8		0	8 s		w.	0	0	cloudy	
Brownsville, Texas	30.22	767.6	30.27	768.8	49	9.4	100	n.	4	1.8		0	0			0	0	clear	
Buffalo, New York	29.13	739.9	29.93	760.2	16	— 8.9	83	ne.	5	2.2			10 n			0.19	4.8	light snow	
Burlington, Vermont	29.58	751.3	29.89	759.2	15.0	— 9.4	67	nw.	9	4.0			10 s		w.	inap.	inap.	cloudy	
Cairo, Illinois	29.89	759.2	30.31	769.9	15.5	— 9.2	83	nw.	10	4.5		0	0			0	0	clear	
Campo, California	27.51	698.7	30.14	765.5	28.6	— 1.9	39	nw.	3	1.3		2 c	0	e.		0	0	clear	
Camp Thomas, Arizona	27.44	697.0	30.27	768.8	29	— 1.7	80	calm			0	2 cs	0			0	0	clear	
Cape Henry, Virginia	29.81	757.2	29.83	757.7	37	2.8	72	n.	5	2.2			10 s			0	0	cloudy	
Cape May, New Jersey	29.86	758.4	29.90	759.4	27	— 2.8	77	ne.	7	3.1			10 s			0.10	2.5	cloudy	
Castroville, Texas	29.39	746.5	30.24	768.1	42	5.6	65	nw.	3	1.3		0	0			0	0	clear	
Cedar Keys, Florida	29.87	758.7	29.89	759.2	58	14.4	86	w.	12	5.4		0	4 s		w.	0.32	8.1	fair	
Champaign, Illinois	29.29	744.0	30.16	766.1	12.3	—10.9	80	nw.	11	4.9		0	0			0	0	clear	
Charleston, S. Carolina	29.66	753.4	29.72	754.9	51	10.6	80	w.	20	8.9			10 n		w.	0.18	4.6	light rain	
Charlotte, N. Carolina	28.87	733.3	29.76	755.9	29.0	— 1.7	100	n.	6	2.7			10 n			0.08	2.0	light snow	
Chattanooga, Tennessee	29.20	741.7	30.06	763.5	25.0	— 3.9	73	nw.	15	6.7			10 ks		nw.	0.09	2.3	cloudy	
Cheyenne, Wyoming	23.92	607.6	30.17	766.3	48.8	9.3	6	nw.	34	15.2			10 s			0	0	cloudy	
Chicago, Illinois	29.36	745.7	30.11	764.8	18.8	— 7.3	85	nw.	12	5.4		0	1 s			inap.	inap.	clear	
Chincoteague, Virginia	29.86	758.4	29.88	758.9	32	0.0	50	e.	10	4.5		4 cs	5 s	w.		0	0	cloudy	
Cincinnati, Ohio	29.37	746.0	30.06	763.5	21	— 6.1	84	nw.	5	2.2			10 s			0.01	0.3	cloudy	
Cleveland, Ohio	29.14	740.1	29.92	760.0	22.3	— 5.4	96	w.	7	3.1			10 s		w.	0.03	0.8	cloudy	
Coleman City, Texas	28.42	721.9			31	— 0.6	81	n.	8	3.6		6 cs	0			0	0	fair	
Columbus, Ohio	29.08	738.6	29.98	761.5	21	— 6.1	84	nw.	7	3.1			10 n			0.03	0.8	light snow	
Concho, Texas	28.26	717.8	30.28	769.1	35	1.7	89	calm	0	0		0	0			0	0	clear	
Davenport, Iowa	29.55	750.6	30.26	768.6	12	—11.1	61	nw.	12	5.4		0	0			0	0	clear	
Dayton, Washington T'y	28.38	720.8	30.18	766.6	41.8	5.4	93	sw.	1	0.4			10 s			0.04	1.0	cloudy	
Deadwood, Dakota	25.21	640.3	30.16	766.1	45	7.2	39	calm	0	0		0	0			0	0	clear	
Decatur, Texas					28	— 2.2	54	n.	6	2.7		0	4 s			0	0	fair	
Delaware Breakwater, Del.	29.87	758.7	29.89	759.2	32	0.0	88	ne.	8	3.6		3 c	6 s	w.	sw.	0	0	cloudy	
Denison, Texas	29.47	748.5	30.31	769.9	29.0	— 1.7	77	n.	6	2.7		0	0			0	0	clear	
Denver, Colorado	24.69	627.1	30.21	767.3	43.0	6.1	36	s.	8	3.6			10 s		calm	0	0	cloudy	
Des Moines, Iowa	29.36	745.7	30.33	770.4	7	—13.9	76	nw.	4	1.8		0	4 s		nw.	0.08	2.0	fair	
Detroit, Michigan	29.26	743.2	30.02	762.5	21.0	— 6.1	84	nw.	12	5.4			10 s		calm	0.15	3.8	cloudy	
Dodge City, Kansas	27.54	699.5	30.29	769.4	18.5	— 7.5	71	se.	5	2.2		0	0			0	0	clear	
Dubuque, Iowa	29.50	749.3	30.27	768.8	7.6	—13.6	58	nw.	5	2.2		0	0			0	0	clear	
Duluth, Minnesota	29.55	750.6	30.31	769.9	— 8	—22.2	78	nw.	13	5.8		10 cs	0	nw.		0	0	cloudy	
Eagle Pass, Texas	29.40	746.7	30.24	768.1	40.1	4.5	82	calm	0	0		0	0			0	0	clear	
Eagle Rock, Idaho	25.42	645.7	30.38	771.6	11	—11.7	66	n.	8	3.6			10 s		w.	0	0	cloudy	
Eastport, Maine	29.62	752.3	29.69	754.1	29.5	— 1.4	72	sw.	10	4.5		5 c	5 s	w.	sw.	0.02	0.5	cloudy	
El Paso, Texas	26.42	671.1	30.30	769.6	31.4	— 0.3	52	w.	3	1.3		0	2 ks			0	0	clear	
Erie, Pennsylvania	29.12	739.6	29.90	759.4	24	— 4.4	88	sw.	3	1.3			10 s			0.42	10.7	cloudy	
Escanaba, Michigan	29.43	747.5	30.15	765.8	11	—11.7	91	nw.	5	2.2		0	3 s			0.05	1.3	clear	
Florence, Arizona																			
Fort Apache, Arizona	25.20	640.1	30.32	770.1	26	— 3.3	70	ne.	4	1.8		0	4 s		calm	0	0	fair	
Fort Assinnaboine, Montana	27.02	686.3	30.06	763.5	35	1.7	66	sw.	16	7.2			10 s		sw.	0	0	cloudy	
Fort Bennett, Dakota	28.95	735.3	30.69	779.5	10	—12.2	80	se.	14	6.3		hz	0			0	0	fair	
Fort Benton, Montana	27.13	689.1	30.11	764.8	22	— 5.6	61	calm	0	0		0	6 ks		calm	0	0	fair	
Fort Buford, Dakota	27.90	708.6	30.10	764.5	15	— 9.4	67	e.	7	3.1		5 cs	0	calm		0	0	fair	
Fort Custer, Montana	26.78	680.2	30.16	766.1	35	1.7	70	sw.	4	1.8			10 s		calm	0	0	cloudy	
Fort Davis, Texas	25.30	642.6	30.28	769.1	36	2.2	72	n.	2	0.9		0	0			0	0	clear	
Fort Elliott, Texas	27.36	694.9	30.30	769.6	21	— 6.1	48	n.	8	3.6		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.74	755.4	30.34	770.6	22.0	— 5.6	88	n.	4	1.8		5 cs	0	n.		0	0	fair	
Fort Grant, Arizona	25.38	644.6	30.28	769.1	32	0.0	32	e.	6	2.7		5 cs	0			0	0	fair	
Fort Griffin, Texas	28.96	735.6	30.34	770.6	31	— 0.6	68	n.	3	1.3		0	0			0	0	clear	
Fort Keogh, Montana	27.36	694.9	30.04	763.0	21	— 6.1	61	ne.	2	0.9		10 cs	0			0	0	cloudy	
Fort Macon, North Carolina	29.70	754.4	29.71	754.6	46	7.8	68	nw.	20	8.9			10 n		nw.	0.01	0.3	light rain	
Fort McKavett, Texas	27.92	709.2	30.31	769.9	34.5	1.4	65	sw.	2	0.9		0	0			0	0	clear	
Fort Missoula, Montana	26.78	680.2	30.24	768.1	31	— 0.6	81	nw.	3	1.3			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	29.64	752.8	29.67	753.6	— 4	—20.0	100	ne.	4	1.8		0	5 s			0	0	fair	
Fort Shaw, Montana	26.30	668.0	30.16	766.1	45	7.2	49	w.	7	3.1			10 s			0	0	cloudy	
Fort Sill, Indian Territory	29.03	737.3	30.36	771.1	24.3	— 4.3	87	n.	7	3.1		2 c	0			0	0	clear	
Fort Stevenson, Dakota	28.13	714.5	30.19	766.8	4	—15.6	76	se.	1	0.4			10 s		calm	0.03	0.8	cloudy	
Fort Verde, Arizona					31.3	— 0.4	71	w.			1	4 cs	0	calm		0	0	fair	
Fredericksburg, Texas																			
Galveston, Texas	30.12	765.0	30.16	766.1	53	11.7	67	n.	11	4.9		0	5 s			0	0	fair	
Grand Haven, Michigan	29.35	745.5	30.06	763.5	18.5	— 7.5	91	n.	6	2.7		0	0			0.10	2.5	clear	
Hatteras, North Carolina	29.74	755.4	29.76	755.9	45	7.2	53	e.	16	7.2			10 k		calm	0	0	cloudy	
Helena, Montana	25.78	654.8	30.21	767.3	37	2.8	42	nw.	6	2.7		6 k	0	calm		0	0	fair	
Henrietta, Texas	29.33	745.0	30.40	772.1	27	— 2.8	77	n.	5	2.2		4 cs	0			0	0	fair	
Huron, Dakota	28.80	731.5	30.34	770.6	6	—14.4	63	ne.	3	1.3			10 s			0.01	0.3	cloudy	
Indianapolis, Indiana	29.22	742.2	30.06	763.5	18	— 7.8	73	nw.	12	5.4			10 s		nw.	inap.	inap.	cloudy	
Indianola, Texas	30.12	765.0	30.15	765.8	54.2	12.3	67	n.	16	7.2		0	hz.			0	0	clear	
Jacksboro, Texas	29.07	738.4	30.31	769.9	30	— 1.1	78	n.	5	2.2		0	3 s		calm	0	0	clear	
Jacksonville, Florida	29.79	756.7	29.84	757.9	57	13.9	80	sw.	16	7.2		hz.	4 s		sw.	inap.	inap.	fair	
Keokuk, Iowa	29.57	751.1	30.27	768.8	11.5	—11.4	80	nw.	6	2.7		0	0			inap.	inap.	clear	
Key West, Florida	30.09	764.3	30.12	765.0	63.0	17.2	65	s.	6	2.7		0	2 s		calm	0	0	clear	
Kittyhawk, North Carolina	29.78	756.4	29.80	756.9	42	5.6	65	e.	13	5.8			10 s			0	0	cloudy	
Knoxville, Tennessee	28.91	734.3	29.99	761.7	25	— 3.9	73	nw.	11	4.9			10 n		calm	0.12	3.0	light snow	
La Crosse, Wisconsin	29.44	747.8	30.28	769.1	4	—15.6	72	n.	8	3.6		0	0			0	0	clear	
La Mesilla, New Mexico	26.27	667.2	30.30	769.6	29.5	— 1.4	50	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.38	746.2	30.34	770.6	16	— 8.9	67	nw.	5	2.2		5 k	0	nw.		inap.	inap.	fair	
Lewiston, Idaho	29.32	744.7	30.19	766.8	39	3.9	59	ne.	2	0.9			10 s		calm	0	0	cloudy	
Little Rock, Arkansas	29.94	760.5	30.28	769.1	29	— 1.7	67	n.	4	1.8		0	0			0	0	clear	
Los Angeles, California	29.74	755.4	30.14	765.5	48.2	9.0	71	ne.	7	3.1		0	0			0	0	clear	
Louisville, Kentucky	29.48	748.8	30.07	763.8	21.0	— 6.1	70	nw.	13	5.8			10 s		w.	inap.	inap.	cloudy	
Lynchburg, Virginia	29.12	739.6	29.84	757.9	32.0	0.0	78	ne.	1	0.4			10 s			0	0	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.11	739.4	30.20	767.1	8	—13.3	76	nw.	13	5.8		0	0			0	0	clear	
Marquette, Michigan	29.38	746.2	30.16	766.1	19	— 7.2	70	n.	7	3.1		0	5 s		nw.	0.08	2.0	fair	
Mason, Texas	28.59	726.2	30.33	770.4	34	1.1	72	n.	5	2.2		0	0			0	0	clear	
Memphis, Tennessee	29.91	759.7	30.27	768.8	21	— 6.1	70	nw.	17	7.6		0	0			0	0	clear	
Milwaukee, Wisconsin	29.32	744.7	30.12	765.0	15	— 9.4	83	nw.	18	8.0		0	1 s			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.04	763.0	30.08	764.0	40.0	4.4	73	n.	12	5.4		3 cs	0			0	0	clear	
Montgomery, Alabama	29.79	756.7	30.03	762.7	39	3.9	54	n.	16	7.2		0	9 s		nw.	0	0	cloudy	
Moorhead, Minnesota	29.15	740.4	30.26	768.6	—10	—23.3	100	e.	4	1.8		0	0			0	0	clear	
Morgantown, W. Virginia	28.90	734.0	29.96	761.0	25.0	— 3.9	80	ne.	5	2.2			10 s		n.	0.05	1.3	cloudy	
Mt. Washington, N. H.	23.15	588.0	29.78	756.4	1.5	—16.9	93	nw.	62	27.7		5 c	4 s	nw.	nw.	0	0	cloudy	
Nashville, Tennessee	29.58	751.3	30.14	765.5	19.3	— 7.1	93	nw.	10	4.5			10 ks		nw.	0.16	4.1	cloudy	
New Haven, Connecticut	29.75	755.6	29.87	758.7	24	— 4.4	80	w.	3	1.3		2 c	sk			0	0	clear	
New London, Connecticut	29.80	756.9	29.85	758.2	30	— 1.1	77	sw.	3	1.3			10 s		calm	0	0	cloudy	
New Orleans, Louisiana	30.00	762.0	30.06	763.5	51.5	10.8	47	nw.	18	8.0		0	hz			0	0	clear	
Newport, Rhode Island	29.83	757.7	29.88	758.9	27.8	— 2.3	75	sw.	15	6.7		2 c	1 s	sw.	calm	0.02	0.5	clear	
New River, N. Carolina					44	6.7	100	e.			2		10 n		e.	0.23	5.8	light rain	
New Shoreham, Rhode I'd.	29.86	758.4	29.90	759.4	32.0	0.0	68	w.	12	5.4		3 k	0	w.		0	0	clear	
New York, New York	29.73	755.1	29.92	760.0	26	— 3.3	76	n.	3	1.3		4 cs	0	w.		0	0	fair	
Norfolk, Virginia	29.81	757.2	29.84	757.9	33	0.6	74	e.	3	1.3			10 s			0	0	cloudy	
North Platte, Nebraska	27.10	688.3	30.22	767.6	19.7	— 6.8	77	s.	14	6.3			10 s			0	0	cloudy	
Olympia, Washington T'y	30.03	762.7	30.07	763.8	47.0	8.3	93	calm	0	0			10 s		calm	0.69	17.5	cloudy	
Omaha, Nebraska	29.10	739.1	30.37	771.4	9.5	—12.5	78	n.	4	1.8			10 s			0.01	0.3	cloudy	
Ooglaamie, Pt. Barrow, Alas-	29.93	760.2	29.94	760.5	— 2.2	—19.0	100	ese.	18	8.0		4 c	2 s		se.	0	0	fair	
Oswego, New York	29.54	750.3	29.89	759.2	20.0	— 6.7	67	n.	6	2.7			10 n			0.25	6.3	light snow	
Palestine, Texas	29.69	754.1	30.25	768.3	37	2.8	61	ne.	8	3.6		0	3 ks			0	0	clear	
Pensacola, Florida	30.01	762.2	30.04	763.0	43.1	6.2	53	n.	16	7.2		3 cs	0			0	0	clear	
Philadelphia, Pa	29.86	758.4	29.92	760.0	27	— 2.8	77	nw.	6	2.7		8 cs	0	w.		0	0	cloudy	
Pike's Peak, Colorado	17.48	444.0	30.18	766.6	19	— 7.2	36	nw.	50	22.4		0	3 k		nw.	0	0	fair	
Ploche, Nevada	24.24	615.7	30.44	773.2	37	2.8	33	sw.	4	1.8		2 k	0	calm		0	0	clear	
Pittsburg, Pennsylvania	29.08	738.6	29.92	760.0	23.0	— 5.0	73	sw.	2	0.9			10 n			0.01	0.3	light snow	
Port Eads, Louisiana	30.04	763.0	30.05	763.3	50.5	10.3	68	nw.	14	6.3		0	2 s;hz		nw.; c	0	0	clear	
Port Huron, Michigan	29.26	743.2	29.99	761.7	16.8	— 8.4	91	nw.	14	6.3			10 s		calm	0.10	2.5	cloudy	
Portland, Maine	29.74	755.4	29.79	756.7	25	— 3.9	73	w.	16	7.2		2 cs	2 s	w.	calm	0	0	fair	
Portland, Oregon	30.06	763.5	30.14	765.5	46.0	7.8	93	w.	2	0.9			10 s		calm	0.95	24.1	cloudy	
Portsmouth, N. Carolina					45	7.2	60	ne.	23	10.3			10 s		ne.	0	0	cloudy	
Prescott, Arizona	24.91	632.7	30.29	769.4	34	1.1	66	se.	3	1.3		0	5 s			0	0	fair	
Punta Rassa, Florida	30.00	762.0	30.01	762.2	65.5	18.6	92	sw.	20	8.9		0	8 ks		sw.	0	0	cloudy	
Red Bluff, California	29.78	756.4	30.16	766.1	43.0	6.1	96	calm	0	0			10 s			0	0	cloudy	
Rio Grande City, Texas	30.00	762.0	30.25	768.3	42	5.6	37	nw.	3	1.3		0	0			0	0	clear	
Rochester, New York	29.21	741.9	29.92	760.0	15	— 9.4	83	nw.	8	3.6			10 ks		calm	0.19	4.8	cloudy	
Roseburg, Oregon	29.54	750.3	30.11	764.8	44.5	5.9	91	calm	0	0			10 n			0.51	13.0	light rain	
Sacramento, California	30.08	764.0	30.16	766.1	43.4	6.3	93	n.	2	0.9			10 s			0	0	cloudy	
St. Louis, Missouri	29.64	752.8	30.28	769.1	8.8	—12.9	76	nw.	14	6.3		0	0			0.03	0.8	clear	
St. Paul, Minnesota	29.37	746.0	30.32	770.1	6.0	—14.4	76	nw.	4	1.8			10 s			0	0	cloudy	
St. Vincent, Minnesota	29.44	747.8	30.42	772.7	—10	—23.3	100	se.	3	1.3			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.79	655.1	30.36	771.1	27	— 2.8	47	calm	0	0		0	0			0	0	clear	
San Antonio, Texas	29.47	748.5	30.20	767.1	43.7	6.5	68	calm	0	0		0	0			0	0	clear	
San Diego, California	29.96	761.0	30.03	762.7	41.5	5.3	49	n.	4	1.8		0	0			0	0	clear	
Sandusky, Ohio	29.26	743.2	29.98	761.5	22	— 5.6	87	nw.	17	7.6			10 s			0.02	0.5	cloudy	
Sandy Hook, New Jersey	29.87	758.7	29.91	759.7	26.0	— 3.3	88	nw.	5	2.2		5 k	0	calm		0	0	fair	
San Francisco, California	30.07	763.8	30.14	765.5	46	7.8	93	e.	5	2.2			10 s		n.	0	0	cloudy	
Santa Fé, New Mexico	23.37	593.6	30.38	771.6	28.5	— 1.9	82	nw.	2	0.9		0	5 s		calm	0	0	fair	
Savannah, Georgia	29.66	753.4	29.70	755.9	52	11.1	80	w.	12	5.4			10 ks		w.	0	0	cloudy	
Shreveport, Louisiana	30.01	762.2	30.26	768.6	37	2.8	72	n.	5	2.2		0	0			0	0	clear	
Silver City, New Mexico	24.39	619.5	30.25	768.3	29	— 1.7	70	n.	2	0.9		0	0			0	0	clear	
Sitka, Alaska	29.27	743.4	29.34	745.2	42.2	5.7	73	se.	8	3.6			10 n		calm	0.03	0.8	light rain	
Smithville, North Carolina	29.61	752.1	29.65	753.1	45	7.2	93	ne.	10	4.5			10 n		w.	0.29	7.4	light rain	
Spokane Falls, Wash. Ter.	28.07	713.0	30.21	767.3	37	2.8	92	s.	1	0.4			10 s		calm	0.19	4.8	cloudy	
Springfield, Illinois	29.51	749.5	30.24	768.1	16	— 8.9	75	nw.	5	2.2		0	0			0	0	clear	
Springfield, Massachusetts	29.76	755.9	29.90	759.4	28.0	— 2.2	77	sw.	2	0.9		4 cs	0	sw.		0	0	fair	
Stockton, Texas	27.13	689.1	30.27	768.8	30.0	— 1.1	88	sw.	4	1.8		0	0			0	0	clear	
Thatcher's Island, Mass	29.83	757.4	29.89	759.2	26.0	— 3.3	51	w.	22	9.8		3 ck	5 s	w.	w.	0	0	fair	
Toledo, Ohio	29.26	743.2	30.00	762.0	21	— 6.1	84	n.	9	4.0			10 s		nw	0.01	0.3	cloudy	
Tucson, Arizona	27.65	702.3	30.15	765.8	40	4.4	59	s.	4	1.8		0	0			0	0	clear	
Umatilla, Oregon	29.81	757.2	30.20	767.1	38.0	3.3	89	nw.	3	1.3			10 s			0.05	1.3	cloudy	
Uvalde, Texas	29.22	742.2	30.22	767.6	42	5.6	73	calm	0	0		0	0			0	0	clear	
Vicksburg, Mississippi	29.94	760.5	30.21	767.3	37	2.8	51	nw.	10	4.5		0	fg			0	0	clear	
Visalia, California	29.72	754.9	30.11	764.8	37.5	3.1	100	nw.	6	2.7			fg			0	0	dense fog	
Washington, D. C.	29.78	756.4	29.90	759.4	24	— 4.4	84	calm	0	0			10 s			0	0	cloudy	
West Los Animas, Colorado	26.02	660.9	30.16	766.1	20.0	— 6.7	96	nw.	1	0.4			10 ks		sw.	0	0	cloudy	
Wickenburg, Arizona					41	5.0	79	ne.			1	9 c	0			0	0	cloudy	
Williamsport, Pa					25	— 3.9	64	nw.	12	5.4			10 ks		nw.	inap.	inap.	cloudy	
Wilmington, N. Carolina	29.59	751.6	29.65	753.1	45	7.2	83	e.	8	3.6			10 k		sw.	0.25	6.3	threatening.	
Winnemucca, Nevada	25.74	653.8	30.28	769.1	31	— 0.6	81	ne.	8	3.6		5 cs	0	sw.		0	0	fair	
Wood's Holl, Mass	29.86	758.4	29.90	759.4	32	0.0	68	nw.	20	8.9		2 k	0	w.		inap.	inap.	clear	
Yankton, Dakota	28.93	734.8	30.35	770.9	8	—13.3	76	n.	8	3.6			10 s			0	0	cloudy	
Yuma, Arizona	29.91	759.7	30.06	763.5	55.2	12.9	33	n.	4	1.8		2 c	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.03	559.6			52.0	11.1	82	s.	4	1.8			9 s;n			0	0	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.09	764.3	30.10	764.5	78	25.6	86	e.				2 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.93	760.2	29.95	760.7	77	25.0	90	n.	6	2.7			10 ks		n.	0.35	8.9	cloudy	J. I. Plume.
Guadeloupe, W. I.																			B. Bigar.
Havana, Cuba, W. I.	30.11	764.8	30.16	766.1	64	17.8	84	calm	0	0		0	2 ks		calm	0	0	fair	A. Van Ganeghem, Ass't
Kingston, Jamaica, W. I.	30.04	763.0	30.05	763.3	71.0	21.7	76	n.	1	0.4		0	7 s		ne.	0	0	fair	Robert Johnstone
Navassa, W. I.	29.93	760.2	30.01	762.2	76	24.4	69	ne.	8	3.6		5 ck	2 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.06	763.5	30.07	763.8	79	26.1	87	se.			3	4 c	5 k	e.	e.	0.210	5.3	fair	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mba	29.40	746.7	29.96	761.0	79	26.1	85	n.			1	3 ck	3 k	calm	calm	0	0	fair	Miss Flora A. Nichols.
Rivas, Nicaragua					71.6	22.0	86	ne.			3	0	0			0	0		Earl Flint.
Santiago de Cuba, W. I.	30.05	763.3	30.07	763.8	71	21.7	76	nw.	9.6	4.3			10 s		ne.	0	0	cloudy	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.27	768.8	30.32	770.1	—26.0	—32.2		w.	12	5.4		hz.	hz			0	0	hazy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.	Character.	Dir'n from.		
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore, India	29.94	760.5	76.5	24.7	92	calm			0		10							showery	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.23	757.8	64	17.8	73	s.			1		5							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 19° 26′, E. 112° 24′	30.17	766.3	67	19.4	84	ne.			4		10					3	ne.	overcast	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.89	759.2	70	21.1	66	ese.			5-7		4	se.						squally	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey.	30.34	770.6	52	11.1	59	s.			1		3	nne.						d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette																			Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, N. 31° 14′, E. 121° 28′	30.42	772.7	41.5	5.3	83	nne.			1-2		2	nne.						d. clouds.	Capt. S. Long.
H. M. S. Diamond, S. 0° 32′, W. 24° 44′	29.99	761.7	80	26.7	86	sse.			2		10					1	se.	overcast	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.05	763.3	65.5	18.6	63	ssw.			1-2		1	ssw.						blue sky	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 48′, W. 58° 56′	29.45	748.0	42	5.6	83	sw.			2-3		10					2	sw.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.88	758.9	83	28.3		calm			0		5							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. G. Robinson.
H. M. S. Espiegle, N. 22° 47′, W. 23° 00′	30.11	764.8	69	20.6	79	n.			3		2					2	nne.	d. clouds	Capt C. A. P. Bridge.
H. M. S. Euryalus, N. 32° 30′, E. 29° 14′	30.33	770 4	65	18.3	78	wsw.			1		5	wsw.						showery	Capt. R. D. King.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.32	770.1	42	5.6	79	nw.			1		8							misty	Capt. R. F. Hoskyn.
H. M S. Gannet, S. 37° 30′, W. 87° 05′	30.43	772.9	59	15.0	70	ese.			3		1	w.				2	ese.	blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 34° 54′, W. 56° 13′	29.72	754.9	73	22.8	90	sw.			3		10					1	ssw.	threatening.	Capt. L. Jones.
H. M. S. Iris, Alexandria, Egypt	30.32	770.1	71	21.7	62	calm			0		3							d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.29	769.4	55	12.8	87	calm			0		0							misty	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 21° 29′, E. 109° 03′	30.28	769.1	56.8	13.8	66	n.			1-2	3 c	9	w.				1	n.	misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 13° 06′ E. 48° 08′	30.10	764.5	81	27.2	87	ese.			1		2	e.				2	se.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, N. 22° 00′, W. 61° 40′	30.09	764.3	77	25.0	79	ene.			3		6	e.				2	e.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. Kinahan
H. M. S. Pelican, S. 41° 08′, W. 38° 33′	29.58	751.3	58	14.4	100	sse.			1		4					4	wsw.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Ready, N. 22° 37′, E. 62° 03′	30.04	763.0	81.1	27.3		calm			0							1	ne.	blue sky	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.06	763.5	41	5.0	91	calm			0		7							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.04	763.0	81.5	27.5	87	ene.			1		5	ene.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull, S. 15° 02′, E. 40° 49′	29.35	745.5	84	28.9	79	e.			2-3		3	ene.						d. clouds	Comm. M. Byles.
H. M. S. Serapis, N. 44° 58′, W. 8° 10′	29.94	760.5	60	15.6	82	s.			2		7	sse.				6	sw.	d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 18° 58′, W. 78° 35′	30.06	763.5	74	23.3	88	nne.			2		10					3	n.	showery	Capt. C. G. Fane.
H. M. S. Triumph, Callao, Peru	29.95	760.7	65	18.3	94	calm			0		9	calm						misty	Capt. A. H. Markham.
H. M. S. Tyne, N. 37° 10′, E. 2° 18′	30.17	766.3	60	15.6	88	calm			0		0							blue sky	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.04	763.0	76	24.4		n.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.20	767.1	63.5	17.5	78	wnw.			3-4		0							misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Santiago, Cape Verd Ids	30.01	762.2	73.4	23.0	79	ne.			3		2					3	ne.	blue sky	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla.	30.02	762.5	45	7.2	61	n.	5	2.2	.....	.....	8	.....	ne.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	29.82	757.4	24	— 4.4	.....	nw.	12	5.4	.....	.....	8	.....	w.	0	0	.....	.....	cloudy	
Naval Hospital, Yokohama, Japan	30.03	762.7	35.5	1.9	65	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear	
Adams, S. 16° 30′, W. 73° 40′	29.76	755.9	71	21.7	95	ese.	.....	.....	2	.....	10	.....	.....	.....	.....	light	s.	cloudy	
Alaska, S. 13° 50′, W. 76° 28′	29.89	759.2	62	16.7	94	ene.	.....	.....	2	.....	2	.....	.....	0	0	sm'h	.....	fair	
Alert, Hong Kong, China *.	30.11	764.8	62	16.7	72	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alliance, Boston, Mass.	29.77	756.1	33	0.6	70	w.	.....	.....	3	.....	10	.....	.....	0	0	.....	.....	cloudy	
Ashuelot, Tientsin, China	30.44	773.2	29	— 1.7	100	sw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, N. 12° 27′, W. 36° 26′	30.06	763.5	75	23.9	90	ene.	18	8.0	.....	.....	5	.....	ene.	0	0	mod.	e.	fair	
Colorado, New York, N. Y.	29.92	760.0	26	— 3.3	100	wsw.	2	0.9	.....	.....	5	.....	calm	0	0	.....	.....	fair	
Essex, Norfolk, Va.	29.84	757.9	38	3.3	72	nne.	.....	.....	2	.....	10	.....	ne.	.....	.....	.....	.....	cloudy	
Franklin, Norfolk, Va.	29.85	758.2	32	0.0	.....	nne.	3	1.3	.....	.....	10	.....	.....	0	0	.....	.....	cloudy	
Galena, N. 12° 36′, W. 17° 42′	30.00	762.0	74	23.3	86	ne.	.....	.....	4	.....	2	.....	.....	.....	.....	long	ne.	clear	
Independence, N. Yard, Mare I'd, Cal.	30.06	763.5	43	6.1	83	ene.	4.8	2.1	.....	.....	10	.....	ene.	0	0	.....	.....	overcast	
Kearsarge, New Orleans, La.	30.06	763.5	54	12.2	49	nnw.	.....	.....	6	.....	10	.....	n.	.....	.....	.....	.....	cloudy	
Lackawanna, S. 25° 58′, W. 72° 10′ †	30.12	765.0	68	20.0	90	s.	.....	.....	3	.....	5†	.....	s.	.....	.....	sm'h	s.	cloudy.†	
Lancaster, Villafranca, France	30.11	764.8	54	12.2	74	ssw.	.....	.....	1	.....	10	.....	sw.	.....	.....	mod.	s.	cloudy	
Michigan, Erie, Pa.	29.85	758.2	22	— 5.6	.....	s.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	snowing	
Minnesota, Newport, R. I.	29.86	758.4	30	— 1.1	.....	wsw.	10	4.5	.....	.....	5	.....	w.	.....	.....	sm'h	.....	clear	
Monocacy, Yokohama, Japan	30.23	767.8	40	4.4	56	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Nipsic, Syracuse, Sicily	30.25	768.3	62	16.7	77	s.	.....	.....	1	.....	8	.....	s.	.....	.....	sm'h	.....	fair	
Onward, Callao, Peru †	30.06	763.5	65	18.3	100	calm	.....	.....	0	.....	10	.....	n.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.28	769.1	56	13.3	75	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C.	29.95	760.7	22	— 5.6	.....	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Pensacola, Callao, Peru	29.96	761.0	67	19.4	84	se.	1	0.4	.....	.....	10	.....	.....	.....	.....	.....	.....	foggy	
Powhatan, Boston, Mass.	29.75	755.6	29	— 1.7	78	wsw.	.....	.....	3	.....	8	.....	w.	.....	.....	.....	.....	cloudy	
Quinnebaug, N. 37° 05′, E. 6° 24′	30.17	766.3	62	16.7	61	sw.	.....	.....	1	.....	2	.....	ssw.	0	0	sm'h	.....	clear	
Ranger, N. 19° 04′, W. 104° 21′ *	29.92	760.0	73	22.8	81	ne.	.....	.....	1	.....	2	.....	calm	0	0	sm'h	.....	clear	
Richmond, Apia, Samoa Islands. *	29.76	755.9	80	26.7	100	nnw.	.....	.....	1	.....	10	.....	.....	0	0	.....	.....	cloudy	
Shenandoah, Montevideo, Uruguay *.	29.77	756.1	73	22.8	90	sw.	.....	.....	3	.....	10	.....	sw.	.....	.....	sm'h	.....	cloudy	
St. Louis, League Island, Pa.	30.13	765.3	26	— 3.3	77	calm	0	0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Swatara, Yokohama, Japan †	30.10	764.5	41	5.0	49	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Tennessee, New York, N. Y.	29.86	758.4	28	— 2.2	.....	wsw.	2.4	1.1	.....	.....	0	.....	.....	0	0	.....	.....	hazy	
Vandalia, Basseterre St. Ketts, W. I.	30.07	763.8	82	27.8	61	e.	.....	.....	1	.....	2	.....	e.	.....	.....	.....	.....	clear	
Wabash, Boston, Mass.	29.83	757.7	28	— 2.2	77	w.	8	3.6	.....	.....	8	.....	sw.	0	0	.....	.....	hazy	
Wachusetts, Sitka, Alaska	29.35	745.5	38	3.3	90	e.	.....	.....	1	.....	10	.....	se	.....	.....	.....	.....	light rain	
Wyoming, Port Royal, S. C.	29.93	760.2	49	9.4	85	w.	34	15.2	.....	.....	10	.....	w	0	0	.....	.....	cloudy	
Yantic, N. 18° 56′, W. 74° 08′ *	29.98	761.5	77	25.0	77	se.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	clear	

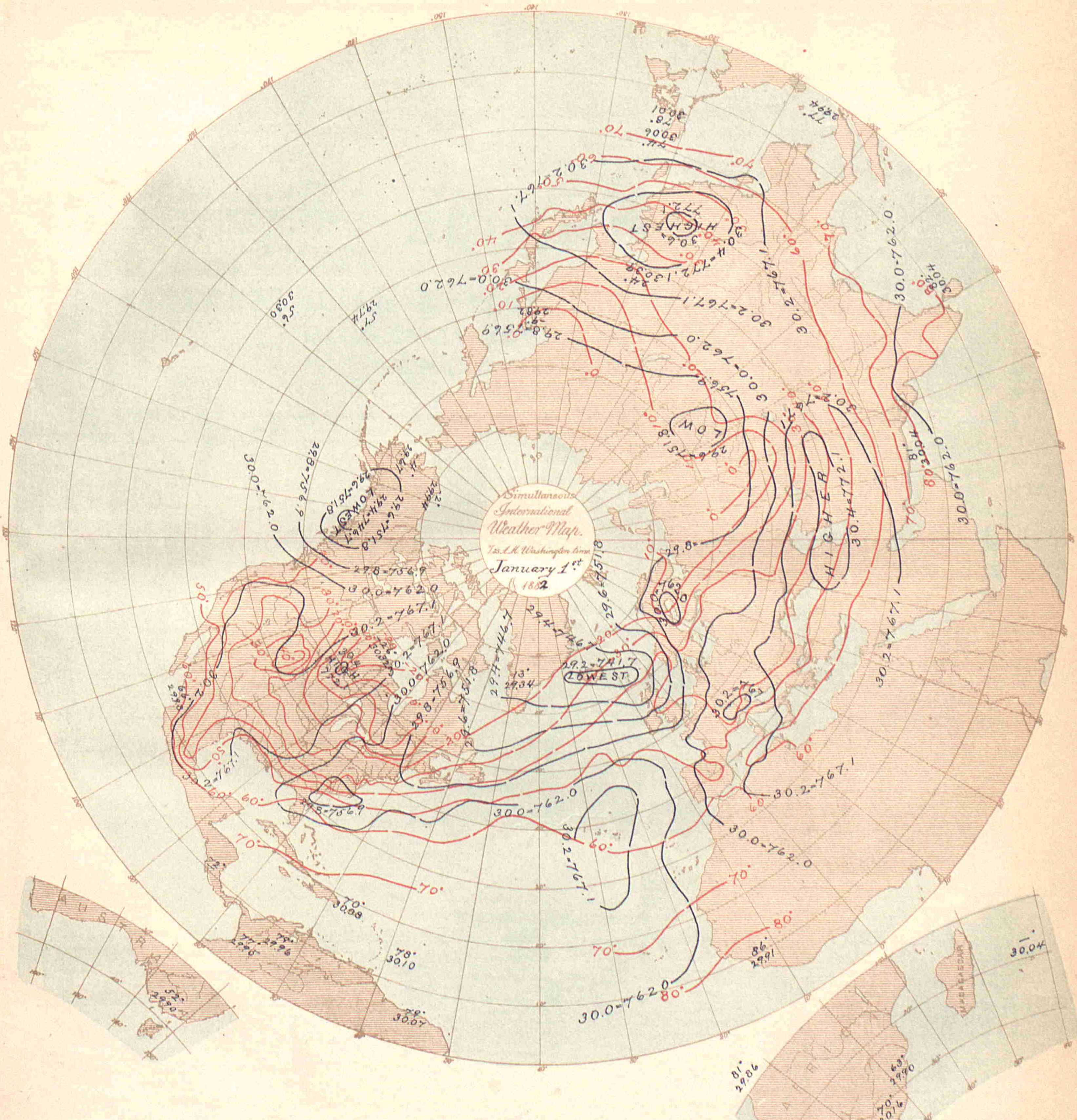
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, Halifax, N. S.	30.02	762.5	36	2.2	62	w.	4		7		wsw.	0	0			d. clouds	C. Gapon.
S. S. Nova Scotian, Capt. W. Richardson, Halifax, N. S.	29.68	753.9	32	0.0		nw.										clear	
S. S. Polynesian, Capt. Robt. Brown, N. 51° 51′, W. 26° 40′*	29.68	753.9	50	10.0		sw.	6		10		sw.	0	0	r'gh	wsw.	misty	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, Liverpool, England.*	29.61	752.1	45	7.2		sw.	3		2		wsw.					raining	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore																	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, Liverpool, England	29.56	750.8	54	12.2	93	s.	4		8		se.					overcast	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 51° 27′, W. 22° 25′†	29.90	759.4	50	10.0	78	wsw.	5		8		sw.	0	0	sm'h	sw.	cloudy	C. W. Walker, 2d Offi.
S. S. Ohio, Capt. Henry Morrison, N. 40° 07 W. 70° 48′8 †.	29.99	761.7	37	2.8	80	wsw.	4		4		s.			mod.	wsw.	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge																	W. H. Townshend.
ANCHOR LINE.																	
Assyria, Capt. J. Brown																	J. Brown.
Utopia, Capt. A. McRitchie																	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause																	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 33° 28′, W. 74° 01′*	29.86	758.4	54	12.2		se.	5		10		sw.	0	0	mod.	ssw.	overcast	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin																	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta Kingston, Jamaica, W. I						ne.					ne.	lightl	light	mod.	ne.	fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse, N. 18° —′, W. 73° —′	29.65	753.1				se.	2		3?		e.	sh'rs	sh'rs	mod.	e.	cloudy?	Fisher & Welden.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, N. 43° 17′, W. 66° 10′*†	30.00	762.0	61	16.1	77	w.					wnw.				sw.	clear	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
Baroda, Capt. C. J. Russell																	
British Merchant, Capt. E. J. Molony, S. 29° 37′, E. 93° 25′	30.23	767.8	66	18.9	90	ese.	4		9							misty	
Bk. Caldew, Capt. W. Peterson																	
S. S. Cipero, Capt. W. N. Lailey																	
S. City of Agra, Capt. Thos. Young. S. 34° 36′, W. 23° 56′	30.06	763.5	64.5	18.1		n.	2		10							raining	
Bk. Glaramara, Capt. R. Morton, S. 1° 30′, W. 27° 27′	30.01	762.2	79	26.1	86	se.	3		7							d. clouds	
Glencairn, Capt. R. S. Tannock, S. 22° 10′, W. 30° 36′	30.11	764.8	82	27.8	78	ne.	4		4							d. clouds	
S. S. Gordon Castle, Capt. W. Waring																	
Hermine, Capt. S. G. Jones																	
S. S. Humboldt, Capt. A. W. Jeffery, N. 19° 17′, W. 24° 40′	30.17	766.3	68	20.0	79	nne.	4		3							d. clouds	
S. Lochee, Capt. J. Raeburn, R. N. R., N. 14° 55′, E. 88° 08′	29.98	761.5	79.5	26.4	82	ne.	4		5							d. clouds	
May Hulse, Capt. H. Youlden, R. N. R., N. 15° 58′, W. 25° 55′	30.11	764.8	72	22.2	63	ne.	5		4							d. clouds	
Bk. Mertola, Capt. E. W. Turner, N. 37° 34′, W. 9° 44′	29.86	758.4	57.5	14.2	100	s.	2		10							drizzling	
Minho, Capt. J. Lawson.																	
Naiad, Capt. J. Smith, S. 33° 56′, W. 29° 54′	29.91	759.7	67.5	19.7	94	nnw.	4		10							overcast	
Queen of Cambria, Capt. M. Parry. S. 38° 22′, W. 42° 28′	29.84	757.9	65	18.3	78	ene.	1		10							overcast	
Pole Star, Capt. F. Norman, S. 32° 38′, W. 48° 48′	29.69	754.1	78.4	25.8	90	ssw.	1		5							foggy	
S. S. Strathleven, Capt. C. W. Pearson, N. 32° 35′, W. 60° 11′	30.09	764.3	66.5	19.2	84	ssw.	3		10							overcast	
S. Superb, Capt. Berridge. S. 12° 26′, W. 21° 49′	30.09	764.3	74.4	23.6	100	ene.	4		10							showery	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham N. 43° 32′, W. 54° 17′*†	30.05	763.3	52	11.1		w.	4		8		nw.	0	0	mod.	cl'd	fair	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO.																	
J. Birmingham, Agent, San Francisco.																	
S. S. Newbern, Capt. E. Y. Rogers,																	
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman																	Crowell & Henry.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains																	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul,																	
S. S. St. Laurent, Capt. A. Servan																	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, N. Y.																	
S. S. Gellert, Capt. Kuhlewein																	P. Frochlich, 3d Offi.
S. S. Silesia, Capt. A. Albers																	
S. S. Wieland, Capt. C. Hebich, N. 49° 49′, W. 15° 21′*	29.98	761.5	51	10.6		nnw.	3	5 ck	0	n.		2 h'r	2 h'r	4	nw	fine	C. Jorgensen.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch, N. 51° 26′, W. 10° 15′	29.83	757.7	54	12.2		wnw.	4		8		w.	light	light	mod.	wnw.	fair	Patterson & Thompson.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll																	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry. N. 57° 23′, W. 16° 41′						wsw.	3				w.	0	0	mod.	wnw.	cloudy	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley																	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker																	F. C. Miller, 2d Offi.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 9° 22′, W. 79° 54′†	29.95	760.7	77	25.0		wnw.	2									showery	
S. S. Bothnia, Capt. W. McMickan....[man																	
S. S. City of Alexandria, Capt. L. F. Timmer-																	E. Stembridge, 3d Offi.
S. S. City of Washington, Capt. J. W. Rey- N. 32° 45′, W. 78° 42′*† ....[holds	29.80	756.9	55	12.8		w.	4								e.	cloudy	
S. S. Maas, Capt. T. H. Bonjer																	
S. S. New York, Capt. R. B. Quick																	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier, N. 41° 46′, W. 63° 30′*	29.88	758.9	43	6.1		sw.	4								ssw.	clear	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander.																	G. H. Lose, 3d Offi.
S. S. Leipsic, Capt. F. Pfeiffer																	Cuppers & Walter
S. S. Main, Capt. Julius Barre																	
S. S. Mosel, Capt. J. Hesse																	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. Undutch																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer..																	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 40° 16′, E. 179° 54′†	29.74	755.4	57	13.9	81	e.	5		10			rain	rain	mod.	se.	overcast	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 28° 46′, E. 126° 31′*†	30.55	776.0	61	16.1	61	nnw.	4		5		n.			mod.	n.	clear	
S. S. Oceanic, Capt. J. Metcalf, N. 30° 27′, W. 173° 10′*	30.30	769.6	56	13.3	?	wsw.	2		9		w.			sm'h		overcast	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerion, N. 37° 15′, W. 74° 50′*†	29.56	750.8				sw.	1		10?		s.			sm'h		clear.?	K. S. Nickerion.
S. S. Seminole, Capt. H. K. Hallett, N. 37° 24′, W. 74° 50′†	29.47	748.5	41	5.0	56	e.	1		10		ne.	2 h'r	snow	sm'h	sse.	snowing	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes,																	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer..																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d Offi.
S. S. Columbia, Capt. F. Bolles, N. 46° 00′, W. 124° 06′†	30.07	763.8	50	10.0	96	ese.	1		10					mod.	w.	drizzling	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal †	30.11	764.8	46	7.8	92	calm	0		10							hazy	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, San Francisco, Cal†	30.05	763.3	45	7.2	92	ne.	1		10		se.					rainy	
S. S. G. W. Elder, Capt. H. G. Morse, N. 45° 46′, W. 127° 41′†	30.03	762.7	43	6.1		se.	5		7		se.	0	0	mod.	se	cloudy	
S. S. Idaho, Capt. E. Alexander, N. 44° 46′, W. 124° 40′†	30.04	763.0	52	11.1	93	se.	4		10		sw.			h'vy	sw.	raining	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 42′, W. 118° 14′	30.11	764.8	60	15.6	88	se.	3		fg.		s.			long	sw.	foggy	G. H. Harisson.
S. S. Senator. Capt. Thos. Wallace, Monterey, Cal†	30.20	767.1	51	10.6	93	nw.	1		10			0	0	sm'h		foggy	T. Wallace.
S. S. State of California, Capt. G. Debney, N. 38° 00′, W. 123° 10′†	30.09	764.3	58	14.4	87	e.	3		10		se.	0	0	sm'h	w.	foggy	
S. S. Victoria, Capt. H. M. Hayward, Nanaimo, Vancouvers Id†	30.22	767.5	34	1.1	100	calm	0		0					sm'h		clear.	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. ——— S. 34° 10′, E. 170° 14′	29.94	760.5	67	19.4	90	e.	3		8		e.			long	ese.	cloudy	A. Bannerman, 2d Offi.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.83	757.7	68	20.0	84	calm.	0		0			0	0			clear	W. H. Hawes, 2d Offi.
S. S. City of Rio de Janeiro, Capt. Cavarly, Hong Kong, China†	30.49	774.4	54	12.2	68	e.	2		5		ne.	0	0			fair	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn,																	E. Le Saik.
S. S. City of Tokio, Com. J. Maury,																	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, Manzanillo, Mexico†	29.99	761.7	73	22.8	90	ene.	3		2		calm	0	0			clear	
S. S. Grenada. Capt. M. Connolly																	
S. S. South Carolina, Capt. W. J. Russell, Panama, Panama*†	29.91	759.7	76	24.4	90	nw.	2		2		nw.	0	0	sm'h		fair	
S. S. Zelandia, Capt. H. Webber, S. 1° 06′, W. 166° 32′	29.83	757.7	78	25.6	100	e.	3		8		ne.			long	ne.	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co.																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke																	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents.																	
S. S. Belgenland, Capt. J. Stokes																	
S. S. Rhynland, Capt. W. G. Randle, N. 40° 34′, W. 69° 31′*	30.01	762.2	39	3.9	63	wsw.	4		9		wsw.	0	0	mod.	wsw.	cloudy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 41° 13′, W. 65° 55*†	30.64	778.2	40	4.4	82	sw.	6		5?		sw.	0	0	hv'y	sw.	cloudy.?..	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 49° 31′, W. 7° 25′*	29.70	754.4	48	8.9		nnw.	5		10		nne.	20 hr	light	cross	s. nnw.	clearing	
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis																	
THINGVALLA LINE																	
Funch, Edye & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub N. 40° 21′, W. 68° 17′†	30.01	762.2	41.0	5.0		wnw.	2		4		wnw.	0	0	long	sw.	clear	J. T. Ulberling
WARREN LINE.																	
Warren & Co , Agents, Boston.																	
S. S. Iowa, Capt. S. Walters																	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent.																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry,																	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 50° 56′, W. 21° 46′*†	29.84	757.9	46	7.8	76	w.	5		10		w.	6 h'r	mod	high	w.	raining	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 40° 35′, W. 69° 05′*††	30.02	762 5	40	4.4	91	w.	4		10		w.	0	0	sm'h	w.	overcast	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 33° 54′, W. 67° 15′†	30.12	765.0	59.5	15.3	97	nw.	4	0	5 k?		w.	0.58	14.7	h'vy	w.	cloudy?	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona, N. 33° 16′, W. 52° 25′	30.28	769.2	70.9	21.6		s.	5		8 s					mod.		fine	
Bk Alpha, Capt. Ole Grönn, Pozzuola, Italy ††	30.21	767.3				s.	6		10		s.	4 h'r	4h'r			thnd'r storm	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 50° 08′, W. 1° 17′*†	29.94	760.5	50.0	10.0		ssw.	6		3		s.	0	0	sm'h	wsw.	threatening.	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis.																	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin,																	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer,																	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 28° 49′, W. 46° 16′†	30.40	772.1				ese.	3		0			light	shr's	sm'h	se.		
S. Enoch Lain, Capt. H. D. Chapman. N. 41° 12′, W. 46° 27′*	30.07	763.8				s.	6		10		sw.	light	sh'rs	long	ssw.	dense haze.	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 37° 52′, W. 69° 48*′	29.99	761.7				w.	5		8		w.	1 h'r	light	mod.	se.	fine	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	29.98	761.5	30	—1.1		ne.	1		2		calm			sm'h		fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 26° 05′, W. 42° 26′†	29.83	757.7	83	28.3		nw.	3		0			0	0	mod.	n.	clear	G. D. Morrison.
Bk. Freya, Capt. Blaouw, Scattery Island, Ireland			44	6.7		w.	6		8		w.	9 h'r	h'vy			squally	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.05	737.9				w.	2		7		w.	0	0				
Bk. Geo. Booth, Capt. D. Williams																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 40° 10′, W. 45° 52′*	30.40	772.1	65.3	18.5	84	s.	6		6		s.	0	0	cross	ssw.	squally	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, N. 0° 06′, W. 33° 36′*	29.81	757.2				se.	1		3		ese.	0	0	mod.	ese.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 37° 44′, W. 41° 44′*†	30.60	777.2				s.	3				wsw.	10 h'r	10 h'r	mod.	wsw.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Italy†	30.73	765.3	51	10.6	78	w.	1		2		w.					fair	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly																	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen. N. 43° 09′, W. 23° 51′†	30.35	770.8	56	13.3		nnw.	4		8		n.	1 hr	light	high	nnw.	clearing	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 34° 54′, W. 52° 30′*	30.16	766.1	65.3	18.5	94	sse.	6		5		s.			r'gh	s.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	29.86	758.4	59	15.0	87	s.	3		10		sw.	8 h'r	light			cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, N. 7° 36′, W. 30° 40′*†	30.10	764.5				nne.	8		8		ene.			chop	ne. to ene.		I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton																	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 2, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.08	764.1	65.5	18.6	75	sw.			2		1			0.039	1.0	pretty fair	Moiroud.
Algiers			30.16	766.1	59.4	15.2	64	ene.			2		1			0	0	pretty fair	Nicolas.
La Calle			30.25	768.4	65.8	18.8	62	nw.			1		1			0	0	pretty fair	Fonfrède.
Tunis			30.24	768.0															Jacques.
Sfax																			Gau.
Saida																			Perès.
Tebessa			30.17	766.4	49.6	9.8	40	s.			4		3			0	0	pretty fair	Derché.
Geriville			30.31	769.8	50.7	10.4	42	ssw.			1		1			0	0	very fair	Lonchamp.
Laghouat					45.3	7.4	69	w.			1		4			0	0	cloudy	Herbin.
Biskra			30.37	771.5	46.4	8.0	59	se.			0		3			0	0	pretty fair	Malau.
			30.30	769.6	60.8	16.0	45	nw.			1		3			0	0	pretty fair	
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.98	761.5	30.07	763.8	55.2	12.9	64	sw.	20	8.9			5			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.55	750.5	30.12	765.1	37.8	3.2	97	ne.			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.23	742.5	30.04	762.9	31.3	— 0.4	96	wsw.	5.6	2.5			10			0	0		Dr. Wierzbiski.
Eperies	29.15	740.5	30.08	763.9	33.4	0.8	85	calm			0		10			0	0		Julius Mikolik.
Gratz	28.83	732.2	30.14	765.6	30.0	— 1.1	84	ne.			2		10			0	0		Andreas Rospini.
Hermannstadt	28.64	727.4	30.15	765.9	28.2	— 2.1	83	se.			2		2			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.76	730.6	30.18	766.5	31.5	— 0.3	94	sw.			1		8			0	0	gloomy	The Staff.
Lemberg	28.95	735.3	29.97	761.3	36.0	2.2	72	se.			1		7			0	0		Dr. T. Stanecki.
Pola	30.05	763.2	30.16	766.1	45.7	7.6	86	wnw.			1		10			0.039	1.0		I. R. Hydrographic Office
Szathmar	29.56	750.8	30.03	762.7	37.0	2.8	94	e.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	29.78	756.3	30.07	763.7	36.7	2.6	89	nw.			1		10					raining	Karl Stancel.
Trieste	30.10	764.5	30.20	767.1	44.2	6.8	98	calm			0		10			0.035	0.9		Rieder.
Vienna	29.38	746.3	30.14	765.5	29.5	— 1.4	98	calm			0		8			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.12	739.6	29.22	742.2	42.3	5.7	61	sw.	12	5.4			3			0.260	6.6	blue sky	W. Boswell.
Armagh, Observatory	29.24	742.7	29.49	749.0	45.7	7.6	84	ssw.	15	6.7			10					drizzling	S. Call.
Bidston, Liverpool Obs'y			29.59	751.6	49.2	9.6	71	wsw.	28	12.5			8					overcast	John Hartnup.
Bolton, Sharples	29.03	737.3	29.56	750.8	48.3	9.1	77	wsw.	24	10.7			7					foggy	Thomas Mackereth.
Bradford, Yorkshire	29.14	740.1	29.54	750.3	47.1	8.4	79	sw.			4		4			0.77	19.6	d. clouds	J. McLandsborough, F.R.A.S.
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	80.0	26.7	78	ne.			3		8					overcast	Pvt. J. Surgenor.
Cardington			29.68	753.9	48.0	8.9	92	w.			3.0		10					overcast	John McLaren.
Chatham, School M. E.	29.69	754.1	29.82	757.4	48.2	9.0	85	s.			2		10			blank	blank	gloomy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.66	753.4	29.89	759.2	49.7	9.8	97	s.					10					rain & fog	The Staff.
Fort Napier, Natal	27.61	701.3	29.83	757.7	71.2	21.8	82	ne.			1		3					blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	87.0	30.6	69	nw.			1		4					d. clouds	Sergt. John Robinson.
Galway, Queen's College			29.41	747.0	49	9.4	100	sw.			3		10			0.33	8.4	raining	J. O'Donaghue.
Gibraltar, Mediterranean	30.03	762.7	30.09	764.3	59.9	15.5	85	e.			6		8					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	29.10	739.1	29.30	744.2	42.9	6.1	89	ssw.			5		10 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.60	751.8	29.77	756.1	47.6	8.7	92	ssw.			4		10					overcast	The Staff.
Guernsey	29.63	752.6	29.98	761.5	50.0	10.0	93	wsw.			3		10					drizzling	A. Collenette, F. M. S.
Kew, Observatory	29.73	755.1	29.77	756.1	48.9	9.4	82	sw.	20	8.9			10					threatening	The Staff.
Leicester, Museum	29.39	746.5	29.64	752.8	50.0	10.0	85	w.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.15	765.8	30.22	767.6	63.0	17.2	67	nw.			2		1					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.07	763.8	30.12	765.0	67.5	19.7	76	n.			2		10					overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.12	739.6	29.64	752.8	47.9	8.8	93	w.			3		10					drizzling	John Mac Email.
Oxford, Radcliffe Obs'y	29.50	749.3	29.73	755.1	48.1	8.9	92	ssw.			6		10					drizzling	The Staff.
Plymouth	29.79	756.7	29.86	758.4	50.0	10.0	93	sw.			4		10					drizzling	John Merrifield.
Sandwick Manse, Orkneys			28.96	735.6	42.8	6.0	69	w.	52	23.2			10					misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.05	763.3	30.12	765.0	51.4	10.8	70	s.			1		6					d. clouds	W. H. Lyne
Sheffield	29.31	744.5	29.59	751.6	49.2	9.6	81	sw.			1		7			0.38	9.7		W. F. Cooper.
Silloth Rectory	29.45	748.0	29.48	748.8	45.5	7.5	87	sw.			5		10			0.225	5.7	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.56	750.8	46.2	7.9	90	w.	27	12.1			5					d. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.55	750.6	29.77	756.1	49.6	9.8	85	sw.			3		8					squally	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.76	755.9	29.82	757.4	52	11.1	86	sw.			6		10					raining	W. Newcombe.
Valencia, Observatory	29.63	752.6	29.65	753.1	51.4	10.8	94	sw.	37	16.5			10					drizzling	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.23	742.4	29.27	743.4	35	1.7	90	e.	20	8.9			10 n			0.560	14.2	threatening	H. J. Cundall, C. E.
Chatham, N. B.*	29.45	748.0	29.51	749.5	12	—11.1	100	nw.	14	6.3			10 n		nw.	0.35	8.9	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.68	753.9	29.71	754.6	7	—13.9	91	ne.	35	15.6			10 n		calm	0.05	1.3	light snow	J. McWilliams.
Fort Garry, Manitoba*	29.38	746.2	30.31	769.9	— 3	—19.4	95	ne.	2	0.9		5 k	5 ks	ne.	ne.	0	0	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.12	739.6	29.25	742.9	47	8.3	96	se.	20	8.9			10 n		s.	1.222	31.0	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.68	753.9	30.06	763.5	3	—16.1	87	n.	7	3.1			10 n			inap.	inap.	light snow	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.67	753.6	29.89	759.2	0	—17.8	72	nw.	14	6.3			10 s			0	0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.39	746.5	30.19	766.8	—13	—25.0	47	calm	0	0		0	0			0	0	clear	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.36	745.7	30.14	765.5	4	—15.6	100	n.	4	1.8			0			inap.	inap.	clear	H. Morgan.
Port Stanley, Ontario	29.43	747.5	30.13	765.3	10	—12.2	83	n.	3	1.3			10 n		nw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.36	745.7	29.71	754.6	5	—15.0	83	n.			5		10 ks		n.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.61	752.1	30.13	765.3	—10	—23.3	83	w.	2	0.9		0	0		e.	0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.35	745.5	30.13	765.3	9	—12.8	100	ne.	7	3.1			10 ks			0.01	0.3	cloudy	K. Stewart.
St. Andrews, N. B.	29.11	739.4	29.16	740.7	12	—11.1	94	ne.	23	10.3			10 n			0.20	5.1	heavy snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	29.51	749.5	29.57	751.1	39	3.9	92	e.	28	12.5			10 n			0.40	10.2	light rain	T. C. Hill, C. E.
Toronto, Ontario*	29.72	754.9	29.15	740.4	1	—17.2	95	nw.	6	2.7		0	0			0	0	clear	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	28.90	734.0	28.97	735.8	41	5.0	79	s.	25	11.2		3 ck	4 s	sw.	s.	0.55	14.0	fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.07	763.8	30.33	770.4	32	0.0	100	se.				0	0			0.30	7.6		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.95	760.7	29.98	761.5	69.0	20.6	94	e.	18.0	8.0		0	9 s			0	0	light haze	John Duthie.
Cape Town, C. G. H. Obs'y	29.83	757.7	29.87	758.7	84.2	29.0	51	s.	31	13.9		6	8			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.22	767.6	30.51	774.9	38.7	3.7	78	sse.			3		0			0	0	clear	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.34	770.7	30.37	771.4	42.1	5.6	81	e.	1.6	0.7		10ck	0	sw.		0	0	covered	M. Marc Dechevrens, S.J.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

JANUARY 2, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.46	748.3	29.51	749.5	39.4	4.1	87	sw.	18	8			10						Oversergent Fischer.
Fanöe	29.33	744.9	29.35	745.4	43.0	6.1	93	wsw.			6		9						Overloerer Lauridsen.
Godthaab, Greenland	29.65	753.0	29.69	754.1	11.8	—11.2	82	nne.			4		9						S. Kleinschmidt.
Stykkisholm, Iceland	28.91	734.4	28.96	735.5	26.2	— 3.2		e.			7		8						A. O. Thorlacius.
Thorshavn	28.80	731.5	28.84	732.4	34.2	1.2	82	calm	0	0			8						Overloerer Bergh.
Vestervig	29.06	738.0	29.15	740.3	42.1	5.6	96	sw.			7		9						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.32	744.7	29.99	761.8	44.2	6.8	97	sse.			1	2 ck	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.53	750.0	30.08	764.0	32.9	0.5	93	sw.			1		k		ne.	0	0		M. Nicot, Director.
Arras, Engineer School	29.65	753.0	29.91	759.6	43.2	6.2	88	sw.			4		10 n		se.	0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.18	766.5	30.26	768.5	48.6	9.2	76	ne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.54	750.4	30.12	765.0	41.0	5.0		s.			1		10		w.	0.087	2.2	raining	M. Saillard, Director.
Beauvais, Normal School	29.77	756.2	30.05	763.2	44.1	6.8	83	sw.			2		5		w.	0	0	cloudy	M. Frère Eugène Marié.
Besançon, Normal School			30.09	764.3	41.9	5.5	94	n.			1					0	0		M. Gobin, Director.
Bordeaux, Observatory	29.96	761.0	30.24	768.0	38.5	3.6	93	sse.			1		fg			0.008	0.2	dense fog	M. Rayet, Director.
Bourges, Normal School	29.55	750.6	30.11	764.7	51.8	11	86	sw.			1		n		sw.	0	0		M. Postel, Director.
Brest, Naval Observatory	29.83	757.6	30.07	763.8	50.4	10.2	89	wsw.			2		10		wsw.	0.047	1.2	misty	M. de Kennaree, Dir.
Caen, Normal School	29.95	760.6	30.02	762.6	49.6	9.8	76	ssw.			1		5		ssw.	0.08	2.	cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.81	757 1	30.14	765.5	39.6	4.2	80	sw.			2		10			0.016	0.4	covered	M. Jadot, Director.
Charleville, Normal School																			M. Grimard, Director.
Clermont-Ferrand Obs'y	28.80	731.4	30.16	766.1	52.5	11.4	43	sw.			2		8			0.016	0.4	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.35	745.4	30.22	767.7	43.5	6.4	90	ne.			1		10					light rain	M. de Villemontée, Dir.
Commercy, Normal School	29.22	742.2	30.15	765 7	41.7	5.4	91	w.			1		10	w.	w.	0.142	3.6	raining	Dr. Coulet, Director.
Gap, Normal School	27.64	702.0	30.26	768.5	37.4	3													M. Jeangirard, Director.
Gréasque, du. Rhone	29.05	737.8	30.19	766.9	49.5	9.7	69	nw.			2		5		nw.	0.04	1.	½ covered	M. Kina, Director.
Grenoble, Normal School	29.49	749.0	30.29	769.4	38.3	3.5	82	e.			1		cn			0	0		M. Ablard, Director.
Guéret, Normal School	28.58	725.8	30.17	766.4	46.6	8.1	64	sw.			3		10			0	0	covered	M. Rivoire, Director.
Lamballe, Normal School	29.81	757.2	30.09	764.2	50.0	10	74	sw.			2		5		sw.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.70	754.3	30.26	768.7	60.4	15.8	55	ne.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.03	762.8	30.13	765.4	52.7	11.5	86	w.			2		8		w.	0	0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.18	741.1	30.27	768.9	40.8	4.9	83	e.			1	0	5 n		wnw.	0	0	cloudy	M. André, Director.
Mans, Normal School	29.79	756.7	30.11	764.7	45.7	7.6	98	sw.			1		8		sw.	0.083	2.1	very cloudy	M. Piboen, Director.
Marseille, Observatory	29.94	760.4	30.21	767.3	53.8	12.1	71	wnw.			2		5		wnw.	0	0		M. Stephan, Director.
Montlouis Pinstituteur	24.97	634.3	29.82	757.3	37.0	2.8	64	w.	5.6	2.5			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.12	765.1	30.24	768 0	55.0	12.8	75	se.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.29	743.9	30.10	764.4	41.4	5.2	91	sw.			1		10			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.00	761.9	30.16	766.0	52.3	11.3	90	sw.			0-1		10		wsw.	0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.15	765.7	30.26	768.5	52.2	11.2	64	sw.	3.8	1.7			1	w.		0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.32	541.5			29.3	—1.5		sw.			1		1		sw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.12	739.7	30.22	767.5	40.8	8.2	75	n.			1			n.	n.	0.04	1.		M. Talhen.
Puy de Dôme Obs'y, Summit	25.22	640.6			32.0	0.0	83	w.			4		8		w.	0.039	1.0	¾ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.16	766.1	30.19	766.9	48.2	9.0	100	s.			1		10			0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.94	760.4	30.15	765.9	48.6	9.2	92	sw.			1		5			0	0	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.10	713.7	30.33	770.3	38.5	3.6	87	e.			1		k		w.	0	0		M. Colrat, Director.
Rouen, Normal School	29.88	759.0	29.93	760.2	40.6	4.8	83	sw.			1		2			0	0	slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.91	759.7	30.07	763.7	47.5	8.6	89	nw.			2		8		nw.	0.012	0.3	very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.90	759.4	30.06	763.6	43.7	6.5	90	ssw.			1		10		wsw.	0.012	0.3	covered	M. Renou, Director.
Toulouse, Observatory	29.57	751.0	30.30	769.5	50.7	10.4	69	sw.			3		2	w.		0	0	slightly cl'dy	M Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.56	750.8	30.05	763.3	44.2	6.8	88	sw.			1					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.16	740.7	30.01	762.3	34.7	1.5	70	sw.			3	0	7 k		wsw.	0.012	0.3	raining	Prof. Dr. Hoh.
Berlin	29.61	752.2	29.80	756.8	38.5	3.6	77	sw.			2		9			0	0		Prof. Dr. Arndt.
Breslau	29.44	747.7	29.97	761.2	38.5	3.6	67	ssw.			2		8	sw.		0	0		Royal University Obs'y.
Carlsruhe	29.64	752.9	30.10	764.4	38.8	3.8	86	sw.			1		10	sw.		0	0	foggy	Albert Senz.
Cassel	29.13	739.8	29.84	757.9	34.9	1.6	74	s.			6		5	s.		0	0		Dr. H. Möhl.
Frankfort on the Main	29.57	751.0	29.94	760.5	32.7	0.4	90	sw.			1		10			0	0		Physical Society.
Friedrichshafen	28.71	729.3	30.22	767.6	32.2	0.1	98	sw.			1		10			0.012	0.3	foggy	Wilhelm, Chief Tel.
Hamburg	29.56	750.9	29.66	753.3	39.6	4.2	93	sw.			6		10			0	0		E. Preller.
Kiel	29.54	750.2	29.55	750.6	40.6	4.8	90	ssw.			3		10			0.020	0.5		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.48	748.8	29.91	759.8	39.2	4.0	75	ssw.			3		10	sw.		0	0		H. Leppig, Asst.
Magdeburg	29.63	752.5	29.82	757.4	39.0	3.9	80	sw.			5		10 ks		sw.	0	0		Dr. Assmann.
Memel	29.75	755.6	29.80	756.8	31.3	—0.4	98	s.			5		10 s					hazy	Issermann.
Munich	28.26	717.7	30.12	765.1	45.0	7.2	56	nw.			2		4	w.		0	0		Central Station.
Neufahrwasser	29.75	755.7	29.77	756.1	34.3	1.3	78	s.			2		4	w.		0	0		A. Lothes.
Neustadt, Palatinate	29.50	749.2	30.02	762.6	41.0	5.0	84	w.			2		10	w.		0.039	1.0		Dicknether.
Stuttgart	29.09	738.9	30.01	762.3	41.9	5.5	74	w.			2		10					light rain	Prof. Dr. Schoder.
Wustrow	29.58	751.3	29.60	751.9	37.9	3.3	93	ssw.			4		10 s			0	0		Profs. Brandes & Reimer
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.77	756.2	30.17	766.2	57.2	14.0		n.			1.0		1			0.012	0.3	misty	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Deesa	29.46	748.2	29.94	760.3	78.5	25.8	48	sw.	6.3	2.8			0			0	0	blue sky	
Bombay	29.86	758.3	29.89	759.3	80.5	26.9	68	nnw.	18	8.0			0			0	0	blue sky	
Poona, Yarrowda	28.13	714.6	29.98	761.4	84.4	29.1	31	e.	12	5.4			2	wsw.		0	0	d. clouds	
Belgaum	27.35	694.8	29.89	759.1	77.5	25.3	61	e.	9	4.0			7	ne.	e.	0	0	d. clouds	
Lahore	29.24	742.6	30.01	762.3	62.6	17.0	47	nw.	0.8	0.4			10			0	0	overcast	
Roorkee	29.07	738.4	30.00	762.0	65.8	18.8	38	sw.	0.9	0.4			1			0	0		
Agra	29.44	747.6	30.02	762.4	71.2	21.8	38	nw.	1.2	0.5			0			0	0		
Nagpur	28.93	734.8	29.98	761.5	78.5	25.8	41	calm	2.8	1.2			0			0	0	blue sky	
Jubbulpore	28.63	727.2	30.02	762.6	68.3	20.2	36	calm	0.9	0.4			0			0	0	blue sky	
Lucknow	29.65	753.0	30.04	762.9	70.7	21.5	42	wsw.	1.8	0.8			0			0	0	blue sky	
Allahabad	29.68	754.0	30.01	762.2	64.8	18.2	60	calm	0.4	0.2			0			0	0	blue sky	
Patna	29.88	759.1	30.08	763.9	68.9	20.5	42	sw.	2.9	1.3			0			0	0	blue sky	
Hazaribagh	27.96	710.2	30.02	762.5	67.8	19.9	36	nw.	3.2	1.4			0			0	0	blue sky	
Cuttack	29.96	760.8	30.04	763.0	73.1	22.8	61	ene.	0.3	0.1			0			0	0	blue sky	
Calcutta, Alipore	30.00	761.9	30.02	762.5	66.5	19.2	71	nnw.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.88	759.0	30.01	762.2	66.3	19.1	79	calm	1.9	0.8			0			0	0	blue sky	
Chittagong	29.92	760.0	30.01	762.2	69.6	20.9	73	w.	2.1	0.9			1			0	0	blue sky	
Sibsagar	29.70	754.3	30.05	763.3	61.9	16.6	83	nw.	1.9	0.8			2			0	0	blue sky	
Jeypore	28.51	724.2	29.98	761.4	73.5	23.1	45	wsw.	3.7	1.6			0			0	0	blue sky	
Zanzibar, Africa	29.87	758.7			85.5	29.7	70	ssw.	5.0	2.2		c	5 fk		ne.	0	0	d. clouds	
Trichinopoly	29.67	753.6			77.0	25.0	95	nne.	1	0.4			10			0	0	overcast	
Bellary	28.44	722.4			81.5	27.5	56	ese.	4.8	2.1		3 k	5	sw.		0	0	gloomy	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.76	755.8	30.18	766.5	42.3	5.7	88	calm	0	0			10			0.016	0.4		Prof. Giovanni Clodig.
Milan	29.67	753.6	30.21	767.3	43.9	6.6	82	w.	4.9	2.2			3	nw.		0.087	2.2		Prof. Schiaparelli.
Padua	30.06	763.6	30.18	766.5	39.2	4.0	97	nnw.	3.2	1.4			10			0.004	0.1		Prof. Dott. Lorenzoni.
Moncalieri	29.26	743.1	30.21	767.3	33.4	0.8	74	nw.	1.3	0.6			10			0	0		Prof. P. F. Denza.
Genoa	29.99	761.8	30.19	766.8	50.2	10.1	74	calm	0	0			10	sw.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.23	717.1	30.22	767.7	38.8	3.8	73	w.			2		2			0	0		Prof. D. C. Bruno.
Pesaro	30.13	765.4	30.19	766.7	43.2	6.2	91	n.	4.9	2.2			1			0	0		Prof. Luigi Guidi.
Florence	29.94	760.4	30.20	767.1	47.7	8.7	88	nw.			2		0			0.079	2.0		Prof. Costantino Pitter.
Leghorn	30.10	764.6	30.19	766.8	52.0	11.1	79	ne.	0.7	0.3			4			0.031	0.8		Prof. P. Monte.
Rome	30.04	763.0	30.22	767.5	52.7	11.5	71	calm	0	0			7			0.118	3.0		Prof. P. S. Ferrari.
Lecce	29.91	759.7	30.17	766.3	50.0	10.0	75	nw.	4.9	2.2			5	nw.		0.004	0.1		Prof. C. de Giorgi.
Cosenza	29.31	744.5	30.22	767.6	52.9	11.6	78	se.	1.8	0.8			10	s.		0.087	2.2		Prof. D. Conti.
Cagliari	30.03	762.7	30.22	767.6	58.6	14.8	72	calm			0		5	nw.		0.004	0.1		Prof. A. Pacinotti.
Palermo	29.98	761.4	30.23	767.8	59.2	15.1	49	w.	3.1	1.4			9	nw.		0.181	4.6		Prof. G. Ciaccialatore.
Syracuse	30.14	765.6	30.19	766.7	59.5	15.3	65	w.	5.6	2.5			2	e.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.64	752.9	30.18	766.6	51.8	11.0	70	n.	0	0			4	nw.		0.213	5.4		Prof. T. Brioschi.
Stelvio	22.13	562.0			20.8	— 6.2	64	se.			1		8			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.17	563.1			22.1	— 5.5	68	s.			2		3			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.29	769.3	30.33	770.4	31.9	— 0.2	100	sw.				0	9 ks		w.			cloudy	
Hakodate	30.26	768.6	30.27	768.8	35.5	1.9	66	wnw.	12.0	5.4			4			0	0		
Hiroshima, I. M. Obs'y	30.40	772.1	30.42	772.6	36.4	2.4	80	nne.	8.0	3.6		cs	2 s			0	0	clear	K. Sasaki.
Kanazawa	30.45	773.4	30.56	776.2	31.2	— 0.4	69					0	0					clear	S. Endo.
Kioto	30.25	768.3	30.44	773.2	30.8	— 0.7	90	n.	1.5	0.7		0	0			0	0	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.22	767.6	30.44	773.2	36.5	2.5	85	calm	0	0		8 c;ck	0			0	0	cloudy	S. Takehayashi.
Neegata	30.40	772.1	30.43	772.9	34.4	1.3	89	sw.	5.6	2.5		10 ck	0			0	0	cloudy	
Nobiru	30.33	770.4	30.35	770.9	35.0	1.7	73	n.	3.2	1.4		0	0			0	0	clear	H. Midzushina.
Supporo					9.0	—12.8	95	calm	0	0			0			0.232	5.9	clear	
Tokei Obs'y, Yeddo	30.33	770.4	30.40	772.1	34.5	1.4	70	nnw.	4.0	1.8		0	0			0	0	clear	The Staff.
Wakayama	30.37	771.4	30.43	772.9	35.6	2.0	79	ene.	2.7	1.2		0	0			0	0	clear	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.79	756.7	29.97	761.2	81.7	27.6	59	e.	15.5	6.9		0	3 k;ks		sse.	0.09	2.3	fair	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.75	603.3	29.97	761.3	45.3	7.4	63	calm	0	0		7 cs	0	w.		0	0	cloudy	Vicente Fernandez.
Leon	24.53	623.0	30.46	773.7	42.5	5.8	80	n.			1	5 c	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.77	756.2	30.03	762.9	65.0	18.3	81	e.			2	6 cs	0	sw.		0	0	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23.13	587.8	30.40	772.3	36.9	2.7	68	calm	0	0		0	0			0	0		The Staff.
Morelia	24.04	610.5	30.14	765.6	48.6	9.2	60	ese.			3	1 c	2 k	s.	se.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.98	609.0	30.15	765.7	36.5	2.5	78	calm			0	1 c	0			0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.48	596.3	30.56	776.3	35.2	1.8	73	ne.	0.2	0.1		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.18	614.3	30.27	769.0	37.6	3.1	49	ne.			1		0	w.		0	0	hazy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.59	573.9	30.35	771.1	44.4	6.9	41					0	3 s		w	0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.83	757.7	29.83	757.7	44.6	7.0		sw.			5					0.016	0.4		
Groningen	29.59	751.6	29.65	753.0	41.7	5.4		sw.			6					0.122	3.1		
Helder	29.63	752.6	29.63	752.6	43.9	6.6		ssw.			5					0.362	9.2		
Hellevoetsluis	29.77	756.1	29.77	756.1	43.0	6.1	96	wsw.			5					0	0		
Utrecht	29.72	755.0	29.77	756.2	43.3	6.3	90	sw.			5		10			0.063	1.6	dull	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	28.76	730.4	28.82	732.0	38.8	3.8	87	s	18	8			10			0.661	16.8	raining	
Brono	28.81	731.7	28.85	732.7	34.5	1.4	97	s.	9	4			3			0.105	4.2		
Christiania	28.94	735.0	29.08	738.7	38.3	3.5	95	ssw.	13	6			10			0.295	7.5	raining	
Gjæsvær	28.96	735.6	28.98	736.2	16.9	— 8.4		se.			4		10						
Lodingen	28.87	733.4	28.92	734.6	24.6	— 4.1	68	se.			2		9			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					61.2	16.2	77	ene.	3.1	1.4		2				0	0		Dr. J. A. Sampaio.
Campo Major	29.16	740.7	30.17	766.4	55.4	13.0	55	nne.	9.8	4.4		3				0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.89	759.2	29.98	761.4	62.1	16.7	54	ne.	18.1	8.1		8				1.205	30.6		Capt. D. A. de Cunha.
Lisbon, Observatory	29.84	758.0	30.21	767.3	53.6	12.0	63	nne.	28.0	12.5		1				0.004	0.1		The Staff.
Ponta Delgada, Azores	30.36	771.2	30.43	773.0	58.3	14.6	86	ne.	12.5	5.6		3				0.075	1.9		
Saint Paul de Loando	29.69	754.1	29.89	759.2	82.0	27.8	91	w.	1.3	0.6		4	e.			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.98	736.2	30.22	767.6	—12.1	—24.5		sw.	7	3		1 c	0			0.012	0.3		Major K. Lasarew.
Archangel	30.10	764.5	30.12	765.0	—12.3	—24.6	86	ese.	9	4			5 ks			0	0		Capt. Sseliwerstow.
Astrakhan	30.29	769.4	30.21	767.3	33.8	1.0	92	calm	0	0		10 cp	0			blank	blank	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.37	745.9	29.91	759.6	10.9	—11.7	80	sw.	22	10			9			0.024	0.6		Meteorological Obs'y.
Dorpat	29.54	750.3	29.79	756.7	32.0	0.0	85	s.	11	5			10 n			0.028	0.7		Observatory.
Ekaterinburg	29.15	740.3	30.22	767.5	— 5.3	—20.7	79	w.	13	6		4 c	0			0	0	light clouds	Meteorological Obs'y.
Kasan	29.81	757.1	30.11	764.7	3.4	—15.9	90	e.	9	4			9			0.024	0.6	snowing	Observatory.
Kertch	30.15	765.8	30.17	766.3	38.8	3.8	93	w.	4	2			10 n			0	0		Lagorio & Sastyrex.
Kieff	29.39	746.6	30.07	763.7	25.5	— 3.6	98	sse.	4	2			10 n			0	0	foggy	Observatory.
Lugan	29.95	760.8	30.17	766.3	28.4	— 2.0	86	wnw.	9	4			10			0.008	0.2		Meteorological Obs'y.
Moscow	29.50	749.2	30.00	762.1	24.6	— 4.1	68	nnw.	4	2		0	8 ks			0	0		Meteorological Obs'y.
Nikolaiev	30.12	765.1	30.19	766.9	30.9	— 0.6	98	calm	0	0			10 n			0	0	light fog	Capt. Kurdakow.
Nikolaievsk, on the Amoor.																			Lieut. Iwanow.
Pekin, China	30.10	764.6	30.24	768.2	24.4	— 4.2	57	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	29.87	758.7	29.89	759.1	20.1	— 6.6	87	se.	18	8			10 n			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.90	734.0	30.60	777.3	23.9	— 4.5	88	calm	0	0			0			0	0		Telch, A. M.
Tiflis	28.82	731.9	30.27	768.9	45.9	7.7	42	n.	4	2			0			0	0		Physical Observatory.
Warsaw	29.50	749.2	29.94	760.5	28.9	— 1.7	92	ssw.	4	2		10c;cs	0					solar corona	Astronomical Obs'y.
Wilna	29.50	749.2	29.93	760.3	30.0	— 0.8	92	sse.	4	2			10			0	0	heavy cld's.	Berg, Assistant
Yeniseisk	29.00	751.7	29.91	759.7	5.4	—14.8	78	w.	16	7			0			0.008	0.2		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.13	739.9	46	7.8	92	w.			4		10			0.1	3.	overcast	J. Youngclause.
North Unst, Shetland Isl'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.15	765.7	30.24	768.2	53.6	12.	64	e.	0.7	0.3			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.21	767.4	30.27	768.9	57.9	14.4	66	se.	3.1	1.4		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.30	693.4	30.35	770.8	48.2	9.0	70	sw.	1.1	0.5		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.02	711.6	30.29	769.3	52.5	11.4	61	ne.	7.6	3.4		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.13	765.4	30.30	769.7	55.4	13.0	72	ssw.	0.7	0.3		2	4	ne.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.32	744.7	30.23	767.8	55.9	13.3	74	calm	0	0		0	2			0	0	almost clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.02	762.6	30.09	764.3	69.5	20.8	67	nw.	3.8	1.7		c	6 k;s		nnw.	0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.98	761.5	30.04	762.9	78.6	25.9	72	ese.	7.7	3.4		6 c	2 ck		e.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.98	761.6	30.08	764.1	59.0	15.0	61	e.	16.2	7.2			10		e.	0	0		Capt. C. Puizon, R. N.
San Juan de Porto Rico, W. I	30.00	762.0	30.09	764.3	69.8	21.0	91	calm	0	0		2 s	5 k	sw.	sw.	0.087	2.2		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Ids	29.95	761.0	30.10	764.5	76.0	24.4	88	se.	0	0		2 c	1 k	e.		0.05	1.3	fair	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.30	744.2	29.34	745.2	13.3	—10.4	93	se.			4		10			0.425	10.8	snowing	
Umea	29.03	737.4	29.08	738.7	32.7	0.4	100	s.			6		10			0.535	13.6		
Hernosand	28.95	735.4	29.00	736.7	35.4	1.9	91	sse.			6		10			0.098	2.5		
Stockholm	29.22	742.1	29.39	746.6	36.9	2.7	84	ssw.			4		10			0	0		
Wisby	29.47	748.0	29.53	750.1	38.8	3.8	93	wsw.			6		10			0	0		
SUB-SERIES.																			
Upsala	29.24	742.8	29.33	745.0	36.3	2.4	83	ssw.	18.1	8.1			10		sw.	0.091	2.3		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.80	731.4	30.29	769.4	33.1	0.6	92	sse.			1					0	0	covered	The Observatory
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.19	766.8	51.1	10.6	66	s.	7	3.0			9		sw.	0	0		The Observatory.
Valona			30.15	765.9	59.2	15.1		sw.			1		5			0.16	4.	cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.15	765.7	63.0	17.2	59	ne.			2	1 c	0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	29.79	756.7	29.88	758.9	12	—11.1	80	w.	16	7.2			10 s		nw.	0	0	cloudy	
Alpena, Michigan	29.44	747.8	30.15	765.8	13	—10.6	80	nw.	3	1.3			10 s			0.04	1.0	cloudy	
Atlanta, Georgia	28.94	735.1	30.17	766.3	24.0	— 4.4	73	nw.	11	4.9			10 s		calm	0	0	cloudy	
Atlantic City, New Jersey	29.94	760.5	29.95	760.7	13.8	—10.1	70	w.	13	5.8		1 k	0	w.		0.63	16.0	clear	
Augusta, Georgia	30.00	762.0	30.20	767.1	30.0	— 1.1	56	nw.	3	1.3		0	0			0.03	0.8	clear	
Baltimore, Maryland	29.98	761.5	30.03	762.7	21	— 6.1	70	nw.	10	4.5		0	8 s		nw.	0	0	cloudy	
Barnegat, New Jersey	29.88	758.9	29.90	759.4	15.0	— 9.4	67	nw.	21	9.4		0	3 s		nw.	0.40	10.2	clear	
Bismarck, Dakota	28.29	718.6	30.29	769.4	7	—13.9	100	calm	0	0		1 c	0	calm		0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.18	690.4	30.11	764.8	25	— 3.9	92	n.	3	1.3			10 s		calm	0	0	cloudy	
Boston, Massachusetts	29.42	747.3	29.60	751.8	12.0	—11.1	80	w.	22	9.8			10 n			0.40	10.2	light snow	
Brownsville, Texas	30.04	763.0	30.09	764.3	55	12.8	100	calm	0	0		0	0			0	0	clear	
Buffalo, New York	29.29	744.0	30.09	764.3	8	—13.3	95	w.	12	5.4			10 n		w.	0.06	1.5	light snow	
Burlington, Vermont	29.56	750.8	29.87	758.7	2.5	—16.4	85	n.	19	8.5			10 s		n.	inap.	inap.	cloudy	
Cairo, Illinois	29.78	756.4	30.20	767.1	25.0	— 3.9	80	s.	4	1.8		0	0			0	0	clear	
Campo, California	27.47	697.7	30.10	764.5	29.2	— 1.6	80	se.	3	1.3		6 c	0	w.		0	0	fair	
Camp Thomas, Arizona	27.35	694.7	30.18	766.6	26	— 3.3	84	calm			0	0	0			0	0	clear	
Cape Henry, Virginia	30.02	762.5	30.04	763.0	28	— 2.2	88	nw.	23	10.3		0	3 k		nw.	0.74	18.8	clear	
Cape May, New Jersey	29.94	760.5	29.97	761.2	21	— 6.1	70	nw.	32	14.3			10 ks		nw.	0.02	0.5	cloudy	
Castroville, Texas	29.27	743.4	30.12	765.0	40	4.4	89	nw.	4	1.8		0	0			0	0	clear	
Cedar Keys, Florida	30.17	766.3	30.19	766.8	35	1.7	53	nw.	8	3.6		0	0			0	0	clear	
Champaign, Illinois	29.25	742.9	30.12	765.0	19.8	— 6.8	70	s.	4	1.8			10 s		s.	inap.	inap.	cloudy	
Charleston, S. Carolina	30.11	764.8	30.17	766.3	28	— 2.2	45	n.	6	2.7		0	0			inap.	inap.	clear	
Charlotte, N. Carolina	29.21	741.9	30.10	764.5	20.0	— 6.7	84	sw.	2	0.9			10 s		w.	0.19	4.8	cloudy	
Chattanooga, Tennessee	29.38	746.2	30.24	768.1	25.0	— 3.9	70	sw.	6	2.7		9 cs	0	w.		inap.	inap.	cloudy	
Cheyenne, Wyoming	23.96	608.6	30.22	767.6	32.1	0.1	47	sw.	6	2.7		0	0			0	0	clear	
Chicago, Illinois	29.36	745.7	30.11	764.8	20.8	— 6.2	92	w.	4	1.8			10 n			inap.	inap.	light snow	
Chincoteague, Virginia	29.98	761.5	30.00	762.0	23	— 5.0	73	nw.	9	4.0		hz	3 ks		w.	0.23	5.8	clear	
Cincinnati, Ohio	29.50	749.3	30.19	766.8	26	— 3.3	76	w.	3	1.3			10 s			inap.	inap.	cloudy	
Cleveland, Ohio	29.32	744.7	30.10	764.5	19.8	— 6.8	79	nw.	11	4.9			10 s		nw.	0.02	0.5	cloudy	
Coleman City, Texas	28.23	717.0			39	3.9	73	e.	2	0.9		0	0			0	0	clear	
Columbus, Ohio	29.25	742.9	30.15	765.8	15	— 9.4	67	n.	3	1.3			10 s			0.03	0.8	cloudy	
Concho, Texas	28.07	713.0	30.09	764.3	44	6.7	68	sw.	10	4.5		0	0			0	0	clear	
Davenport, Iowa	29.44	747.8	30.14	765.5	22	— 5.6	73	se.	3	1.3			10 s		calm	0.02	0.5	cloudy	
Dayton, Washington T'y	28.05	712.5	29.85	758.2	38.8	3.8	89	sw.	2	0.9			10 n		sw.	0.03	0.8	light rain	
Deadwood, Dakota	25.33	643.4	30.28	769.1	29	— 1.7	70	calm	0	0			10 ks			0	0	cloudy	
Decatur, Texas																			
Delaware Breakwater, Del.	29.93	760.2	29.95	760.7	23	— 5.0	88	n.	33	14.8		2 k	3 ks	nw.	n.	0.01	0.3	fair	
Denison, Texas	29.28	743.7	30.12	765.0	32.3	0.2	67	ne.	4	1.8		0	0			0	0	clear	
Denver, Colorado	24.75	628.6	30.27	768.8	29.4	— 1.4	58	s.	9	4.0		0	2 s		calm	0	0	clear	
Des Moines, Iowa	29.13	739.9	30.10	764.5	23	— 5.0	73	s.	2	0.9		0	3 s			0	0	clear	
Detroit, Michigan	29.39	746.5	30.15	765.8	18.0	— 7.8	83	w.	7	3.1		0	0			0	0	clear	
Dodge City, Kansas	27.46	697.5	30.21	767.3	29	— 1.7	84	nw.	4	1.8		5 cs	0	n.		0	0	fair	
Dubuque, Iowa	29.36	745.7	30.13	765.3	18.3	— 7.6	83	s.	1	0.4		0	6 s		s.	0.07	1.8	fair	
Duluth, Minnesota	29.43	747.5	30.19	766.8	4	—15.6	79	nw.	6	2.7		0	0			0	0	clear	
Eagle Pass, Texas	29.28	743.7	30.12	765.0	39.2	4.0	89	calm	0	0		0	0			0	0	clear	
Eagle Rock, Idaho	25.28	642.1	30.24	768.1	22	— 5.6	76	n.	3	1.3			10 s		nw.	0	0	cloudy	
Eastport, Maine	29.05	737.9	29.12	739.6	15	— 9.4	100	n.	23	10.3			10 n		n.	0.23	5.8	light snow	
El Paso, Texas	26.37	669.8	30.25	768.3	42.1	5.6	46	nw.	2	0.9		0	1 s			0	0	clear	
Erie, Pennsylvania	29.32	744.7	30.10	764.5	15	— 9.4	83	n.	12	5.4			10 n			0.13	3.3	light snow	
Escanaba, Michigan	29.42	747.3	30.14	765.5	14	—10.0	80	n.	3	1.3		0	3 s			0.02	0.5	clear	
Florence, Arizona																			
Fort Apache, Arizona	25.14	638.5	30.26	768.9	25	— 3.9	67	e.	4	1.8		0	0			0	0	clear	
Fort Assinnaboine, Montana	27.04	686.8	30.08	764.0	22	— 5.6	48	ne.	4	1.8			10 s		calm	0	0	cloudy	
Fort Bennett, Dakota	28.54	724.9	30.28	769.1	14	—10.0	83	nw.	1	0.4			10 s			0	0	cloudy	
Fort Benton, Montana	27.03	686.5	30.01	762.2	28	— 2.2	77	calm	0	0			10 s		calm	0	0	cloudy	
Fort Buford, Dakota	28.07	713.0	30.27	768.8	17	— 8.3	70	e.	1	0.4			10 s		calm	0	0	cloudy	
Fort Custer, Montana	26.71	678.4	30.09	764.3	35	1.7	70	se.	4	1.8			10 s		calm	0	0	cloudy	
Fort Davis, Texas	25.19	639.8	30.17	766.3	40	4.4	67	calm	0	0		0	0			0	0	clear	
Fort Elliott, Texas	27.38	695.4	30.31	769.9	23	— 5.0	46	n.	4	1.8		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.57	751.1	30.17	766.3	25.0	— 3.9	73	calm	0	0		4 cs	0	e.		0	0	fair	
Fort Grant, Arizona	25.28	642.1	30.18	766.6	41	5.0	48	e.	6	2.7		0	0			0	0	clear	
Fort Griffin, Texas	28.78	731.0	30.16	766.1	33	0.6	88	sw.	4	1.8		0	0			0	0	clear	
Fort Keogh, Montana	27.45	697.2	30.14	765.5	23	— 5.0	64	ne.	8	3.6		10 cs	0			0	0	cloudy	
Fort Macon, North Carolina	30.16	766.1	30.17	766.3	24	— 4.4	73	nw.	17	7.6		3 c;hz	0	nw;c		0.28	7.1	clear	
Fort McKavett, Texas	27.79	705.9	30.18	766.6	47.8	8.8	58	sw.	8	3.6		0	0			0	0	clear	
Fort Missoula, Montana	26.55	674.4	30.01	762.2	34	1.1	89	calm	0	0			10 n			0.07	1.8	light rain	
Fort St. Michaels, Alaska	29.49	749.0	29.53	750.0	— 5	—20.6	100	se.	2	0.9		0	0			0	0	clear	
Fort Shaw, Montana	26.20	665.5	30.06	763.5	39	3.9	57	ne.	2	0.9			10 s			0	0	cloudy	
Fort Sill, Indian Territory	28.84	732.5	30.17	766.3	28.5	— 1.9	91	n.	7	3.1		0	0			0	0	clear	
Fort Stevenson, Dakota	28.25	717.5	30.31	769.9	—10	—23.3	57	se.	1	0.4		2 c	0	calm		0	0	clear	
Fort Verde, Arizona					27	— 2.8	56	w.			2	0	0			0	0	clear	
Fredericksburg, Texas																			
Galveston, Texas																			
Grand Haven, Michigan	30.10	764.5	30.14	765.5	57	13.9	94	s.	8	3.6		0	5 s			0	0	fair	
Hatteras, North Carolina	29.38	746.2	30.09	764.3	19.0	— 7.2	84	e.	6	2.7			10 s		w.	0	0	cloudy	
Helena, Montana	30.03	762.7	30.05	763.3	30	— 1.1	88	nw.	10	4.5		3 k	0	calm		0.15	3.8	clear	
Henrietta, Texas	25.63	651.0	30.06	763.5	35	1.7	82	calm	0	0		0	8 s		calm	0	0	cloudy	
Huron, Dakota	29.11	739.4	30.18	766.6	30	— 1.1	88	ne.	5	2.2		0	0			0	0	clear	
Indianapolis, Indiana	28.77	730.7	30.31	769.9	2.2	—16.6	60	nw.	7	3.1		0	0			0	0	clear	
Indianola, Texas	29.28	743.7	30.12	765.0	23	— 5.0	80	sw.	2	0.9			10 s		sw.	inap.	inap.	cloudy	
Jacksboro, Texas	30.08	764.0	30.10	764.5	58.2	14.6	93	s.	10	4.5		0	0			0	0	clear	
Jacksonville, Florida	28.89	733.8	30.13	765.3	33	0.6	81	calm	0	0		0	0			0	0	clear	
Keokuk, Iowa	30.13	765.3	30.18	766.6	34	1.1	60	nw.	3	1.3		3 cs	0			0	0	clear	
Key West, Florida	29.38	746.2	30.08	764.0	21.0	— 6.1	84	se	5	2.2			10 s		se.	0	0	cloudy	
Kittyhawk, North Carolina	30.09	764.3	30.12	765.0	61.5	16.4	78	n.	20	8.9			8 k		n.	0.01	0.3	cloudy	
Knoxville, Tennessee	30.05	763.3	30.07	763.8	25	— 3.9	64	nw.	12	5.4		5 cs	1 s	w.		0.85	21.6	fair	
La Crosse, Wisconsin	29.13	739.9	30.21	767.3	20.6	— 6.3	86	nw.	3	1.3			10 s			inap.	inap.	cloudy	
La Mesilla, New Mexico	29.33	745.0	30.17	766.3	14	—10.0	80	n.	2	0.9			10 s			0.06	1.5	cloudy	
Leavenworth, Kansas	26.21	665.7	30.24	768.1	29.2	— 1.6	67	calm	0	0		0	0			0	0	clear	
Lewiston, Idaho	29.21	741.9	30.17	766.3	25	— 3.9	64	nw.	6	2.7		2 cs	0	w.		0	0	clear	
Little Rock, Arkansas	28.99	736.3	29.86	758.4	41	5.0	96	ne.	1	0.4			10 n		calm	0.07	1.8	light rain	
Los Angeles, California	29.86	758.4	30.19	766.8	30	— 1.1	78	calm	0	0		0	0			0	0	clear	
Louisville, Kentucky	29.70	754.4	30.10	764.5	47.2	8.4	86	n.	2	0.9		5 c	0	calm		0	0	fair	
Lynchburg, Virginia	29.56	750.8	30.15	765.8	28.0	— 2.2	77	sw.	3	1.3			10 n		calm	inap.	inap.	light snow	
Mackinac City, Michigan	29.34	745.2	30.06	763.5	24.2	— 4.3	73	w.	1	0.4		0	0			inap.	inap.	clear	
Madison, Wisconsin																			
Marquette, Michigan	29.04	737.6	30.14	765.5	15	— 9.4	76	w.	3	1.3		0	2 s		calm	0.01	0.3	fair	
Mason, Texas	29.34	745.2	30.12	765.0	15	— 9.4	67	w.	5	2.2			10 s		calm	0.05	1.3	cloudy	
Memphis, Tennessee	28.38	720.8	30.12	765.0	39	3.9	82	sw.	3	1.3		0	0			0	0	clear	
Milwaukee, Wisconsin	29.86	758.4	30.22	767.6	27	— 2.8	77	se.	4	1.8		0	0			0	0	clear	
	29.32	744.7	30.12	765.0	19	— 7.2	70	w.	3	1.3			10 s		w.	0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.20	767.1	30.24	768.1	32.3	0.2	58	ne.	4	1.8	.....	1 c	0	.....	.....	0	0	clear	
Montgomery, Alabama	30.01	762.2	30.25	768.3	25	— 3.9	73	w.	3	1.3	.....	1 cs	0	.....	.....	0	0	clear	
Moorhead, Minnesota	29.19	741.4	30.30	769.6	—22	—30.0	100	n.	5	2.2	.....	0	0	.....	.....	0.10	2.5	clear	
Morgantown, W. Virginia	29.05	737.9	30.11	764.8	23.0	— 5.0	80	w.	8	3.6	.....	.....	10 s	.....	w.	0.02	0.5	cloudy	
Mt. Washington, N. H	22.91	581.9	29.54	750.3	— 6.0	—21.1	91	nw.	60	26.8	.....	.....	10n;fg	.....	nw.	0.17	4.3	light snow.	
Nashville, Tennessee	29.65	753.1	30.21	767.3	23.3	— 4.8	71	s.	3	1.3	.....	6 cs	0	w.	.....	inap.	inap.	fair	
New Haven, Connecticut	29.64	752.8	29.76	755.9	12	—11.1	70	nw.	15	6.7	.....	0	2 s	.....	w.	0.35	8.9	clear	
New London, Connecticut	29.68	753.9	29.73	755.1	15	— 9.4	67	nw.	15	6.7	.....	5 k	4 s	w.	nw.	0.55	14.0	clearing	
New Orleans, Louisiana	30.15	765.8	30.21	767.3	42.2	5.7	57	ne.	3	1.3	.....	2 c	0	.....	.....	0	0	clear	
Newport, Rhode Island	29.61	752 1	29.66	753.4	17.8	— 7.9	81	w.	25	11.2	.....	3 cs	5 s	calm	nw.	0.60	15.2	cloudy	
New River, N. Carolina	.....	.....	.....	.....	22	— 5.6	67	nw.	.....	.....	1	3 c	3 s	w.	.....	0.02	0.5	fair	
New Shoreham, Rhode I'd	29.65	753.1	29.68	753.9	17.0	— 8.3	83	nw.	28	12.5	.....	0	8 s	.....	nw.	0.31	7.9	cloudy	
New York, New York	29.68	753.9	29.87	758.7	12	—11.1	61	w.	16	7.2	.....	0	0	.....	.....	0.07	1.8	clear	
Norfolk, Virginia	30.03	762.7	30.06	763.5	24	— 4.4	84	nw.	2	0.9	.....	0	0	.....	.....	0.40	10.2	clear	
North Platte, Nebraska	27.12	688.8	30.24	768.1	28	— 2.2	77	sw.	3	1.3	.....	4 cs	3 s	w.	.....	0	0	fair	
Olympia, Washington T'y	29.62	752.3	29.66	753.4	46.5	8.1	94	sw.	2	0.9	.....	.....	10 n	.....	cal m	0.37	9.4	light rain	
Omaha, Nebraska	28.94	735.1	30.20	767.1	19.6	— 6.9	72	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Ooglaamie, Pt. Barrow, Alas-	29.91	759.7	29.93	760.2	—21.6	—29.8	86	e.	14	6.3	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	29.66	753.4	30.01	762.2	10.0	—12.2	70	ne.	12	5.4	.....	.....	10 n	.....	.....	0.25	6.3	light snow	
Palestine, Texas	29.61	752.1	30.17	766.3	42	5.6	73	s.	4	1.8	.....	.....	9 ks	.....	.....	0	0	cloudy	
Pensacola, Florida	30.21	767.3	30.24	768.1	34.0	1.1	60	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Philadelphia, Pa	29.91	759.7	29.97	761.2	15	— 9.4	76	nw.	16	7.2	.....	0	0	.....	.....	inap.	inap.	clear	
Pike's Peak, Colorado	17.73	450.3	30.43	772.9	19	— 7.2	36	sw.	22	9.8	.....	0	0	.....	.....	0	0	clear	
Ploche, Nevada	24.05	610.9	30.25	768.3	43	6.1	23	se.	6	2.7	.....	10 k	0	sw.	.....	0	0	cloudy	
Pittsburg, Pennsylvania	29.25	742.9	30.10	764.5	18.7	— 7.4	77	nw.	3	1.3	.....	.....	10 n	.....	.....	0.05	1.3	light snow	
Port Eads, Louisiana	30.20	767.1	30.21	767.3	47.1	8.4	72	n.	4	1.8	.....	0	hz	.....	calm	0	0	clear	
Port Huron, Michigan	29.41	747.0	30.14	765.5	12.2	—11.0	88	w.	4	1.8	.....	.....	10 s	.....	w.	0.03	0.8	cloudy	
Portland, Maine	29.39	746.5	29.44	747.8	15	— 9.4	83	nw.	22	9.8	.....	.....	10 n	.....	calm	0.54	13.7	light snow	
Portland, Oregon	29.70	754.4	29.77	756.1	48.2	9.0	93	s.	6	2.7	.....	.....	10 n	.....	s.	0.42	10.7	light rain	
Portsmouth, N. Carolina	.....	.....	.....	.....	32	0.0	60	n.	12	5.4	.....	0	6 ks	.....	n.	0.38	9.7	fair	
Prescott, Arizona	24.81	630.2	30.19	766.8	31	— 0.6	74	e.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Punta Rassa, Florida	30.13	765.3	30.14	765.5	44.5	6.9	52	n.	10	4.5	.....	10 c	0	nw.	.....	0.05	1.3	cloudy	
Red Bluff, California	29.72	754.9	30.10	764.5	44.0	6.7	100	calm	0	0	.....	.....	10 n	.....	.....	0.13	3.3	light rain	
Rio Grande City, Texas	29.86	758.4	30.11	764.6	47	8.3	93	calm	0	0	.....	.....	fg	.....	.....	0	0	dense fog	
Rochester, New York	29.33	745.0	30.04	763.0	9	—12.8	70	nw.	16	7.2	.....	.....	10 n	.....	nw.	0.02	0.5	light snow	
Roseburg, Oregon	29.41	747.0	29.98	761.5	45	7.2	86	sw.	4	1.8	.....	.....	10 ks	.....	sw.	0.61	15.5	cloudy	
Sacramento, California	30.00	762 0	30.08	764.0	47.2	8.4	93	se.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	
St. Louis, Missouri	29.50	749.3	30.14	765.5	12.8	—10.7	80	s.	8	3.6	.....	4 cs	0	.....	.....	0	0	fair	
St. Paul, Minnesota	29.27	743 4	30.22	767.6	6.0	—14.4	76	nw.	9	4.0	.....	0	4 s	.....	nw.	0.12	3.0	clearing	
St. Vincent, Minnesota	29.35	745.5	30.33	770.4	—11	—23.9	100	n.	4	1.8	.....	.....	10 s	.....	calm	0.02	0.5	cloudy	
Salt Lake City, Utah	25.50	649.2	30.13	765.3	36	2.2	48	calm	0	0	.....	10 k	0	calm	.....	0	0	cloudy	
San Antonio, Texas	29.36	745.7	30.09	764.3	42.7	5.9	100	calm	0	0	.....	0	0	.....	.....	0	0	clear	
San Diego, California	29.95	760.7	30.02	762.5	48.5	9.2	91	n.	3	1.3	.....	0	fg	.....	.....	0	0	light fog	
Sandusky, Ohio	29.42	747.3	30.14	765.5	18	— 7.8	83	w.	9	4.0	.....	.....	10 s	.....	w.	0.06	1.5	cloudy	
Sandy Hook, New Jersey	29.83	757.7	29.87	758.7	14.0	—10.0	80	n.	35	15.6	.....	3 k	0	n.	.....	0.08	2.0	clear	
San Francisco, California	30.00	762.0	30.07	763.8	51	10.6	93	se.	8	3.6	.....	.....	10 n	.....	s.	0.02	0.5	light rain	
Santa Fé, New Mexico	23.31	592.1	30.32	767.1	27.8	— 2.3	78	calm	0	0	.....	0	4 s	.....	calm	0	0	fair	
Savannah, Georgia	30.08	764.0	30.18	766.6	28	— 2.2	64	nw.	6	2.7	.....	4 ck	0	.....	.....	inap.	inap.	fair	
Shreveport, Louisiana	29.90	759.4	30.16	766.1	35	1.7	53	e.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Silver City, New Mexico	24.33	618.0	30.19	766.8	29	— 1.7	70	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sitka, Alaska	29.45	748.0	29.52	749.8	30	— 1.1	83	calm	0	0	.....	0	0	.....	.....	0.41	10.4	clear	
Smithville, North Carolina	30.08	764.0	30.12	765.0	23	— 5.0	73	nw.	5	2.2	.....	4 c	2 s	w.	.....	0.02	0.5	fair	
Spokane Falls, Wash. Ter.	27.75	704.8	29.89	759.2	36	2.2	100	ne.	3	1.3	.....	.....	10 n	.....	calm	0.09	2.3	light rain	
Springfield, Illinois	29.40	746.7	30.13	765.3	22	— 5.6	80	s.	5	2.2	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	
Springfield, Massachusetts	29.60	751.8	29.74	755.4	14.6	— 9.7	61	nw.	14	6.3	.....	9 cs	0	nw.	.....	0.22	5.6	cloudy	
Stockton, Texas	27.00	685.8	30.14	765.5	38.7	3.7	82	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Thatcher's Island, Mass	29.64	752.8	29.70	754.4	9.0	—12.8	100	w.	38	17.0	.....	.....	10 n	.....	w.	0.21	5.3	heavy snow	
Toledo, Ohio	29.41	747.0	30.15	765.8	18	— 7.8	67	nw.	3	1.3	.....	1 ck	0	nw.	.....	inap.	inap.	clear	
Tucson, Arizona	27.60	701.0	30.10	764.5	42	5.6	47	se.	7	3.1	.....	0	0	.....	.....	0	0	clear	
Umatilla, Oregon	29.50	749.3	29.89	759.2	38.7	3.7	92	s.	2	0.9	.....	.....	10 s	.....	w.	0.02	0.5	cloudy	
Uvalde, Texas	29.10	739.1	30.10	764.5	41	5.0	92	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Vicksburg, Mississippi	29.95	760.7	30.22	767.6	32	0.0	50	e.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Visalia, California	29.68	753.9	30.08	764.0	38.5	3.6	94	sw.	3	1.3	.....	.....	fg	.....	.....	0	0	dense fog	
Washington, D. C	29.93	760.2	30.05	763.3	20.0	— 6.7	70	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	
West Los Animas, Colorado	26.06	661.9	30.20	767.1	9	—12.8	87	calm	0	0	.....	0	3 k	.....	nw.	0	0	clear	
Wickenburg, Arizona	.....	.....	.....	.....	35	1.7	78	w.	.....	.....	1	4 c	0	.....	.....	0	0	fair	
Williamsport, Pa	.....	.....	.....	.....	13	—10.6	70	nw.	11	4.9	.....	.....	10 ks	.....	nw.	0.01	0.3	cloudy	
Wilmington, N. Carolina	30.04	763.0	30.10	764.5	27	— 2.8	64	nw.	4	1.8	.....	8 c;k	0	w.	.....	inap.	inap	cloudy	
Winnemucca, Nevada	25.53	648.5	30.07	763.8	35	1.7	82	ne.	6	2.7	.....	.....	10 ks	.....	sw.	0	0	cloudy	
Wood's Holl, Mass	29.58	751.3	29.62	752.3	18	— 7.8	74	nw.	35	15.6	.....	.....	10 s	.....	nw.	0.49	12.4	cloudy	
Yankton, Dakota	28.90	734.0	30.32	770.1	10	—12.2	58	nw.	8	3.6	.....	0	4 s	.....	.....	0	0	fair	
Yuma, Arizona	29.83	757.7	29.98	761.5	52.0	11.1	33	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1	.....	.....	53.0	11.7	85	w.	6	2.7	.....	6 k	3 s;n	w.	.....	0.05	1.3	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.06	763.5	30.07	763.8	80	26.7	78	e.	.....	.....	.....	5 ck	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.94	760.5	29.96	761.0	76	24.4	90	e.	4	1.8	.....	.....	10 ks	.....	e.	0.45	11.4	cloudy	J. I. Plume.
Guadeloupe, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. Bigar.
Havana, Cuba, W. I.	30.05	763.3	30.10	764.5	71	21.7	97	n.	6	2.7	.....	0	8 ks	.....	n.	0	0	cloudy	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.06	763.5	30.07	763.8	74.4	23.6	79	se.	8	3.6	.....	0	7 s	.....	e.	.....	.....	.....	Robert Johnstone
Navassa, W. I.	29.97	761.2	30.05	763.3	76	24.4	65	ne.	10	4.5	.....	5 ck	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	80	26.7	82	e.	.....	.....	3	5 k	6 ps	e.	e.	0	0	½ cloudy	Dr. O. J. Hering.
Puerto Berrio, U. S. Col'mba	29.44	747.8	30.00	762.0	77	25.0	94	calm	.....	.....	0	5 ck	4 ks	w.	ne.	1.42	36.1	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	72	22.2	88	ne.	.....	.....	2	cs	1 ks	nw.	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.03	762.7	30.06	763.5	73	22.8	76	calm	0	0	.....	3 c	0	.....	.....	0	0	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.28	769.1	30.33	770.4	—36.0	—37.8	.....	w.	8	3.6	.....	0	0	.....	.....	0.01	0.3	clear	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore, India	29.93	760.2	75	23.9	95	nw.			2		10							showery	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.23	767.8	63.2	17.3	72	wnw.			1		3							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 16° 52′, E. 110° 40′	30.07	763.8	75	23.9	76	ne.			4–5		4	se.				4	ne.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.83	757.7	73	22.8	59	ese.			5–6		3	s.						squally	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.31	769.9	54	12.2	73	ese.			1									d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette																			Lieut. J. L. Burr
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.39	771.9	43.5	6.4	92	ene.			1		8	ene.						d. clouds	Capt. S. Long.
H. M. S. Diamond, S. 2° 26′, W. 24° 39′	29.94	760.5	79	26.1		se.			3		3	wsw.				2	se.	d. clouds	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	29.88	758.9	65.5	18.6	60	ssw.			4–5		9	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 48′, W. 58° 56′	29.54	750.3	45	7.2	?	s.			2–4							2	s.	showery	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.86	758.4	83	28.3		ese.			1		4							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. G. Robinson.
H. M. S. Espiegle, N. 17° 20′, W. 24° 35′	30.09	764.3	71	21.7	85	nne.			3		7	nne.				2	nne.	showery	Capt. C. A. P. Bridge.
H. M. S. Euryalus, N. 33° 24′, E. 25° 58′	30.24	768.1	63	17.2	78	w.			3–4		5	w.				3	w.	showery	Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′ E. 43° 12′	29.94	760.5	79	26.1	63	s.			6		1					3	s.	blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.42	772.7	46	6.1	75	ne.			0–1		7	nw.						misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 37° 10′, W. 85° 50′	30.43	772.9	59	15.0	70	ssw.			3–4		8					1 2	sse.; wsw.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Montevideo, Uruguay	29.97	761.2	65	18.3	63	sw.			6		6							squally	Capt. L. Jones.
H. M. S. Iris, Alexandria, Egypt			67	19.4	68	calm			0		2							d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.19	766.8	62	16.7	88	calm			0		3	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 21° 29′, E. 109° 03′	30.21	767.3	52.4	11.3	86	n.			2–3		10					1	n.	misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 14° 16′, E. 52° 20′	30.04	763.0	80	26.7	91	ne.			3–4		3	e.				3	ese.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, N. 19° 35′, W. 61° 58′	30.11	764.8	78.5	25.8	84	e.			3		3	e.				2	e.	d. clouds	Capt. E. Drummond
H. M. S. Orontes, S. 34° 50′, E. 21° 20′	29.94	760.5	69	20.6	84	ene.			5		2					4	e.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 40° 45′, W. 36° 14′	29.31	744.5	58	14.4	90	sw.			3		3					2	w.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix, N. 19° 09′, W. 75° 21′	30.04	763.0	75	23.9	85	nne.			1		2					1	sse.	d. clouds	Capt. H. H. Grenfell.
H. M. S. Ready, N. 22° 29′, E. 59° 20′	30.14	765.5	69.1	20.6		var.			2–4							2	n.	squally	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	29.65	753.1	43	6.1	?	calm			0		9							raining	Lieut. V. B. Oriebar.
H. M. S. Ruby, Trincomalee, Ceylon, Ind	30.09	764.3	80.5	26.9	91	nnw.			1		8	nnw.						d. clouds	Capt. O. E. Foot.
H. M. S. Sea Gull, S. 12° 48′, E. 41° 38′	29.32	744.7	85	29.4	96	ene.			2		1	nne.				2	nne.	blue sky	Comm. M. Byles.
H. M. S. Serapis, N. 40° 46′, W. 9° 18′	30.27	768.8	64	17.8	89	sse.			1		0					5	wsw.	blue sky	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 18° 50′, W. 77° 31′	30.05	763.3	74.5	23.6	85	calm			0		7					sm'h		d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, Callao, Peru	29.94	760.5	72	22.2	63	calm			0		10	calm						misty	Capt. A. H. Markham.
H. M. S. Tyne, N. 37° 26′, E. 60° 50′	30.29	769.4	62	16.7	88	e.			1		1	ne.				1	sse.	blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.01	762.2	75	23.9		e.			3		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.16	766.1	71.5	21.9	71	wsw.			1		0							blue sky	Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	30.04	763.1	76.1	24.5	79	n.			3		2					3	n.	blue sky	C. da Silva Costa.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla.	30.22	767.6	36	2.2	70	ne.	7	3.1			0			0	0			clear	
N. Yard, Portsmouth, N. H.	29.50	749.3	15	— 9.4		nw.	18	8.0			10							snowing	
Naval Hospital, Yokohama, Japan	30.20	767.1	37	2.8	76	calm			0		0			0	0			clear	
Adams, Mollendo, Peru	29.72	754.9	70	21.1	90	se.			1		8					light	s.	cloudy	
Alaska, Pisco, Peru	29.86	758.4	67	19.4	95	calm			0		5			0	0	sm'h		fair	
Alert, Hong Kong, China*	30.03	762.7	62	16.7	66	nne.			1		8		w.	0	0	sm'h		cloudy	
Alliance, Boston, Mass.	29.56	750.8	16	— 8.9	100	ne.			4		10			snow	snow			snowing	
Ashuelot, Tientsin, China	30.26	768.6	30	— 1.1	100	sw			1		0							clear	
Brooklyn, N. 10° 19′, W. 34° 56′	30.02	762.5	75	23.9	95	ene.	24	10.7			10		ene.	0.02	0.5	mod.	ene.	cloudy	
Colorado, New York, N. Y.	29.87	758.7	13	—10.6	94	nw.	5	2.2			10?		calm	0	0			clear?	
Essex, Norfolk, Va.	30.05	763.3	33	0.6	60	wnw.			3		5		nw.					fair	
Franklin, Norfolk, Va.	30.04	763.0	20	— 6.7		w.	6	2.7			2		nnw.	0.25	6.3			clear	
Galena, N. 9° 50′, W. 16° 12′	29.98	761.5	77	25.0	82	ne.			5		8		ne.			long	ne.	cloudy	
Independence, N. Yard, Mare I'd, Cal.	29.93	760.2	47	8.3	85	ese.	4.8	2.1			10		ese.	0	0			overcast	
Kearsarge, New Orleans, La.	30.20	767.1	44	6.7	68	ne.			1		2							fair	
Lackawanna, S. 27° 43′, W. 72° 58′†	30.07	763.8	63	17.2	100	ssw.			3		10					mod.	sw.	clear	
Lancaster, Villafranca, France	30.13	765.3	53	11.7	86	se.			1		2		se.			mod.	s.	fair	
Michigan, Erie, Pa.	30.00	762.0	17	— 8.3		ne.			2		10							snowing	
Minnesota, Newport, R. I.	29.55	750.6	20	— 6.7		nw.	16	7.2			5?		nw.			mod.		clear?	
Monocacy, Yokohama, Japan	30.39	771.9	40	4.4	73	calm			0		0							clear	
Nipsic, Syracuse, Sicily	30.21	767.3	62	16.7	44	wnw.			3		2					sm'h		clear	
Onward, Callao, Peru†	30.05	763.3	62	16.7	100	nw.			2		10		se.			long	w.	cloudy	
Palos, Hong Kong, China	30.19	766.8	60	15.6	71	calm			0		10		calm					cloudy	
Passaic, Washington, D. C.	30.04	763.0	20	— 6.7		nw.			2		5		nw.					fair	
Pensacola, Callao, Peru	29.97	761.2	65	18.3	89	calm	0	0			0							foggy	
Powhatan, Boston, Mass.	29.61	752.1	14	—10.0	100	wnw.			4		10							snowing	
Quinnebaug, Off Cape Farina, Africa.	30.29	769.4	61	16.1	66	ssw.			3		0			0	0	sm'h		clear	
Ranger, N. 19° 04′, W. 104° 21′*	29.89	759.2	73	22.8	76	ne.			1		2		calm	0	0	sm'h		clear	
Richmond, Apia, Samoa Islands*	29.65	753.1	80	26.7	82	se.			1		10			0	0			cloudy	
Shenandoah, Montevideo, Uruguay*	30.02	762.5	65	18.3	58	s.			4		2		s.			mod.	s.	clear	
St. Louis, League Island, Pa.	30.17	766.3	15	— 9.4	100	nw.	15	6.7			0			0	0			clear	
Swatara, Yokohama, Japan†	30.28	769.1	42	5.6	66	w.			1		0					sm'h		clear	
Tennessee, New York, N. Y.	29.84	757.9	13	—10.6		w.	1.4	0.6			0			0	0			hazy	
Vandalia, Charlestown Nevis, W. I.	30.06	763.5	80	26.7	78	e.			3		5		e.					fair	
Wabash, Boston, Mass.	29.55	750.6	14	—10.0	64	nw.	14	6.3			10		nw.					snowing	
Wachusetts, Sitka, Alaska	29.57	751.1	27	— 2.8		ese.			1		0							clear	
Wyoming, Port Royal, S. C.	30.15	765.8	28	— 2.2	67	nnw.	12	5.4			2		calm	0	0			clear	
Yantic, N. 18° 50′, W. 74° 33′*	30.02	762.5	77	25.0	82	ne.			0-1		5		ne.			sm'h		fair	

MERCHANT-MARINE SERIES.

Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, Halifax, N. S.	30.17	766.3	21	—6.1	?	nw.	4	.....	1	.....	nw.	5 h'r	5 h'r	.....	.....	blue sky	C. Gapou, 2d Officer.
S. S. Nova Scotian, Capt. W. M. Richardson, Halifax, N. S.	29.18	766.6	38	3.3	.....	se.	.....	.....	.....	.....	.....	.....	.....	.....	.....	rain & sleet.	.....
S. S. Polynesian, Capt. Robt. Brown, N. 51° 42′, W. 32° 42′*	29.68	753.9	40	4.4	.....	w.	6	.....	4	.....	w.	2 h'r	2 h'r	r'gh	w.	fair	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. Liverpool, England*	29.58	751.3	50	10.0	.....	wsw.	2	.....	1	.....	w.	.....	.....	.....	.....	fair	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, Liverpool, Eng.	29.47	748.5	50	10.0	93	se.	5	.....	2	.....	se.	.....	.....	.....	.....	fair	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 51° 27′, W. 13° 01′†	29.59	751.6	53	11.7	79	w.	5	.....	8	.....	w.	light	light	sm'h	w.	hazy	C. W. Walker, 2d Off'r
S. S. Ohio, Capt. Henry Morrison, N. 41° 59′, W. 66° 15′*†	29.42	747.3	43	6.1	91	sw.	9	.....	9	.....	wsw.	.....	.....	r'gh	ssw.	hazy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Brown.
Utopia, Capt. A. McRitchie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 30° 46′, W. 73° 51′..*	29.99	761.7	58	14.4	.....	wnw.	4	.....	10	.....	wsw.	6 h'r	h'vy	high	wsw.	overcast	J. Sandberg.
S. S. Andes, Capt. W. P. Gladiom	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Kingston, Jamaica	.....	.....	.....	.....	.....	ne.	.....	.....	.....	.....	.....	0	0	mod.	ne.	fine	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse, N. 18° —′, W. 73° —′	29.68	753.1	.....	.....	.....	ne.	1	.....	4?	.....	ne.	sh'rs	shr's	mod.	e.	cloudy?	Fisher & Welden.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S.	.....	.....	70	21.1	61	sw.	6	.....	.....	.....	sw.	0	0	.....	ssw.	clear	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russel	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British Merchant, Capt. E. J. Molony. ‡ S. 25° 25′, E. 93° 13′	30.21	767.3	69.7	20.9	84	ese.	5–6	.....	7	.....	.....	.....	.....	.....	.....	misty	.....
Caldew, Capt. W. Peterson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Cipero, Capt. W. N. Lailey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. City of Agra, Capt. Thos. Young, S. 32° 49′, W. 21° 58′	30.00	762.0	68.5	20.3	.....	nw.	5	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Glaramara, Capt. R. Morton, N. 0° 04′, W. 26° 55′	29.99	761.7	80	26.7	86	se.	2	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Glencairn, Capt. R. S. Tannock, S 24° 38′, W. 28° 38′	30.11	764.8	82	27.8	74	nnw.	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. G. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery, N. 15° 26, W. 26° 00′	30.15	765.8	71.5	21.9	67	ne.	3	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Lochee, Capt. J. Raeburn, R. N. R., N. 12° 22′, E. 87° 31′	29.94	760.5	78	25.6	90	se.	1	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
May Hulse, Capt. H. Youlden, N. 13° 16′, W. 25° 52′	30.05	763.3	71.7	22.1	75	n.	3	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Mertola, Capt. E. W. Turner, N. 36° 35′, W. 9° 36′	30.06	763.5	59.5	15.3	81	ene.	6	.....	1	.....	.....	.....	.....	.....	.....	d. clouds	.....
Minho, Capt. J. Lawson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Naiad, Capt. John Smith, S. 32° 32′, W. 27° 09	29.86	758.4	70.3	21.3	95	nw.	6	.....	9	.....	.....	.....	.....	.....	.....	overcast	.....
Pole Star, Capt. F. Norman, S. 32° 53′, W. 49° 54′	29.80	756.9	74.7	23.7	72	ssw.	5	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
Queen of Cambria, Capt. M. Parry, S. 38° 49′, W. 39° 56′	29.85	758.2	62	16.7	66	wsw.	5	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Strathleven, Capt. C. W. Pearson N. 32° 56′, W. 63° 49′	29.87	758.7	64.5	18.1	94	w.	7	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
S. Superb, Capt. Berridge S. 9° 49′, W. 22° 22′	.....	.....	.....	.....	.....	e.	3	.....	10	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 44° 44′, W. 49° 22′*†	30.35	770.9	46	7.8	.....	se.	4	.....	6	.....	sw.	0	0	sm'h	.....	fine	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO.																	
J. Birmingham, Agent, San Francisco.																	
S. S. Newbern, Capt. E. Y. Rogers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Crowell & Henry.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Servan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York.																	
S. S. Gellert, Capt. Kuhlewein	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Silesia, Capt. A. Albers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. Froehlich, 3d Offl.
S. S. Wieland, Capt. C. Hebich, N. 49° 46′, W. 7° 33′..*	29.87	758.7	53	11.7	.....	sw.	6	.....	10 ks	.....	sw.	rain	rain	4	wsw.	stormy	C. Jorgensen.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 51° 20′, W. 9° 23′						sw.	3				w.	0	0	mod.	nw.	foggy	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley																	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker																	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Alisa, Capt. J. W. Sansom, N. 10° 23′, W. 79° 02′†	29.96	761.0	79	26.1		nne.	4								nne.	showery	
S. S. Bothnia, Capt. MacMackan, [man																	
S. S. City of Alexandria, Capt. L. F. Timmer-																	E. F. Stembridge, 3d offi
S. S. City of Washington, Capt. J. W Re,- N. 28° 37′, W. 86° 10*† [nolds	30.05	763.3	70	21.1		nw.	3								se.	fine	
S. S. Maas, Capt. T. N. Bonjer																	
S. S. New York, Capt. R. B. Quick N. 27° 15′, W. 85° 45′*†.	30.30	769.6	60	15.6		ne.	1								n.	clear	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt E. M. Chevalier, N. 42° 28′, W. 58° 42′*	29.63	752.6	50	10.0		se.	6							high	ssw.	cloudy	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander																	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer, N. 38° 21′, W. 68° 50′	29.76	755.9				w.	6		8		w.	6 h'r	6h'r	cross	w.	fair	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	29.68	753.9	42.0	5.6		ssw.	3		7		s.	0	0				
S. S. Mosel, Capt. J. Hesse																	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. C. Undeutsch																	Moutz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattesauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 40° 16′, W. 174° 28′†	29.41	747.0	53	11.7	79	w.	6		5		w.	0	0	high	sw.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 26° 27′, E. 122° 14′*†	30.37	771.4	67	19.4	84	nne.	5		8		ne.			mod.	nne.	misty	
S. S. Oceanic, Capt. J. Metcalf, N. 30° 27′. W. 177° 51′*	30.16	766.1	70	21.1	75	ssw.	5		5		w.			sm'h	sw.	overcast	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 32° 13′, W. 78° 34′*†	29.70	754.4				nw.	6		8?		wsw.				nnw.	clear?	K. S. Nickerson.
S, S. Seminole, Capt. H. K. Hallett N. 34° 08′, W. 76° 26′r	29.70	754.4	37	2.8	52	nw.	1		8		wnw.	8 h'r	snow	sm'h	sse.	cloudy	H. K. Hallett.
OREGON IMROVEMENT CO. *John L Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes																	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d officer
S. S. Columbia, Capt. Fred Bolles																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†	30.01	762.2	51	10.6	93	sse.	2		10		sse.					light rain	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	30.02	762.5	51	10.6	93	s.	1		10		se.					cloudy	
S. S. Geo. W. Elder, Capt. H. G. Morse, Victoria, B. C†	29.98	761.5	43	6.1		w.	6		7		sw.	0	0	mod.	sw.	cloudy	
S. S. Idaho, Capt. E. Alexander, N. 41° 40′, W. 124° 26′†	30.02	762 5	50	10.0	93	sw.	3		8		sw.			h'vy	sw.	cloudy	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 32° 40′, W. 117° 11′†	30.09	764.3	57	13.9	93	sw.	2		8		sw.			long	sw.	cloudy	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace. San Francisco, Cal†	30.21	767.3	51	10.6	93	sse.	2		10							light rain	T. Wallace.
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.03	762.7	50	10.0	93	se.	2		10		se.					raining	
S. S. Victoria, H. M. Hayward, Nanaimo, Vancouver I'd†	29.78	756.5	43	6.1	100	calm	0		10					sm'h		light rain	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. ——, S. 36° 00′, E. 174° 45′	29.87	758.7	62	16.7	100	ene.	3		10		e.			long	ene.	threatening.	A. Bannerman, 2d Offi
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	30.05	763.3	71	21.7	95	calm	0		0			0	0			clear	W. H. Hawes, 2d Offi.
S. S. City of Rio de Janeiro, Capt. Cavarly, Hong Kong, China†	30.45	773.4	59	15.0	76	ne.	2		8		ne.	0	0			fair	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn,																	E. Le Saik.
S. S. City of Tokio, Com. J. Maury																	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 17° 38′, W. 102° 00′†	29.96	761.0	79	26.1	82	ene.	3		2		ene.	0	0	small	sw.	fair	
S. S. Grenada, Capt M. Connolly,																	
S. S. South Carolina, Capt. W J. Russell, Panama, Panama*†	29.90	759.4	75	23.9	85	nw.	2		3		nw.	0	0			fine	
S. S. Zelandia, Capt. H. Webber, S. 4° 48′ W. 167° 20′	29.84	757.9	81	27.2	91	e.	4		0					mod.	nw.	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO.																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke, N. 36° 40′, W. 72° 38′						nnw.	6					10 h'r	snow	r'gh	nne.	snowing	G. S. Locke
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, N. 42° 04′, W. 64° 20′*	29.43	747.5	46	7.8	69	sw.	6		10		sw.	0.1	3.	long	sw.	cloudy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 40° 30′, W. 70° 17′*†	30.57	776.5	32	0.0	79	wnw.	7		10		wnw.	2 h'r	snow	h'vy	wnw.	overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels. Off Beachy Head, Eng*	29.68	753.9	48	8.9		wsw.	5		10			3 h'r	driz.	mod	wsw.	overcast	
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis																	
THINGVALLA LINE.																	
Funch, Edye, & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub, N. 41° 05′, W. 63° 53′.†	29.74	755.4	43.7	6.5		wsw.	4		6?		wsw.	0	0	hv'y	sw.	covered?	J. T. Ulberling.
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters.																	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent, New York.																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry,																	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 50° 10′ W. 28° 17′*†	29.75	755.6	50	10.0	78	w.	6		5		w.	4 h'r	mod.	high	w.	fair	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. N. 41° 01′, W. 61° 21′*†	29.67	753.6	61	16.1	82	sse.	6		10		sw.	shr's	shr's	r'gh	s.	showery	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, N. 34° 13′, W. 66° 50′†	29.97	761.2	63	17.2	67	wnw.	4		10 s		w.	0.44	11.2	h'vy	sw.	overcast	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona N. 33° 50′, W. 47° 11′	30.50	774.7	68.9	20.5		s.	2	0	6 ks					sm'h		cloudy	
Bk. Alpha, Capt. Ole Grönn, Pozzuoli, Italy*†	30.20	767.1	61	16.1		nw.	2		6		nw.	0	0			cloudy	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, Downs Roads, Eng*†	29.84	757.9	50.0	10.0		sw.	7		7		sw.	2 h'r	h'vy			threatening.	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis																	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin,																	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer,																	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 28° 29′ W. 45° 18′†	30.50	774.7				sse.	3		2		se.	0	0	mod.	se.		
S. Enoch Train, Capt. H. D. Chapman. N. 41° 13′, W. 44° 46′*	30.26	768.6				e.	4		3		e.	h'vy	shr's	long	ssw.	clear	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 38° 10′, W. 68° 51′*	29.73	755.1				w.	9		10		w.	4 h'r	h'vy	h'v	s.	cloudy	J. C. Andersen.
U. S. F. C. S. FishHawk, Lt. Tanner, U.S.N., Washington, D. C†	30.07	763.8	25	—3.9		nw.	3		1		nw.			sm'h		fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 27° 20′, W. 43° 45′†	29.98	761.5	79	26.1		se.	5		10		se.	0	0	mod.	n.	cloudy	G. D. Morrison.
Bk. Freya, Capt. Blaouw, Scattery Id., Ireland			43	6.1		sw.	6		10		wsw.	4 h'r	light			squally	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.05	737.9				nne.	3		1		nne.	0	0				
Bk. Geo. Booth, Capt D. Williams,																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 41° 02′, W. 42° 41′*	30.11	764.9	64.8	18.2	97	sw.	6		9		sw.	2 h'r	2 h'r	mod.	w.	drizzling	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, N. 0° 29′, W. 32° 45′*	29.80	756.9				sse.	1		2		ese.	0	0	long	nnw.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 37° 53′, W. 39° 54′*†	30.70	779.8				var.					wnw.	0	0	mod.	wnw.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.08	764.0	51	10.6	72	w.	1		8		se.	0	0			cloudy	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly,																	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen. N. 43° 36′, W. 22° 50′†	30.41	772.3	58	14.4		w.	3		10		w.	0	0	long	nnw.	foggy	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 34° 45′, W. 49° 16′*	30.32	770.1	68.2	20.1	94	s.	3		3		ssw.			mod.	s.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.21	767.3	58	14.4	76	ne.	6		0			0	0			clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, N. 4° 31′, W. 29° 55′*†	30.10	764.5				ne.	8		8		ene.			chop	ne. to ene.		I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton,																	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,

Brig. & Bvt. Maj. Gen'l,

Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 3, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			29.86	758.5	63.3	17.4	90	sw.			3		4			0.031	0.8	cloudy	Moiroud.
Algiers			29.89	759.2	63.0	17.2	64	ene.			2		9			0	0	covered	Nicolas.
La Calle			30.02	762.5	66.2	19.0	63	e.			1		2			0	0	fair	Fonfrède.
Tunis			30.02	762.4															Jacques.
Sfax																			Gan.
Saida																			
Tebessa			29.95	760.8	54.7	12.6	70	s.			6		4			0	0	cloudy	Perès.
Geriville			30.13	765.4	57.9	14.4	38	sse.			1		0			0	0	clear	Derché.
Laghouat					47.1	8.4	78	nw.			6		10			0.020	0.5	covered	Lonchamp.
Biskra			30.16	766.1	50.0	10.0	50	ne.			1		3			0	0	pretty fair	Herbin.
			30.10	764.5	58.3	14.6	55	nw.			1		3			0	0	pretty fair	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.91	759.7	30.00	762.0	52.7	11.5	79	se.	2	0.9			1			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.48	748.9	30.07	763.7	30.2	— 1.0	96	w.			1		10			0	0	dense fog	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.06	738.0	29.83	757.7	47.1	8.4	62	ssw.	7.4	3.3			3			0	0		Dr. Wierzbiski.
Eperies	29.10	739.1	30.02	762.5	32.0	0.0	92	s.			5		10			0	0		Julius Mikolik.
Gratz	28.69	728.6	29.99	761.7	33.1	0.6	75	s.			1		0			0	0		Andreas Rospini.
Hermannstadt	28.63	727.2	30.12	765.1	35.2	1.8	82	se.			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.47	723.0	29.84	758.0	37.4	3.0	87	e.			1	3 c	0			0	0	almost clear	The Staff.
Lemberg	28.91	734.4	29.93	760.3	38.1	3.4	75	s.			1		3			0	0		Dr. T. Stanecki.
Pola	29.98	761.5	30.10	764.4	46.8	8.2	81	calm			0		9			0	0		I. R. Hydrographic Office
Szathmar	29.62	752.4	30.09	764.3	36.1	2.3	91	s.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	29.82	757.3	30.11	764.8	30.2	— 1.0	94	calm			0		10			0.094	2.4		Karl Stancel.
Trieste	30.04	762.9	30.14	765.5	48.2	9.0	84	calm			0		10			0	0		Rieder.
Vienna	29.17	741.0	29.92	760.0	32.0	0.0	96	se.			1		10			0.020	0.5		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	28.90	734.0	29.00	736.6	40.3	4.6	63	w.	4	1.8			3			0	0	blue sky	W. Boswell.
Armagh, Observatory	28.97	735.8	29.22	742.2	39.8	4.3	91	wsw.	10	4.5			10					showery	S. Call.
Bidston, Liverpool Obs'y			29.19	741.4	42.9	6.1	90	wsw.	33	14.8			8					raining	John Hartnup.
Bolton, Sharples	28.66	728.0	29.18	741.2	41.9	5.5	85	w.	24	10.7			8					d. clouds	Thomas Mackereth, A.S.
Bradford, Yorkshire	28.74	730.0	29.14	740.1	43.7	6.5	82	w.			4		6			0.02	0.5	d. clouds	J. McLandsborough, F.R.
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	80.5	26.9	74	ne			2		3					d. clouds	Pvt. J. Surgenor.
Cardington			29.24	742.7	45.4	7.4	80	w.			3.0		0					blue sky	John McLaren.
Chatham, School M. E.	29.20	741.7	29.33	745.0	46.9	8.3	81	sw.			2		5			blank	blank	d. clouds	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.22	742.2	29.45	748.0	44.7	7.1	83	w.					7						The Staff.
Fort Napier, Natal	27.40	695.9	29.61	752.1	83.3	23.5	52	calm			0		2					blue sky	Pvt. E. K. Anniss, A. H.C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	89.0	31.7	69	calm			0		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			29.29	744.0	38	3.3	90	nw.			2		8			0.61	15.5	showery	J. O'Donaghue.
Gibraltar, Mediterranean	29.92	760.0	29.98	761.5	58.5	14.7	85	ne.			5		3					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	28.88	733.5	29.08	738.6	40.2	4.6	80	w.			3		8 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.14	740.1	29.31	744.5	46.8	8.2	74	wsw.			2		4					blue sky	The Staff.
Guernsey	29.17	740.9	29.47	748.5	45.0	7.2	92	wnw.			3		5					showery	A. Collenette, F. M. S.
Kew, Observatory	29.29	744.0	29.33	745.0	46.9	8.3	74	sw.	15	6.7			3					d. clouds	The Staff.
Leicester, Museum	28.97	735.8	29.22	742.2	46.4	8.0	69	w.			1		1					blue sky	J. C. Smith.
Malta, Mediterranean	30.03	762.7	30.11	764.8	62.0	16.7	69	nw.			1		6					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.24	768.1	30.29	769.4	64.0	17.8	75	n.			3		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.73	729.7	29.25	742.9	46.6	8.1	69	sw.			3		5					d. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.07	738.4	29.30	744.2	46.8	8.2	80	sw.			5		1					squally	The Staff.
Plymouth	29.33	745.0	29.40	746.7	46.2	7.9	85	w.			4		6					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			28.95	735.3	35.1	1.7	100	wsw.	5	2.2			10					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.96	761.0	30.03	762.7	47.2	8.4	88	n.			2		10					misty	W. H. Lyne.
Sheffield	28.94	735.1	29.22	742.2	44.3	6.8	88	wsw.			2		5			0.03	0.8	d. clouds	W. F. Cooper.
Silloth Rectory	29.10	739.1	29.13	739.9	41.1	5.1	84	w.			3		10			0.040	1.0	showery	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.20	741.7	41.3	5.2	90	w.	16	7.2			10					raining	Rev. S. J. Perry.
Stratfield Turgiss	29.06	738.1	29.27	743.4	47.5	8.6	75	w.			1		0					blue sky	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.39	746.5	29.45	748.0	48	8.9	77	nw.			5		5					d. clouds	W. Newcombe.
Valencia, Observatory	29.45	748.0	29.47	748.5	44.1	6.7	61	wnw.	29	13.0			6					squally	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.71	754.6	29.75	755.6	8	—13.3	89	w.	8	3.6		0	0			0	0	clear	H. J. Cundall, C. E.
Chatham, N. B.*	29.68	753.9	29.75	755.6	2	—16.7	91	s.	6	2.7		0	0			0.11	2.8	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.77	756.1	29.80	756.9	2	—16.7	91	w.	50	22.4			10 s		w.	0.40	10.2	threatening	J. McWilliams.
Fort Garry, Manitoba*	29.39	746.5	30.30	769.6	6	—14.4	79	s.	8	3.6		5 k	5 n	s.	s.	0.120	3.0	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.71	754.6	29.84	757.9	14	—10.0	80	w.	15	6.7		0	0			0	0	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.69	754.1	30.06	763.5	6	—14.4	91	n.	4	1.8			10 ks		sw.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.85	758.2	30.07	763.8	1	—17.2	72	w.	10	4.5		5 cs	5 s			0	0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.24	742.7	30.00	762.0	9	—12.8	76	ne.	14	6.3			10 n		w.	0.07	1.8	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.34	745.2	30.07	763.8	23	— 5.0	86	w.	8	3.6		5 k	5 n	w.		0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.40	746.7	30.09	764.3	23	— 5.0	88	sw.	18	8.0			10 n		w.	inap.	inap.	cloudy	M. Payne.
Quebec, Quebec*	29.68	753.9	30.05	763.3	— 9	—22.8	58	w.			1	0	2 s		w.	0	0	clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.54	750.3	30.06	763.5	— 4	—20.0	100	e.	5	2.2			10 n			inap.	inap.	light snow	W. H. McIntyre.
Saugeen, Ontario*	29.24	742.7	30.00	762.0	21	— 6.1	96	nw.	39	17.4			10 s			0.06	1.5	light snow	K. Stewart.
St. Andrews, N. B.	29.89	759.2	29.94	760.5	4	—15.6	82	nw	1	0.4		0	0			0.20	5.1	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	29.63	752.6	29.70	754.4	23	— 5.0	73	sw.	16	7.2		0	8 ks		w.	0.70	17.8	fair	T. C. Hill, C. E.
Toronto, Ontario*	29.60	751.8	30.01	762.2	22	— 5.6	84	w.	11	4.9		5 ck	5 ks	w.	w.	0	0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	29.87	758.7	29.94	760.5	18	— 7.8	67	nw.	6	2.7		0	5 k		nw.	0.02	0.5	fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.57	751.1	29.83	757.7	34	1.1	100	sw.					10			0	0	overcast	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.94	760.5	29.97	761.2	70.0	21.1	88	w.	13.6	6.1		0	7 k			0	0	light haze	John Duthie.
Cape Town, C. G. H. Obs'y	29.93	760.2	29.97	761.2	80.0	26.7	59	sse.	18	8.0		0	0			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.25	768.3	30.54	775.7	40.7	4.8	85	ese.			2		0			0	0	clear	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.30	769.6	30.32	770.2	46.9	8.3	97	nnw.	2.5	1.1			10			0.252	6.4	foggy	M. Marc Dechevrens, S.J.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Amount and kind. Lo'er 0—10	Direction. Upper. From.	Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	28.94	735.1	28.99	736.3	44.6	7.0	91	wsw.	29	13	1		10						Oversergent Fischer.
Fanöe	28.95	735.2	28.97	735.7	44.2	6.8	91	wsw.			6		8						Overloerer Lauridsen.
Godthaab, Greenland	29.43	747.5	29.47	748.6	9.5	—12.5	88	ne.			4		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.37	746.0	29.41	747.1	21.9	— 5.6		ne.			7		8						A. O. Thorlacius.
Thorshavn	29.00	736.6	29.04	737.5	31.1	— 0.5	77	nw.	13	6			3						Overloerer Bergh.
Vestervig	28.69	728.7	28.78	731.0	43.5	6.4	94	sw.			6		10						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.37	746.0	30.04	763.1	45.0	7.2	85	se.			1	2 c	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.02	737.0	29.57	751.0	46.8	8.2	97	sw.			4		n		sw.	0	0		M. Nicot, Director.
Arras, Engineer School	29.16	740.7	29.42	747.2	46.4	8.0	96	sw.			6		10		e.	0.091	2.3	covered	M. Klein, Commandant.
Avignon, Normal School	29.90	759.4	29.98	761.4	47.1	8.4	72	ne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.08	738.6	29.63	752.7	50.0	10.0	62	sw.			3		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.21	741.9	29.47	748.6	46.8	8.2	89	s.			2		10			0.177	4.5	covered	M. Frère Eugène Marié.
Besançon, Normal School			29.84	757.8	47.1	8.4	92	ne.			1					0	0		M. Gobin, Director.
Bordeaux, Observatory	29.50	749.2	29.76	755.8	55.6	13.1	66	s.			1		5			0.012	0.3	cloudy	M. Rayet, Director.
Bourges, Normal School	29.10	739.2	29.65	753.1	53.2	11.8	71	s.			1		n		s.	0	0		M. Postel, Director.
Brest, Naval Observatory	29.34	745.3	29.59	751.5	50.4	10.2	84	w.			2		4		w.	0.268	6.8		M. de Kennaree, Dir.
Caen, Normal School	29.39	746.6	29.47	748.6	50.5	10.3		w.			1		8		w.	0.31	8.	very cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.28	743.7	29.61	752.0	45.1	7.3	68	ssw.			4		8	w.	sw.	0.039	1.0	very cloudy	M. Jadot, Director.
Charleville, Normal School																			M. Grimard, Director.
Clermont-Ferrand Obs'y	28.45	722.6	29.82	757.4	52.3	11.3	50	s.			2		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	28.92	734.6	29.78	756.3	54.0	12.2	52	sse.			2				e.				M. de Villemontée, Dir.
Commercy, Normal School	28.79	731.2	29.71	754.6	50.7	10.4	68	w.			4		5 kn	w.	w.	0.008	0.2	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.45	697.3	30.03	762.8	43.7	6.5	69					1 c	0	nw.		0.110	2.8		M. Jeangirard, Director.
Gréasque, du. Rhone	28.85	732.8	29.98	761.5	52.7	11.5	61	se.			3		5		se.	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.07	738.3	29.83	757.6	56.1	13.4	38	ssw.			4	2 cs	0			0	0	slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.18	715.8	29.76	755.9	50.4	10.2	40	ssw.			4		5		wsw.	0	0	cloudy	M. Rivoire, Director.
Lamballe, Normal School	29.33	745.0	29.60	751.8	47.5	8.6	76	w.			3		5		w.	0.217	5.5	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.27	743.4	29.83	757.6	61.2	16.2	49	ne.			1	0	1 s			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.51	749.6	29.61	752.2	50.0	10.0	86	w.			2		2		sw.	0.197	5.0	¼ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.76	730.4	29.82	757.3	51.1	10.6	56	s.			3	c	0	ssw.		0	0		M. André, Director.
Mans, Normal School	29.31	744.5	29.63	752.5	46.2	7.9	98	sw.			1		10			0.024	0.6	covered	M. Piboen, Director.
Marseille, Observatory	29.72	754.8	29.99	761.7	55.6	13.1	67	se.			3		5		se.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.63	625.5	29.47	748.5	41.9	5.5	43	ssw.	20.6	9.2			5	nw.					M. Cave, for Dr. Fines.
Montpellier, Normal School	29.78	756.5	29.89	759.3	49.3	9.6	89	nne.			3		5		se.			light rain	M. Galzin, Director.
Nancy, Normal School	28.87	733.3	29.65	753.1	48.2	9	65	sw.			2	0	8 ckn			0	0	very cloudy	M. Hasse, Director
Nantes, Observatory	29.48	748.7	29.64	752.8	50.0	10	92	ssw.			0—1		10		sw.	0.059	1.5	light rain	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	29.74	755.5	29.86	758.4	48.4	9.1	78	se.	3.8	1.7			1	wnw.		0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.02	533.8			28.0	—2.2		sw.			3		10		sw.	0.315	8.0	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School					44.6	7.0	83	n.			1			n.	n.	0	0		M. Tallieu.
Puy de Dôme Obs'y, Summit	24.82	630.4			36.7	2.6	68	wsw.			8		8			0.016	0.4	¾ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	29.69	754.1	29.72	754.9	50.9	10.5	97	wsw.			2		10			0.094	2.4	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.50	749.2	29.71	754.6	52.3	11.3	95	sw.			1		10			0.063	1.6	covered	M. Mouillot, Director.
Rodez, Normal School	27.68	703.1	29.84	758.0	45.7	7.6	74	e.			3	0	1 s			0.39	10.	clear	M. Colrat, Director.
Rouen, Normal School	29.53	750.0	29.58	751.2	48.9	9.4	92	sw.			1		5			0	0	cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.35	745.4	29.50	749.4	48.0	8.9	86	nnw.			4		10		nnw.	0.047	1.2	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.48	748.9	29.53	750.1	49.1	9.5	82	sw.			3		10		sw.	0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.16	740.6	29.88	758.9	52.5	11.4	83	sse.			3		1	w.		0	0	clear	M Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.04	737.5	29.53	750.0	46.8	8.2	94	sw.			3					0.067	1.7		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.82	732.0	29.67	753.5	42.8	6.0	70	ssw.			3	0	7 k		sw.	0	0		Prof. Dr. Hoh.
Berlin	29.24	742.7	29.42	747.2	47.5	8.6	69	se.			6		10			0	0		Prof. Dr. Arndt.
Breslau	29.16	740.7	29.69	754.0	47.3	8.5	61	ssw.			2		10			0	0		Royal University Obs'y.
Carlsruhe	29.22	742.2	29.65	753.2	52.9	11.6	56	sw.			5		9	sw.		0.028	0.7		Albert Senz.
Cassel	28.73	729.7	29.44	747.8	43.7	6.5	86	s.			8		8	s.		0	0		Dr. H. Möhl.
Frankfort on the Main	29.21	742.0	29.58	751.2	46.9	8.3	74	ssw.			3		10			0	0		Physical Society.
Friedrichshafen	28.33	719.6	29.79	756.6	42.8	6.0	82	s.			1		10	sw.		0	0		Wilhelm, Chief Tel.
Hamburg	29.10	739.2	29.20	741.6	46.6	8.1	92	sw.			8		10			0.181	4.6	raining	E. Preller.
Kiel	29.10	739.2	29.12	739.6	46.6	8.1	93	sw.			6		10			0.744	18.9		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.15	740.3	29.57	751.0	46.6	8.1	68	ssw.			4		9	wsw.		0	0		H. Leppig, Asst.
Magdeburg	29.22	742.2	29.41	746.9	47.5	8.6	73	ssw.			6		10 ks		sw.	0	0	squally	Dr. Assmann.
Memel	29.33	745.0	29.37	746.1	38.3	3.5	100	sw.			8		10					raining	Issermann.
Munich	27.91	708.9	29.75	755.7	48.2	9.0	59	se.			1		5	sw.		0.024	0.6		Central Station.
Neufahrwasser	29.39	746.4	29.40	746.8	43.5	6.4	76	sw.			6		10			0.028	0.7		A. Lothes.
Neustadt, Palatinate	29.10	739.2	29.62	752.4	51.4	10.8	62	ssw.			6		10	w.		0	0		Dicknether.
Stuttgart	28.74	730.0	29.65	753.1	46.4	8.0	68	sw.			1		8	w.		0	0		Prof. Dr. Schoder.
Wustrow	29.15	740.4	29.17	741.0	46.6	8.1	98	ssw.			5		10			0.138	3.5		Profs. Brandes & Reimer
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.61	752.2	30.01	762.2	55.8	13.2		n.			1.5	c	0			0.087	2.2		Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.08	764.1	30.14	765.4	77.5	25.3	28	ne.					0			0	0	blue sky	
Deesa	29.49	749.1	29.97	761.2	77.5	25.3	56	nw.	6.7	3.0			0			0	0	blue sky	
Bombay	29.90	759.4	29.94	760.4	79.4	26.3	74	nnw.	15	6.7			8		sw.	0	0	d. clouds	
Poona, Yarrowda.	28.06	712.7	29.91	759.6	81.8	27.7	51	sw.	15	6.7			7		w.	0.04	1.0	d. clouds	
Belgaum	27.40	696.0	29.96	761.1	72.4	22.4	79	sse.	7	3.1			10	e.	e.	0	0	threatening.	
Lahore	29.30	744.2	30.07	763.8	65.1	18.4	52	calm	1.9	0.8			0			0	0		
Roorkee	29.09	739.0	30.03	762.8	62.8	17.1	62	n.	1.3	0.6			9			0	0	blue sky	
Agra	29.41	747.0	29.99	761.6	74.2	23.4	42	n.	4.3	1.9			0			0	0		
Nagpur	28.92	734.5	29.96	761.0	81.2	27.3	38	calm	2	0.9			6		w.	0	0	d. clouds	
Jubbulpore	28.63	727.1	30.03	762.6	66.0	18.9	45	calm	1.4	0.6			0			0	0	blue sky	
Lucknow	29.63	752.5	30.01	762.3	72.2	22.3	44	calm	0.7	0.3			0			0	0	blue sky	
Allahabad	29.66	753.5	29.99	761.7	66.8	19.3	61	calm	0.6	0.3			1			0	0	d. clouds	
Patna	29.81	757.2	30.00	762.1	67.6	19.8	58	sw.	2.5	1.1			0			0	0	blue sky	
Hazaribagh	27.94	709.7	30.00	762.0	68.3	20.2	42	nw.	4.3	1.9			0			0	0	blue sky	
Cuttack	29.92	760.0	30.01	762.2	74.3	23.5	56	calm					1			0	0	blue sky	
Calcutta, Alipore	29.98	761.4	30.00	761.9	69.0	20.6	73	wsw.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.87	758.7	30.00	761.9	66.9	19.4	69	calm	0.8	0.4			0			0	0	blue sky	
Chittagong	29.92	759.9	30.01	762.2	68.4	20.2	72	nw.	1.5	0.7			0			0	0	blue sky	
Sibsagar	29.67	753.7	30.03	762.6	62.1	16.7	82	se.	2.0	0.9			3		sw.	0	0	blue sky	
Jeypore	28.51	724.2	29.98	761.4	73.7	23.2	41	nw.	3.6	1.6			3		nw.	0	0	d. clouds	
Zanzibar, Africa	29.85	758.2			83.7	28.7	73	nne.	5.7	2.5			6			0.24	6.1	d. clouds	
Trichinopoly	29.68	753.9			78.3	25.7	89	calm	0	0			10			0	0	overcast	
Bellary	28.47	723.1			81.8	27.7	58	se.	4.4	2.0		4 k	4	s.		0	0	gloomy	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.70	754.4	30.12	765.1	42.8	6.0	92	calm	0	0			10			0	0		Prof. Giovanni Clodig.
Milan	29.59	751.5	30.13	765.2	33.8	1.0	96	n.	2.5	1.1			10			0.055	1.4		Prof. Schiaparelli.
Padua	30.00	762.1	30.12	765.0	39.6	4.2	92	ese.	1.3	0.6			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.15	740.3	30.10	764.5	34.3	1.3	89	nw.	0.7	0.3			10			0	0		Prof. P. F. Denza.
Genoa	29.87	758.7	30.07	763.7	51.4	10.8	92	se.	5.6	2.5			10	se.		0.008	0.2		Prof. G. M. Garibaldi.
Mondovi	28.13	714.4	30.12	765.0	38.7	3.7	73	w.			2		0	wsw.		0	0		Prof. D. C. Bruno.
Pesaro	30.06	763.6	30.11	764.9	38.8	3.8	97	n.			6		10			0.039	1.0		Prof. Luigi Guidi.
Florence	29.85	758.1	30.11	764.8	48.6	9.2	84	ne.			2		10			0	0		Prof. Costantino Pitter.
Leghorn	30.01	762.2	30.10	764.4	51.1	10.6	84	ne.	3.1	1.4			9			0.059	1.5		Prof. P. Monte.
Rome	29.93	760.3	30.11	764.8	51.8	11.0	71	n.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	29.85	758.2	30.11	764.8	53.6	12.0	72	nw.	15.0	6.7			5	nw.		0.059	1.5		Prof. C. de Giorgi.
Cosenza	29.23	742.5	30.14	765.6	51.1	10.6	75	ese.	2.5	1.1			1	se.		0	0		Prof. D. Conti.
Cagliari	29.88	758.9	30.07	763.8	56.8	13.8	79	calm			0		0			0	0		Prof. A. Pacinotti.
Palermo	29.87	758.6	30.12	765.0	57.9	14.4	62	nw.	1.8	0.8			5	sse.		0	0		Prof. G. Ciacciatore.
Syracuse	30.08	764.1	30.13	765.2	56.7	13.7	67	wnw.	3.8	1.7			2	w.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.60	751.7	30.13	765.3	51.8	11.0	80	n.	1.8	0.8			2	nw.		0	0		Prof. T. Brioschi.
Stelvio	22.00	558.9			17.2	— 8.2	100	sw.			6		6			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.05	560.0			24.3	— 4.3	71	ne.			2		10			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.28	769.1	30.32	770.1	37.9	3.3	84	w.				1 ck	0	w.				fair	
Hakodate	30.24	768.1	30.25	768.3	44.0	6.7	68	wnw.	15.0	6.7			7			0	0	overcast	
Hiroshima, I. M. Obs'y	30.38	771.6	30.40	772.1	43.5	6.4	84	nne.	4.1	1.8		ck	7 s			0	0	cloudy	K. Sasaki
Kanazawa	30.45	773.5	30.56	776.2	35.0	1.7	71						10 s					cloudy	S. Endo.
Kioto	30.28	769.1	30.46	773.7	37.8	3.2	87	n.	1.7	0.8		10 cs	0			0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.13	765.3	30.34	770.6	45.9	7.7	85	n.	2.9	1.3			10 n			1.470	37.3	light rain	S. Takehayashi.
Neegata	30.43	772.9	30.47	773.9	29.3	— 1.5	68	s.	2.2	1.0		10 cs	0			0	0	cloudy	
Nobiru	30.37	771.4	30.39	771.9	33.2	0.7	82	wsw.	4.3	1.9		cs	5 s			0	0	fair	H. Midzushina.
Supporo					25.0	— 3.9	81	sse.	6.0	2.7			1			0	0	clear	
Tokei Obs'y, Yeddo	30.37	771.4	30.44	773.2	36.4	2.4	82	ene.	3.5	1.6			1c s			0	0	cloudy	The Staff.
Wakayama	30.39	771.9	30.44	773.2	43.4	6.3	73	e.	3.3	1.5		10 cs	0			0	0	cloudy	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.77	756.1	29.96	761.0	80.1	26.7	58	s.	5.5	2.5		0	8 k;n		s.	0	0	cloudy	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			
Guanajuato	23.71	602.4	29.94	760.4	46.4	8.0	58	calm	0	0		8 cs	0	sw.		0	0	cloudy	Prof. L. Perez.
Leon	24.45	621.0	30.32	770.0	45.6	7.6	78	n.			1	6 c	0			0	0	foggy	Vicente Fernandez.
Mazatlan	29.74	755.4	30.00	762.1	64.5	18.0	89	e.			1	2 cs	0			0	0	clear	Prof. M. Leal.
Mexico, Central Obs'y	23.10	586.8	30.33	770.3	39.9	4.4	54	calm	0	0		6 c	0	nw.		0	0	⅛ cloudy	F. Quijano, C. E.
Morelia	24.38	619.2	30.65	778.6	47.1	8.4	72	ese.			2	2 ck	0	se.		0	0	blue sky	The Staff.
Pabellon, Aguascalientes	23.94	607.9	30.10	764.4	41.0	5.0	87	calm			0	5c	0	wsw.		0	0	½ cloudy	M. Tena, M. D.
Puebla, Catholic Institute	23.45	595.5	30.49	774.4	36.7	2.6	63	calm	0	0		0	0			0	0		M. V. de Leon, M. E.
San Luis Potosi	24.22	615.4	30.28	769.1	42.2	5.7	51	ne.			1	7	0	w.		0	0	cloudy	Prof. P. Spina.
Tlacotalpam																			G. Barroeta, M. D.
Vera Cruz																			Prof. M. Cházaro.
Zacatecas	22.59	573.8	30.35	771.0	45.7	7.6	49	w.	5.6	2.5		8 cs	0	sw.		0	0	cloudy	Prof. J. Rossell.
																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.33	744.9	29.33	744.9	47.5	8.6		sw.			5					0.079	2.0		
Groningen	29.12	739.7	29.18	741.1	46.2	7.9		sw.			6					0.244	6.2		
Helder	29.16	740.6	29.16	740.6	46.2	7.9		ssw.			5					0.087	2.2		
Hellevoetsluis	29.28	743.6	29.28	743.6	45.5	7.5	96	sw.			5					0.303	7.7		
Utrecht	29.24	742.7	29.29	743.9	48.7	9.3	86	sw.			5		8			0.181	4.6	very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	28.60	726.3	28.66	727.9	37.8	3.2	80	n.	13	6			7			0.213	5.4		
Brono	28.60	726.4	28.64	727.4	34.2	1.2	82	ssw.	18	8			10			0.134	3.4		
Christiania	28.44	722.3	28.58	726.0	35.1	1.7	94	nne.	13	6			10			0.236	6.0	rain & snow.	
Gjæsvær	28.65	727.6	28.67	728.2	26.8	— 2.9		calm			0		10						
Lodingen	28.57	725.6	28.61	726.8	27.1	— 2.7	66	ene.			2		10			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					61.2	16.2	91	nnw.	3.1	1.4			3			0	0		Dr. J. A. Sampaio.
Campo Major	28.95	735.4	29.96	760.9	56.8	13.8	50	wnw.	1.3	0.6			8			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.11	764.9	30.20	767.1	66.0	18.9	41	ene.	3.8	1.7			6			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.68	753.8	30.04	763.0	55.0	12.8	82	n.	5.6	2.5			7			0	0		The Staff.
Ponta Delgada, Azores	30.46	773.6	30.53	775.4	60.1	15.6	89	nne.	8.1	3.6			3			0.071	1.8		
Saint Paul de Loando	29.69	754.1	29.89	759.2	83.1	28.4	89	wsw.	2.5	1.1			2	ssc.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.22	742.1	30.48	774.2	—17.9	—27.7		ne.	18	8		5 c	0			0	0		Major K. Lasarew.
Archangel	29.34	745.1	29.35	745.6	10.0	—12.2	89	se.	18	8			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.47	774.0	30.39	771.9	31.8	— 0.1	94	ese.	7	3			10 n			0.035	0.9	heavy cl'ds.	Capt. Wisganow.
Barnaul	30.00	762.0	30.60	777.2	—22.9	—30.5	77	calm	0	0			5			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.45?	748.0?	29.70?	754.3?	35.4	1.9	98	s.	11	5			10 n			0.217	5.5	raining	Observatory.
Ekaterinburg	29.51	749.6	30.61	777.4	—11.0	—23.9	82	sw.	2	1		1 cs	0			0	0	light clouds	Meteorological Obs'y.
Kasan	30.09	764.2	30.39	772.0	— 1.7	—18.7	84	sse.	13	6			10			0	0		Observatory.
Kertch	30.09	764.3	30.11	764.8	36.5	2.5	94	calm	0	0			10 n			0	0		Lagorio & Sastyrex.
Kieff	29.36	745.8	30.04	762.9	26.6	— 3.0	100	sse.	7	3			10 n			0	0	foggy	Observatory.
Lugan	30.07	763.8	30.29	769.3	28.0	— 2.2	87	se.	13	6			10			0	0		Meteorological Obs'y.
Moscow	29.31	744.5	29.81	757.2	29.3	— 1.5	88	s.	10.1	4.5			10 s			0	0		Meteorological Obs'y.
Nikolaiev	30.08	764.0	30.15	765.8	33.4	0.8	96	calm	0	0			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor.	29.93	760.1	30.01	762.3	— 4.4	—20.2	79	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.17	766.2	30.31	769.8	25.2	— 3.8	71	calm	0	0		0	2 k			0	0		Physical Observatory.
St. Petersburg	29.27	743.4	29.28	743.8	35.6	2.0	91	ssw.	18	8			10 n			0.126	3.2		Central Physical Obs'y.
Tashkend, Laboratory	28.85	732.9	30.57	776.5	21.2	— 6.0	93	calm	0	0			10			0	0		Teich, A. M.
Tiflis	28.81	731.7	30.26	768.6	47.3	8.5	49	calm	0	0			0			0	0		Physical Observatory.
Warsaw	29.28	743.6	29.71	754.5	40.5	4.7	78	s.	18	8		10c;cs	0						Astronomical Obs'y.
Wilna	29.19	741.4	29.62	752.3	38.1	3.4	82	se.	4	2			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.13	765.4	30.46	773.7	— 7.8	—22.1	81	w.	7	3			2			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.05	737.9	45	7.2	92	nnw.			4	5	5	nw.		0.3	8.	hvy showers	Andrew Gibb.
Monach Lt. House, Hebrides																			J. Youngclause.
North Unst, Shetland Isl'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.83	757.6	29.93	760.1	51.8	11.	83	e.	0	0			9			0.374	9.5	covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.75	755.7	29.81	757.2	60.1	15.6	48	se.	4.0	1.8		3	2	e.		0	0	cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	20.91	683.6	29.89	759.2	51.8	11.0	72	s.	12.1	5.4		0	3			0	0	light clouds	Domingo Martin.
Madrid, Royal Obs'y	27.69	703.4	29.95	760.7	50.0	10.0	59	e.	2.0	0.9			10			0	0	covered	The Staff.
Murcia, Met. Obs'y	29.82	757.5	29.98	761.4	48.2	9.0	93	wsw.	1.1	0.5		5	5			0.614	15.6	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.96	735.6	29.87	758.6	50.2	10.1	78	nw.	14.3	6.4		0	8			0.260	6.6	almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.13	765.4	30.20	767.0	65.3	18.5	60	nne.	8.1	3.6		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.99	761.7	30.04	763.1	79.1	26.1	75	ne.	1.8	0.8		2 c	6 ck		e.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.89	759.1	29.99	761.6	62.1	16.7	63	ene.	11.0	4.9		6	2	ne.	se.	0.017	0.4		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.00	761.9	30.09	764.2	72.3	22.4	83	calm	0	0		3 k	2 k	s.	s.	0	0		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Ids	29.95	760.7	30.09	764.3	77.2	25.1	86	ese.	1.8	0.8		0	3 ck		se.	0	0	clear	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	28.74	730.0	28.78	731.0	29.1	— 1.6	96	se.			4		10			0.106	2.7	snowing	
Umea	28.72	729.5	28.77	730.8	32.0	0.0	92	s.			2		10			0	0		
Hernosand	28.73	729.8	28.78	731.1	27.9	— 2.3	89	calm			0		3			0.197	5.0		
Stockholm	28.61	726.6	28.78	731.1	39.6	4.2	93	s.			4		10			0.035	0.9	raining	
Wisby	28.90	734.1	28.69	735.6	41.0	5.0	97	wsw.			7		10			0.260	6.6		
Sub-Series.																			
Upsala	28.66	728.0	28.75	730.2	35.2	1.8	98	ese.	6.7	3.0			10			0.327	8.3		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.42	721.8	29.85	758.3	50.7	10.4	45	sw.			5					0	0	clouds	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.05	763.2	45.9	7.7	85	n.	8	3.5			10		n.	0	0		The Observatory.
Valona			30.09	764.2	56.8	13.8		nw.			1		2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.08	763.9	63.9	17.7	68	wsw.			1	5 c	0	sw.		0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.04	763.0	30.13	765.3	19	— 7.2	84	se.	4	1.8		0	9 ks			0	0	cloudy	
Alpena, Michigan	29.46	748.3	30.17	766.3	9	—12.8	76	nw.	27	12.1			10 n			0.09	2.3	heavy snow	
Atlanta, Georgia	29.06	738.1	30.28	769.1	28.5	— 1.9	69	nw.	4	1.8		0	sk.			0	0	dense smoke	
Atlantic City, New Jersey	30.24	768.1	30.24	768.1	10.3	—12.1	58	w.	5	2.2		0	0			0	0	clear	
Augusta, Georgia	30.15	765.8	30.35	770.9	28.0	— 2.2	77	calm	0	0		0	sk.			0	0	clear	
Baltimore, Maryland	30.22	767.6	30.27	768.8	20	— 6.7	70	nw.	3	1.3		0	fg			0	0	clear	
Barnegat, New Jersey	30.18	766.6	30.20	767.1	14.2	— 9.9	70	nw.	14	6.3		0	1 k		n.	0	0	clear	
Bismarck, Dakota	28.17	715.5	30.17	766.3	14	—10.0	83	e.	6	2.7			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.14	689.3	30.07	763.8	32	0.0	100	e.	1	0.4			10 n		calm	0.07	1.8	light rain	
Boston, Massachusetts	29.91	759.7	30.08	764.0	6.2	—14.3	82	w.	8	3.6		0	0			inap.	inap.	clear	
Brownsville, Texas	29.98	761.5	30.03	762.7	61	16.1	100	se.	4	1.8		0	0			0	0	clear	
Buffalo, New York	29.25	742.9	30.05	763.3	24.5	— 4.2	92	sw.	16	7.2			10 s		sw.	0.02	0.5	cloudy	
Burlington, Vermont	29.76	755.9	30.07	763.8	9.3	—12.6	79	se.	5	2.2			10 s		w.	inap.	inap.	cloudy	
Cairo, Illinois	29.86	758.4	30.28	769.1	28.0	— 2.2	82	e.	4	1.8		0	0			0	0	clear	
Campo, California	27.46	697.5	30.09	764.3	30	— 1.1	88	e.	2	0.9		8 c	0	w.		0	0	cloudy	
Camp Thomas, Arizona	27.25	692.1	30.08	764.0	33	0.6	81	calm			0		9 ks			0	0	cloudy	
Cape Henry, Virginia	30.26	768.6	30.28	769.1	28	— 2.2	77	nw.	28	12.5		0	0			0	0	clear	
Cape May, New Jersey	30.21	767.3	30.24	768.1	22	— 5.6	58	nw.	21	9.4		2 k	0	nw.		0	0	clear	
Castroville, Texas	29.21	741.9	30.06	763.5	50	10.0	93	w.	2	0.9			fg.			0	0	dense fog	
Cedar Keys Florida	30.30	769.6	30.32	770.1	38	3.3	73	n.	6	2.7		0	0			0	0	clear	
Champaign, Illinois	29.39	746.5	30.26	768.6	20.9	— 6.2	53	n.	2	0.9			10 s		w.	0	0	cloudy	
Charleston, S. Carolina	30.26	768.6	30.32	770.1	35	1.7	64	nw.	2	0.9		0	0			0	0	clear	
Charlotte, N. Carolina	29.37	746.0	30.26	768.6	21.0	— 6.1	84	ne.	2	0.9		0	fg.			0	0	clear	
Chattanooga, Tennessee	29.46	748.3	30.32	770.1	23.0	— 5.0	73	ne.	2	0.9		0	fg.		calm	0	0	clear	
Cheyenne, Wyoming	23.85	605.8	30.10	764.5	34.5	1.4	46	nw.	8	3.6			10 s			0	0	cloudy	
Chicago, Illinois	29.49	749.0	30.24	768.1	17.7	— 8.3	83	w.	7	3.1		0	0			inap.	inap.	clear	
Chincoteague, Virginia	30.25	768.3	30.27	768.8	20	— 6.7	70	n.	16	7.2		hz.	3 s;ks			0	0	clear	
Cincinnati, Ohio	29.60	751.8	30.29	769.4	27	— 2.8	80	s.	3	1.3			10 s			inap.	inap.	cloudy	
Cleveland, Ohio	29.42	747.3	30.20	767.1	19	— 7.2	84	sw.	11	4.9			10 s			0.01	0.3	cloudy	
Coleman City, Texas	28.16	715.3			42	5.6	92	s.	2	0.9		6 cs	0			0	0	fair	
Columbus, Ohio	29.34	745.2	30.24	768.1	23	— 5.0	88	w.	11	4.9			10 n			inap.	inap.	light snow	
Concho, Texas	28.00	711.2	30.02	762.5	44	6.7	100	s.				5 ck	0	s.		0	0	fair	
Davenport, Iowa	29.61	752.1	30.32	770.1	22	— 5.6	58	n.	2	0.9		6 k	2 s	nw.	nw.	0	0	cloudy	
Dayton, Washington T'y	28.14	714.7	29.94	760.5	34.3	1.3	77	ne.	4	1.8			10 s			0.18	4.6	cloudy	
Deadwood, Dakota	25.20	640.1	30.15	765.8	26	— 3.3	80	sw.	4	1.8		0	0			0	0	clear	
Decatur, Texas																			
Delaware Breakwater, Del.	30.23	767.8	30.25	768.3	20	— 6.7	84	w.	11	4.9		1 k	2 ks	nw.		0	0	clear	
Denison, Texas	29.18	741.2	30.02	762.5	42.0	5.0	93	se.	4	1.8			fg.			0	0	dense fog	
Denver, Colorado	24.59	624.6	30.11	764.8	40.0	4.4	42	se.	5	2.2			9 s		calm	0	0	cloudy	
Des Moines, Iowa	29.32	744.7	30.29	769.4	23	— 5.0	73	e.	4	1.8		10 cs	0	nw.		0	0	cloudy	
Detroit, Michigan	29.41	747.0	30.17	766.3	25.7	— 3.5	88	w.	12	5.4			10 s		w.	0.03	0.8	cloudy	
Dodge City, Kansas	27.31	693.7	30.06	763.5	27	— 2.8	88	se.	8	3.6			10 s		se.	0	0	cloudy	
Dubuque, Iowa	29.53	750.0	30.30	769.6	9.5	—12.5	66	w.	2	0.9		8 ck	fg.	w.	calm	inap.	inap.	cloudy	
Duluth, Minnesota	29.59	751.6	30.35	770.9	8	—13.3	76	nw.	8	3.6			10 s		nw.	0	0	cloudy	
Eagle Pass, Texas	29.20	741.7	30.04	763.0	44.2	6.8	93	se.	1	0.4		0	0			0	0	clear	
Eagle Rock, Idaho	25.19	639.8	30.15	765.8	21	— 6.1	76	n.	5	2.2			10 s			0	0	cloudy	
Eastport, Maine	29.89	759.2	29.96	761.0	5	—15.0	76	w.	7	3.1		2 c	0	w.		0.21	5.3	clear	
El Paso, Texas	26.27	667.2	30.15	765.8	32.1	0.1	43	calm	0	0			3 s			0	0	clear	
Erie, Pennsylvania	29.34	745.2	30.12	765.0	23	— 5.0	88	sw.	16	7.2			10 n			0.18	4.6	heavy snow	
Escanaba, Michigan	29.57	751.1	30.29	769.4	9	—12.8	76	nw.	11	4.9		0	5 s		nw.	0	0	fair	
Florence, Arizona																			
Fort Apache, Arizona	25.03	635.8	30.15	765.8	27	— 2.8	70	e.	1	0.4			10 s		calm	0	0	cloudy	
Fort Assinnaboine, Montana	27.00	685.8	30.04	763.0	31	— 0.6	52	sw.	12	5.4		1 c	0	w.		inap.	inap.	clear	
Fort Bennett, Dakota	28.37	720.6	30.11	764.8	22	— 5.6	87	se.	10	4.5		0	5 s			0	0	fair	
Fort Benton, Montana	27.03	686.5	30.01	762.2	34	1.1	55	w.	12	5.4		0	0			inap.	inap.	clear	
Fort Buford, Dakota	27.82	706.6	30.02	762.5	26	— 3.3	77	ne.	9	4.0		10 cs	0	calm		0.02	0.5	cloudy	
Fort Custer, Montana	26.80	680.7	30.18	766.6	25	— 3.9	82	nw.	6	2.7		0	0			0	0	clear	
Fort Davis, Texas	25.09	637.3	30.07	763.8	40	4.4	67	calm	0	0			10 s		calm	0	0	cloudy	
Fort Elliott, Texas	27.11	688.6	30.04	763.0	25	— 3.9	53	s.	4	1.8		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.41	747.0	30.01	762.2	36.3	2.4	71	e.	4	1.8		0	0			0	0	clear	
Fort Grant, Arizona	25.22	640.6	30.12	765.0	41	5.0	62	sw.	2	0.9		7 k	0			0	0	fair	
Fort Griffin, Texas	28.65	727.7	30.03	762.7	34	1.1	89	calm	0	0		6 c	0	calm		0	0	fair	
Fort Keogh, Montana	27.34	694.4	30.03	762.7	24	— 4.4	76	s.	3	1.3		0	0			0	0	clear	
Fort Macon, North Carolina	30.29	769.4	30.30	769.6	26	— 3.3	88	nw.	9	4.0		hz.	hz.	calm	calm	0	0	light haze	
Fort McKavett, Texas	27.70	703.6	30.09	764.3	50.3	10.2	48	s.	10	4.5		0	0			0	0	clear	
Fort Missoula, Montana	26.76	679.7	30.22	767.6	13	—10.6	100	ne.	1	0.4		0	fg.			0.04	1.0	dense fog	
Fort St. Michaels, Alaska	29.40	746.7	29.44	747.8	— 7	—21.7	100	ne.	8	3.6		0	8 s			0	0	fair	
Fort Shaw, Montana	26.20	665.5	30.06	763.5	35	1.7	55	w.	18	8.0		2 cs	0			0	0	clear	
Fort Sill, Indian Territory	28.69	728.7	30.02	762.5	34.5	1.4	80	n.	5	2.2		1 c	0			0	0	clear	
Fort Stevenson, Dakota	28.11	714.0	30.17	766.3	12	—11.1	64	s.	5	2.2		0	9 s		calm	0	0	cloudy	
Fort Verde, Arizona					40.4	4.7	59	w.			2		10 s		w.	0	0	cloudy	
Fredericksburg, Texas	28.24	717.3	30.06	763.5	52	11.1	93	sw.	3	1.3		5 cs	0	sw.		0	0	fair	
Galveston, Texas	30.04	763.0	30.08	764.0	62	16.7	88	s.	8	3.6			10 ks			0	0	threatening	
Grand Haven, Michigan	29.46	748.3	30.17	766.3	28.0	— 2.2	72	nw.	12	5.4			10 s		nw.	0.01	0.3	cloudy	
Hatteras, North Carolina	30.25	768.3	30.27	768.8	30	— 1.1	88	nw.	8	3.6		3 k	0			0	0	clear	
Helena, Montana	25.67	652.0	30.10	764.5	30	— 1.1	52	w.	9	4.0		0	0			0.03	0.8	clear	
Henrietta, Texas	29.09	738.9	30.16	766.1	35	1.7	79	e.	6	2.7		0	0			0	0	clear	
Huron, Dakota	28.70	729.0	30.24	768.1	19.6	— 6.9	70	se.	12	5.4			10 s			0	0	cloudy	
Indianapolis, Indiana	29.40	746.7	30.24	768.1	22	— 5.6	80	w.	2	0.9		2 ck	3 s;fg	w.	w;c.	0.17	4.3	fair	
Indianola, Texas	30.02	762.5	30.05	763.3	60.8	16.0	87	s.	7	3.1		2 k	1 k	s.		0	0	clear	
Jacksboro, Texas	28.76	730.5	30.00	762.0	43	6.1	74	se.	3	1.3		0	2 s		calm	0	0	clear	
Jacksonville, Florida	30.28	769.1	30.33	770.4	33	0.6	68	calm	0	0		0	fg.			0	0	clear	
Keokuk, Iowa	29.55	750.6	30.25	768.3	20.5	— 6.4	84	ne.	5	2.2			10 s			0	0	cloudy	
Key West, Florida	30.22	767.6	30.25	768.3	58.0	14.4	58	n.	17	7.6		0	0			0	0	clear	
Kittyhawk, North Carolina	30.28	769.1	30.30	769.6	25	— 3.9	64	nw.	12	5.4		0	1 k			0	0	clear	
Knoxville, Tennessee	29.23	742.4	30.31	769.9	21.3	— 5.9	91	sw.	2	0.9		6 cs	sk.	nw.	calm	0	0	fair	
La Crosse, Wisconsin	29.47	748.5	30.31	769.9	10	—12.2	73	calm	0	0		0	0			0	0	clear	
La Mesilla, New Mexico	26.07	662.2	30.10	764.5	28.0	— 2.2	77	calm	0	0		0	2 s			0	0	clear	
Leavenworth, Kansas	29.26	743.2	30.22	767.6	27	— 2.8	77	e.	4	1.8		0	4 s			0	0	fair	
Lewiston, Idaho	29.13	739.9	30.00	762.0	31.8	— 0.1	73	se.	2	0.9		5 cs	0	calm		0.15	3.8	fair	
Little Rock, Arkansas	29.80	756.9	30.14	765.5	38	3.3	62	e	2	0.9			10 s			0	0	cloudy	
Los Angeles, California	29.72	754.9	30.12	765.0	50.1	10.1	86	nw.	4	1.8			10 s		calm	0	0	cloudy	
Louisville, Kentucky	29.68	753.9	30.27	768.8	27.0	— 2.8	77	s.	2	0.9			10 s		calm	inap.	inap.	cloudy	
Lynchburg, Virginia	29.54	750.3	30.26	768.6	21.0	— 6.1	64	calm	0	0		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.18	741.2	30.27	768.8	11	—11.7	59	nw.	6	2.7		0	0			0	0	clear	
Marquette, Michigan	29.50	749.3	30.28	769.1	12	—11.1	80	nw.	12	5.4			10 s		nw.	0.02	0.5	cloudy	
Mason, Texas	28.31	719.1	30.05	763.3	47.1	8.4	86	calm	0	0		0	fg.		calm	0	0	light fog	
Memphis, Tennessee	29.85	758.2	30.21	767.3	33	0.6	60	se.	4	1.8		1 c	sk.	calm	calm	0	0	clear	
Milwaukee, Wisconsin	29.45	748.0	30.25	768.3	15	— 9.4	83	w.	5	2.2		0	0			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.23	767.8	30.27	768.8	42.0	5.6	73	e.	3	1.3	.....	10 cs	sk	.....	.....	0	0	cloudy	
Montgomery, Alabama	30.07	763.8	30.31	769.9	29	— 1.7	77	calm	0	0	.....	1 cs	0	.....	.....	0	0	clear	
Moorhead, Minnesota	29.22	742.2	30.33	770.4	—15	—26.1	100	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Morgantown, W. Virginia	29.20	741.7	30.26	768.6	27.5	— 2.5	76	sw.	5	2.2	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	
Mt. Washington, N. H.	23.26	590.8	29.88	758.9	—14.0	—25.6	62	nw.	50	22.4	.....	3 cs	1 s	w.	nw.	0.06	1.5	fair	
Nashville, Tennessee	29.70	754.4	30.26	768.6	26.3	— 3.2	79	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	
New Haven, Connecticut	30.01	762.2	30.13	765.3	7	—13.9	87	w	4	1.8	.....	0	sk.	.....	.....	0	0	clear	
New London, Connecticut	30.08	764.0	30.12	765.0	9	—12.8	55	calm	0	0	.....	0	0	.....	.....	0	0	clear	
New Orleans, Louisiana	30.16	766.1	30.22	767.6	49.5	9.7	73	se.	5	2.2	.....	0	sk	.....	.....	0	0	clear	
Newport, Rhode Island	30.04	763.0	30.09	764.3	14.8	— 9.6	71	nw.	9	4.0	.....	0	1 s	.....	calm	0	0	clear	
New River, N. Carolina	.....	.....	.....	.....	21	— 6.1	58	n.	.....	.....	1	0	0	.....	.....	0	0	clear	
New Shoreham, Rhode I'd.	30.09	764.3	30.12	765.0	17.0	— 8.3	67	nw.	20	8.9	.....	0	0	.....	.....	0	0	clear	
New York, New York	29.99	761.7	30.18	766.6	15	— 9.4	83	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Norfolk, Virginia	30.27	768.8	30.30	769.6	25	— 3.9	73	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	
North Platte, Nebraska	26.99	685.5	30.11	764.8	23.6	— 4.7	76	se.	14	6.3	.....	10 cs	0	nw.	.....	0	0	cloudy	
Olympia, Washington T'y	29.78	756.4	29.82	757.4	37.0	2.8	94	s.	1	0.4	.....	.....	10 n	.....	calm	0.12	3.0	light rain	
Omaha, Nebraska	29.00	736.6	30.27	768.8	26.2	— 3.2	87	se.	5	2.2	.....	8 cs	0	.....	.....	0	0	cloudy	
Ooglaamie, Pt. Barrow, Alas-	29.76	755.9	29.78	756.4	—20.2	—29.0	86	ene.	12	5.4	.....	hz	hz	.....	.....	0	0	hazy	
Oswego, New York	29.70	754.4	30.05	763.3	19.6	— 6.9	62	se.	4	1.8	.....	.....	10 s	.....	w.	c.42	10.7	cloudy	
Palestine, Texas	29.50	749.3	30.06	763.5	57	13.9	80	s.	12	5.4	.....	0	8 ks	.....	.....	0	0	fair	
Pensacola, Florida	30.27	768.8	30.30	769.6	41.0	5.0	65	e.	5	2.2	.....	4 cs	hz	w.	.....	0	0	fair	
Philadelphia, Pa.	30.18	766.6	30.24	768.1	16	— 8.9	67	w.	4	1.8	.....	0	fg	.....	.....	0	0	clear	
Pike's Peak, Colorado	17.59	446.8	30.29	769.4	14	—10.0	76	sw.	20	8.9	.....	0	0	.....	.....	0	0	clear	
Pioche, Nevada	23.97	608.8	30.17	766.3	34	1.1	81	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.36	745.7	30.22	767.6	23.5	— 4.7	72	sw.	8	3.6	.....	.....	10 s	.....	sw.	0.03	0.8	cloudy	
Port Eads, Louisiana	30.24	768.1	30.24	768.1	47.1	8.4	96	e.	7	3.1	.....	0	hz	.....	calm	0	0	clear	
Port Huron, Michigan	29.40	746.7	30.13	765.3	21.5	— 5.8	85	w.	16	7.2	.....	.....	10 s	.....	calm	0	0	cloudy	
Portland, Maine	29.96	761.0	30.01	762.2	9	—12.8	76	nw.	2	0.9	.....	.....	10s; fg	.....	calm	0.15	3.8	cloudy	
Portland, Oregon	29.83	757.7	29.90	759.4	40.5	4.7	92	s.	2	0.9	.....	.....	10 s	.....	sw.	0.09	2.3	cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	32	0.0	60	n.	9	4.0	.....	0	0	.....	.....	0	0	clear	
Prescott, Arizona	24.78	629.4	30.16	766.1	42	5.6	41	sw.	1	0.4	.....	.....	10 s	.....	sw.	0	0	cloudy	
Punta Rassa, Florida	30.27	768.8	30.28	769.1	44	6.7	60	ne.	9	4.0	.....	1 c	0	calm	.....	0	0	clear	
Red Bluff, California	29.71	754.6	30.09	764.3	46.5	8.1	95	calm	0	0	.....	.....	10 s	.....	s.	0.19	4.8	cloudy	
Rio Grande City, Texas	29.76	755.9	30.00	762.0	56	13.3	54	se.	5	2.2	.....	1 c	0	calm	.....	0	0	clear	
Rochester, New York	29.33	745.0	30.04	763.0	18	— 7.8	84	sw.	12	5.4	.....	.....	10 s	.....	w.	0.01	0.3	cloudy	
Roseburg, Oregon	29.38	746.2	29.95	760.7	43.2	6.2	85	se.	2	0.9	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	
Sacramento, California	30.03	762.7	30.11	764.8	48.2	9.0	93	se.	10	4.5	.....	.....	8 s	.....	.....	0.13	3.3	cloudy	
St. Louis, Missouri	29.66	753.4	30.30	769.6	23.6	— 4.7	88	e.	3	1.3	.....	.....	fg	.....	.....	0	0	dense fog	
St. Paul, Minnesota	29.38	746.2	30.33	770.4	6.0	—14.4	87	calm	0	0	.....	0	0	.....	.....	0	0	clear	
St. Vincent, Minnesota	29.35	745.5	30.33	770.4	0	—17.8	100	s.	11	4.9	.....	3 ck	5 s	w.	calm	0	0	cloudy	
Salt Lake City, Utah	25.52	648.2	30.09	764.3	34	1.1	71	calm	0	0	.....	.....	10 n	.....	calm	0.07	1.8	light snow	
San Antonio, Texas	29.31	744.5	30.04	763.0	58.6	14.8	93	s.	4	1.8	.....	.....	10 ks	.....	.....	0	0	cloudy	
San Diego, California	29.97	761.2	30.04	763.0	52.5	11.4	82	n.	4	1.8	.....	3 ck	5 s	n.	.....	0	0	cloudy	
Sandusky, Ohio	29.48	748.8	30.20	767.1	21	— 6.1	76	sw.	16	7.2	.....	.....	10 s	.....	.....	0	0	cloudy	
Sandy Hook, New Jersey	30.15	765.8	30.19	766.8	16.0	— 8.9	83	nw.	11	4.9	.....	1 k	0	nw.	.....	0	0	clear	
San Francisco, California	30.04	763.0	30.12	765.0	50	10.0	93	se.	4	1.8	.....	0	fg	.....	sw.	0.11	2.8	fair	
Santa Fé, New Mexico	23.32	592.3	30.33	770.4	28.5	— 1.9	79	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Savannah, Georgia	30.22	767.6	30.32	770.1	34	1.1	71	calm	0	0	.....	0	hz.	.....	.....	0	0	clear	
Shreveport, Louisiana	29.87	758.7	30.12	765.0	47	8.3	100	se.	2	0.9	.....	.....	10 s	.....	calm	0	0	cloudy	
Silver City, New Mexico	24.20	614.7	30.06	763.5	30	— 1.1	61	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Sitka, Alaska	29.34	745.2	29.41	747.0	34	1.1	79	calm	0	0	.....	7 k	0	s.	.....	0	0	fair	
Smithville, North Carolina	30.28	769.1	30.32	770.1	23	— 5.0	73	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Spokane Falls, Wash. Ter.	27.89	708.4	30.03	762.7	28	— 2.2	77	nw.	1	0.4	.....	.....	10 s	.....	w.	0.33	8.4	cloudy	
Springfield, Illinois	29.58	751.3	30.31	769.9	28	— 2.2	70	n.	1	0.4	.....	0	8 s	.....	w.	0	0	cloudy	
Springfield, Massachusetts	29.99	761.7	30.13	765.3	7.2	—13.8	87	calm	0	0	.....	0	fg	.....	.....	0	0	clear	
Springfield, Mo.	28.64	727.4	30.22	767.6	28	— 2.2	77	e.	8	3.6	.....	6 c	3 s	w.	.....	0	0	cloudy	
Stockton, Texas	26.88	682.7	30.02	762.5	46.7	8.2	58	sw.	4	1.8	.....	0	6 s	.....	sw.	0	0	fair	
Thatcher's Island, Mass.	30.02	762.5	30.08	764.0	10.0	—12.2	80	w.	26	11.6	.....	1 ck	0	w.	.....	0.04	1.0	clear	
Toledo, Ohio	29.44	747.8	30.18	766.6	27	— 2.8	80	s.	12	5.4	.....	.....	10 ks	.....	w.	0	0	cloudy	
Tucson, Arizona	27.53	699.2	30.03	762.7	44	6.7	56	se.	1	0.4	.....	6 cs	0	.....	.....	0	0	fair	
Umatilla, Oregon	29.61	752.1	30.10	762.0	34.3	1.3	87	s.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
Uvalde, Texas	29.03	737.3	30.03	762.7	54	12.2	93	e.	3	1.3	.....	.....	fg	.....	.....	0	0	dense fog	
Vicksburg, Mississippi	29.91	759.7	30.18	766.6	51	10.6	80	se.	4	1.8	.....	8 k	fg	se.	.....	0	0	cloudy	
Visalia, California	29.70	754.4	30.09	764.3	40	4.4	89	e.	5	2.2	.....	2 ck	0	.....	.....	inap.	inap.	clear	
Washington, D. C.	30.16	766.1	30.28	769.1	18.0	— 7.8	83	nw.	1	0.4	.....	0	2 s	.....	.....	0	0	clear	
West Los Animas, Colorado	25.92	658.4	30.06	763.5	24	— 4.4	88	calm	0	0	.....	5 cs	0	sw.	.....	0	0	fair	
Wickenburg, Arizona	.....	.....	.....	.....	40	4.4	72	w.	.....	.....	1	8 c	0	.....	.....	0	0	cloudy	
Williamsport, Pa.	.....	.....	.....	.....	20	— 6.7	76	e.	5	2.2	.....	.....	10 ks	.....	.....	0	0	cloudy	
Wilmington, N. Carolina	30.26	768.6	30.32	770.1	25	— 3.9	64	n.	4	1.8	.....	hz	sk.	calm	calm	0	0	dense haze	
Winnemucca, Nevada	25.54	648.7	30.08	764.0	35	1.7	89	sw.	6	2.7	.....	.....	10 ks	.....	sw.	0.11	2.8	cloudy	
Wood's Holl, Mass.	30.08	764.0	30.12	765.0	14	—10.0	64	nw.	16	7.2	.....	0	0	.....	.....	0	0	clear	
Yankton, Dakota	28.81	731.8	30.23	767.8	25	— 3.9	73	se.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
Yuma, Arizona	29.78	756.4	29.94	760.5	51.2	10.7	43	ne.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1	.....	.....	51.0	10.6	76	nw.	4	1.8	.....	6 k	3 s	w.	.....	0.01	0.3	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.07	763.8	30.08	764.0	78	25.6	77	e.	.....	.....	.....	5 ck	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.91	759.7	29.93	760.2	77	25.0	95	calm	0	0	.....	.....	10 n	.....	calm	0.30	7.6	raining	J. I. Plume.
Guadeloupe, W. I.	29.99	761.7	30.01	762.2	77	25.0	86	e.	.....	.....	.....	2 k	0	.....	.....	0.2	5.	clear	B. Bigar.
Havana, Cuba, W. I.	30.15	765.8	30.20	767.1	66	18.9	100	n.	1.2	0.5	.....	0	0	.....	.....	0	0	clear	A. Van Cangheim, Ass't
Kingston, Jamaica, W. I.	30.08	764.0	30.09	764.3	67.8	19.9	77	calm	0	0	.....	0	0	.....	.....	0	0	.....	Robert Johnstone
Navassa, W. I.	29.96	761.0	30.04	763.0	77	25.0	65	ne.	9	4.0	.....	5 k	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.05	763.3	79	26.1	87	e.	.....	.....	3	4 c	5 k	e.	e.	0	0	fair	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mba	29.42	747.3	29.98	761.5	79	26.1	89	n.	.....	.....	1	3 ck	fg	calm	.....	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	71.6	22.0	86	ne.	.....	.....	5	0	1 ks	.....	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.11	764.8	30.14	765.5	74	23.3	76	ne.	2.4	1.1	.....	0	3 ks	.....	.....	0	0	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.98	761.5	30.04	763.0	—44.0	—42.2	.....	sw.	9	4.0	.....	0	0	.....	.....	0	0	clear	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore, India	29.93	760.2	78.8	26.0	84	n.			1		8							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.12	765.0	62	16.7	61	calm			0		8							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 14° 05′, E. 110° 09′	30.00	762.0	75	23.9	95	nne.			4–5		10					4	n.	misty	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.94	760.5	75	23.9	59	sse.			2–3		3	se.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.89	759.2	66	18.9	100	calm			0		9					4	nw.	d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.17	766.3	45	7.2	84	nne.			1		9	nne.						d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette																			Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.33	770.4	50.5	10.3	93	n.			1		10							foggy	Capt. S. Long.
H. M. S. Diamond, S. 4° 25′, W. 26° 02′	29.93	760.2	80	26.7		se.			3							2	ese.	d. clouds	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	29.94	760.5	64	17.8	78	wsw.			4–5		6	wsw.						showery	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 48′, W. 58° 56′	29.63	752.6	46	7.8	85	s.			1–4		3					1	sse.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.92	760.0	81	27.2		nne.			1–2		5	nnw.						d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. G. Robinson.
H. M. S. Espiegle, St. Vincent, C. Verd Ids.	30.09	764.3	70	21.1	75	ene.			2–4		8	nne.				1	nnw.	squally	Capt C. A. P. Bridge.
H. M. S. Euryalus, N. 34° 14′, E. 22° 56′	30.08	764.0	62	16.7	77	w.			3		6	w.				3	w.	showery	Capt. R. D. King.
H. M. S. Fawn, N. 13° 00′, E. 43° 12′	29.93	760.2	79.5	26.4	70	s.			5		1					3	s.	blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.44	773.2	45	7.2	84	ne.			0–1		10							foggy	Capt. R. F. Moskyn.
H. M. S. Gannet, S. 36° 00′, W. 82° 35′	30.35	770.9	58	14.4	69	s.			3		9					2	se.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Montevideo, Uruguay	29.94	760.5	66	18.9	73	n.			6		0					2	wsw.		
H. M. S. Iris, Alexandria, Egypt	30.12	765.0	64	17.8	83	wnw.			2–3		3							squally	Capt. L. Jones.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.18	766.6	60	15.6	82	calm			0		3	ne.				1	wsw.	d. clouds	Capt. E. H. Seymour.
H. M. S. Lark																		d. clouds	Capt. R. E. Tracey.
H. M. S. Liffey																			Lieut. C. F. Oldham.
H. M. S. Magpie, N. 20° 55′, E. 109° 30′	30.17	766.3	63.5	17.5	83	ene.			1–2		3								Comm. J. T. R. Ayler.
H. M. S. Malabar, N. 15° 10′ E. 55° 59′	29.98	761.5	78	25.6	90	ne.			4		3	ne.				1	ne.	misty	Capt. A. Carpenter.
H. M. S. Mutine																2	ene.	d. clouds	Capt. H. Hand.
H. M. S. Northampton																			Comm. F. Edwards.
H. M. S. Orontes, S. 34° 10′, E. 25° 45′	30.25	768.3	68	20.0	94	sw.			3		9								Capt. E. Drummond.
H. M. S. Pelican, S. 40° 07′, W. 32° 22′	29.68	753.9	55.5	13.1	96	wsw.			5		3					3	ssw.	showery	Capt. R. J. Kinahan.
H. M. S. Phœnix, N. 19° 57′, W. 75° 15′	30.10	764.5	69	20.6	95	wnw.			2		1					2	wsw.	d. clouds	Capt. F. R. Dicken.
H. M. S. Ready																sm'h		blue sky	Capt. H. H. Grenfell.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	29.75	755.6	43	6.1	91	n.			1		10								Capt. W. H. Edwards.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.07	763.8	80.5	26.9	87	nnw.			1		5	nnw.						overcast	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 11° 16′, E. 41° 49′	29.30	744.2	85	29.4	91	n.			3		3	nne.				3	ne.	d. clouds	Capt. C. E. Foot.
H. M. S. Serapis, N. 36° 45′, W. 8° 04′	30.01	762.2	65	18.3	94	ese.			1		4	ese.				1	ese.	d. clouds	Comm. M. Byles.
H. M. S. Tenedos, N. 18° 14′, W. 76° 27′	30.11	764.8	79	26.1	82	e.			2		4					sm'h		d. clouds	Capt. G. O. Twiss.
H. M. S. Triumph, S. 11° 48′, W. 78° 18′	29.90	759.4	70	21.1	90	calm			0		2	calm				2	s.	d. clouds	Capt. C. G. Fane.
H. M. S. Tyne, N. 37° 17′, E. 10° 38′	30.13	765.3	58	14.4	93	ene.			1		0					1	wsw.	blue sky	Capt. A. H. Markham.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.07	763.8	72	22.2		n.			1		4							d. clouds	Capt. J. E. Stokes.
H. M. S. Woodlark, Bushire, Persia	30.14	765.5	68.5	20.3		wsw.			3		4	sw.						d. clouds	Com. W. S. Brown.
H. M. S. Zephyr																			Capt. T. P. Nesham.
																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis
Quanza, Fogo, Cape Verd Ids.	30.05	763.2	77.9	25.5	80	calm			0		4		sw.			2		d. clouds	C. da Silva Costa,
Tamega																			P. I. de Rio Carvallio.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.30	769.6	46	7.8	62	nne.	5	2.2	.....	.....	8	.....	ne.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	30.04	763.0	10	—12.2	.....	nw.	9	4.0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Naval Hospital Yokohama, Japan	30.30	769.6	38	3.3	86	calm	.....	.....	0	.....	10	.....	w.	0	0	.....	.....	covered	
Adams, Mollendo, Peru	29.75	755.6	70	21.1	95	sse.	.....	.....	0-1	.....	10	.....	.....	.....	.....	light	s.	cloudy	
Alaska, S. 12° 16′, W. 77° 23′	29.94	760.5	67	19.4	95	calm	.....	.....	0	.....	10	.....	.....	0	0	sm'h	.....	cloudy	
Alert, Hong Kong, China*	30.03	762.7	64	17.8	78	e.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alliance, Boston, Mass	30.00	762.0	7	—13.9	?	nw.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear	
Ashnelot, Tientsin, China	30.31	769.9	28	— 2.2	100	ese.	.....	.....	1	.....	8	.....	calm	.....	.....	.....	.....	cloudy	
Brooklyn, N. 8° 06′, W. 33° 04′	29.98	761.5	78	25.6	95	ene.	24	10.7	.....	.....	8	.....	ene.	0	0	mod.	ene.	fair	
Colorado, New York, N. Y	30.17	766.3	16	— 8.9	?	nw.	3	1.3	.....	.....	2	.....	calm	0	0	.....	.....	clear	
Essex, Norfolk, Va	30.31	769.9	28	— 2.2	100	n.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	clear	
Franklin, Norfolk, Va	30.25	768.3	26	— 3.3	.....	n.	6	2.7	.....	.....	2	.....	calm	0	0	.....	.....	fair	
Galena, N. 8° 31′, W. 13° 19′	29.93	760.2	81	27.2	96	ene.	.....	.....	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Independence, N. Yard, Mare I'd, Cal	29.96	761.0	50	10.0	93	s.	4.8	2.1	.....	.....	5?	.....	s.	0.17	4.3	.....	.....	cloudy?	
Kearsarge, New Orleans, La	30.20	767.1	50	10.0	86	ese.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Lackawanna, S. 29° 29′, W. 72° 04′†	30.08	764.0	61	16.1	100	s.	.....	.....	4	.....	10	.....	.....	.....	.....	mod.	s.	cloudy	
Lancaster, Villafranca, France	30.04	763.0	59	15.0	70	w.	.....	.....	0-1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Michigan, Erie, Pa	30.05	763.3	23	— 5.0	.....	sw.	.....	.....	5	.....	10	.....	.....	.....	.....	.....	.....	snowing	
Minnesota, Newport, R. I	30.09	764.3	13	—10.6	.....	nnw.	7	3.1	.....	.....	0	.....	.....	.....	.....	.....	.....	clear	
Monocacy, Yokohama, Japan	30.48	774.2	43	6.1	75	wnw.	.....	.....	1	.....	5	.....	calm	.....	.....	.....	.....	hazy	
Nipsic, Syracuse, Sicily	30.15	765.8	59	15.0	65	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.09	764.3	64	17.8	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	long	w.	misty	
Palos, Hong Kong, China	30.21	767.3	60	15.6	76	w.	.....	.....	1	.....	0?	.....	.....	.....	.....	.....	.....	fair?	
Passaic, Washington, D. C	30.27	768.8	21	— 6.1	.....	sw.	.....	.....	2	.....	2	.....	nw.	.....	.....	.....	.....	fair	
Pensacola, Callao, Peru	30.00	762.0	64	17.8	94	calm	0	0	.....	.....	8	.....	nw.	0	0	sm'h	.....	cloudy	
Powhatan, Boston, Mass	30.06	763.5	9	—12.8	100	sw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Quinnebaug, Tunis, Tunis, Africa	30.12	765.0	57	13.9	75	calm	.....	.....	0	.....	2	.....	calm	0	0	sm'h	.....	clear	
Ranger, N. 18° 52′, W. 104° 02′*	29.93	760.2	74	23.3	90	ne.	.....	.....	2	.....	2	.....	calm	0	0	sm'h	.....	clear	
Richmond, Apia, Samoa Islands*	29.72	754.9	81	27.2	96	w.	.....	.....	1	.....	10	.....	sw.	0	0	.....	.....	cloudy	
Shenandoah, Montevideo, Uruguay*	29.98	761.5	67	19.4	64	nnw.	.....	.....	4	.....	2	.....	.....	.....	.....	mod.	nnw.	clear	
St. Louis, League Island, Pa	30.42	772.7	17	— 8.3	67	nw.	5	2.2	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Swatara, Yokohama, Japan†	30.34	770.6	43	6.1	75	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Tennessee, New York, N. Y	30.17	766.3	15	— 9.4	.....	wnw.	6	2.7	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Vandalia, Plymouth Montserrat, W. I.	30.10	764.5	77	25.0	86	ene.	.....	.....	2	.....	5	.....	ene.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass	30.09	764.3	7	—13.9	.....	wnw.	3	1.3	.....	.....	2	.....	wnw.	0	0	.....	.....	hazy	
Wachusetts, Sitka, Alaska	29.48	748.8	31	— 0.6	.....	ene.	.....	.....	1	.....	10	.....	se.	0	0	.....	.....	overcast	
Wyoming, Port Royal, S. C	30.29	769.4	34	1.1	79	ne.	1	0.4	.....	.....	2	.....	calm	0	0	.....	.....	clear	
Yantic, N. 17° 56′, W. 73° 31′*	30.03	762.7	77	25.0	86	ne.	.....	.....	3	.....	5	.....	.....	.....	.....	sm'h	.....	fair	

MERCHANT-MARINE SERIES.

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VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind. Up'er	Amount and kind. Lo'er	Direction. Upper.	Direction. Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 43° 45′, W. 67° 45′	30.26	768.6	15	—9.4	?	n.	6		9		n.	1 h'r	1 h'r	3	nw.	snowing	C. Gapon.
S. S. Nova Scotian, Capt. W. Richardson, Off Sambro, N. S.	29.80	756.9	15	—9.4		w.	4		2		wnw.			r'gh	sw.	clear	
S. S. Polynesian, Capt. R. Brown, N. 50° 49′, W. 38° 05′*	29.69	754.1	43	6.1		sw.	6		10		sw.	2h'r	2h'r	r'gh	nw. sw.	cloudy	Roberts & Spark
S. S. Prussian, Capt. J. G. Stephens, Bar Ship Light, St. Georges Channel*	29.18	741.2	46	7.8		wsw.	6		3		wnw.					fair	J. G. Stephens.
S. S. Waldensian																	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, Liverpool, England	29.10	739.1	50	10.0	93	wnw.	6		5		w.					fair	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, St. George's Channel, Eng†	29.29	744.0	44	6.7	84	nw.	5		2		nw.	light	light	sm'h	nw.	clear	C. W. Walker, 2d Offl.
S. S. Ohio, Capt. Henry Morrison, N. 43° 40′, W. 59° 15′.*†	29.84	757.9	37	2.8	100	nnw.	10		10		nw.			long high	wsw.	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge																	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown																	J. Brown.
Utopia, Capt. A. McRitchie																	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. W. Williams, N. 26° 43′, W. 74° 05′*	30.20	767.1	68	20.0		nnw.	2		8		sw.	0	0	small	nw.	cloudy	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin																	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta,																	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse N. 18° —′, W. 73° —′	29.76	755.9				ne.	2		5?		e.	shr's	sh'rs	mod.	e.	cloudy?	Fisher & Weldon.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. 8*†	29.55	750.6	74	23.3	59	nw.	1					0	0			clear	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell																	
British Merchant, Capt. E. J. Molony, S. 21° 56′, E. 92° 25′	30.07	763.8	75.5	24.2	72	ese.	5-6		7							d. clouds	
Bk. Caldew, Capt. W. Peterson																	
S. S. Cipero, Capt. W. N. Laily																	
S. City of Agra, Capt. Thos. Young, S. 30° 23′, W. 19° 10′	30.06	763.5	75.5	24.2		nw.	5		1							blue sky	
Bk. Glaramara, Capt. R. Morton, N. 1° 07′, W. 26° 40′	29.99	761.7	76.5	24.7	95	n.	2		10							overcast	
Glencairn, Capt. R. S. Tannock, S. 26° 20′, W. 26° 48′	30.09	764.3	82	27.8	78	nw.	4		3							d. clouds	
S. S. Gordon Castle, Capt. W. Waring,																	
Bq. Hermine, Capt. S. G. Jones																	
S. S. Humboldt, Capt. A. W. Jeffery, N 11° 34′, W. 27° 03′	30.06	763.5	73.5	23.1	76	ne.	4		7							d. clouds	
S. Lochee, Capt. J. Raeburn, N. 10° 25′ E. 87° 14′	29.95	760.7	81	27.2	87	ne.	4		4							d. clouds	
May Hulse, Capt. H. Youlden, N. 10° 30′ W. 25° 45′	30.00	762.0	75.7	24.3	72	ne.	5		4							d. clouds	
Bk. Mertola, Capt. E. W. Turner, N. 36° 49′, W. 9° 12′	30.06	763.5	59.5	15.3	97	nw.	6		7							d. clouds	
Minho, Capt. J. Lawson																	
Naiad, Capt. John Smith S. 30° 46′, W. 24° 40′	29.93	760.2	71.7	22.1	90	nw.	5		10							d. clouds	
Pole Star, Capt. F. Norman, S. 33° 18′, W. 50° 42′	29.99	761.7	71.8	22.1	57	nne.	1		2							d. clouds	
Queen of Cambria, Capt. M. Parry, S. 39° 49′, W. 36° 57′	29.69	754.1	58	14.4	76	w.	6		10							showery	
S. S. Strathleven, Capt. C. W. Pearson, N. 33° 56′, W. 66° 43′	29.92	760.0	57.5	14.2	74	wnw.	5		10							overcast	
S. Superb, Capt. Berridge, S. 7° 26′ W. 23° 41′	29.99	761.7	78.5	25.8	95	ene.	3		0							misty	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt S. Windham, N. 46° 23′, W. 46° 58′*†	30.00	762.0	56	13.3		sw.	6		10		w.	2 h'r	2 h'r	h'vy	wsw.	raining	Wm. Fitt.
CALIFORNIA, AND MEXICAN S. S. CO.																	
J. Birmingham, Agent San Francisco.																	
S. S. Newbern, Capt. E. Rogers																	
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman																	Crowell & Henry.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains																	J. H. Mills, 3d Officer
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul																	
S. S. St. Laurent, Capt. A. Servan																	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York.																	
S. S. Gellert, Capt. Kuhlewein																	
S. S. Silesia, Capt. A. Albers																	P. Froehlich, 3d Offl.
S. S. Wieland, Capt. C. Helbch, N. 49° 52′, W. 2° 04′*	29.38	746.2	52	11.1		w.	4-5	5 ck	0	w.		8 h'r	hv'y	4	w.		C. Jorgensen.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch,																	Patterson&Thompson.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, N. 51° 38′, W. 6° —′*†	30.30	769.6	44	6.7		wsw.	4		8		nw.	0	0	long	wnw.	overcast	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind. Up'er	Amount and kind. Lo'er	Direction. Upper.	Direction. Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry. N. 53° 27′, W. 4° 07′						wsw.	7				nw.	8h'r	8h'r				E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley																	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker																	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 13° 15′, W. 77° 38′†	29.99	761.7	80.5	26.9		nne.	4								ne.		
S. S. Bothnia, Capt. W. McMickan																	
S. S. City of Alexandria, Capt. L. F. Timmerman																	E. Stembridge, 3d Off.
S. S. City of Washington, Capt. J. W. Reynolds, N. 24° 00′, W. 81° 22′*†	30.30	769.6	75	23.9		ne.	3								sw.	fine	
S. S. Maas, Capt. T. H. Bonjer																	
S. S. New York, Capt. R. B. Quick, N. 25° 00′, W. 83° 36′†*	30.35	770.9	64	17.8		ne.	4								ne.	fine	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier, N. 43° 12′, W. 54° 00′*	29.74	755.4	40	4.4		nne.	2								ssw.	raining	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander																	G. H. Lose, 3d Off.
S. S. Leipzic, Capt. F. Pfeiffer, N. 39° 37′, W. 63° 11′	29.92	760.0	43	6.1	67	nnw.	5		8		nnw.	3 h'r	3 h'r	mod.	w; nnw.	fair	Cuppers & Walter
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	29.14	740.1	45.5	7.5		ssw.	6		7		s.	6 h'r	6 h'r			raining	
S. S. Mosel, Capt. J. Hesse																	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. Undeutsch																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 40° 16′, W. 168° 04′†	29.45	748.0	49	9.4	71	w.	3		5		sw.	0	0	high	wsw.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 23° 35′, E. 117° 55′*†	30.41	772.4	63	17.2	78	ne.	3		2		ne.			sm'h		clear	
S. S. Oceanic, Capt. J. Metcalf, N. 30° 27′, E. 177° 48′*	29.91	759.7	66	18.9	88	w.	6		8		w.			4	wnw.	squally	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.90	759.4				calm	0									dense fog	K. S. Nickerion.
S. S. Seminole, Capt. H. K. Hallett, N. 32° 08′, W. 80° 30′†	29.97	761.2	47	8.3	45	var.	1		0			0	0	sm'h		fine	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes,																	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d Off.
S. S. Columbia, Capt. F. Bolles																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal †	30.07	763.8	50	10.0	93	calm	0		5		sw.					hazy	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, San Francisco, Cal†	30.07	763.8	50	10.0	93	s.	1		10		s.					rainy	
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†	29.75	755.6	40	4.4		var.	2		7		nw.	0	0	sm'h		cloudy	
S. S. Idaho, Capt. E. Alexander, N. 38° 06′, W. 123° 50′	30.08	764.0	51	10.6	93	s.	2		fg.					mod.	w.	foggy	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 42′, W. 118° 14′†	30.08	764.0	60	15.6	82	sw.	2		8		sw.			sm'h	wsw.	cloudy	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.22	767.6	50	10.0	93	w.	1		8			0	0			cloudy	T. Wallace.
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.07	763.8	50	10.0	86	calm.	0		10		se.	0	0			cloudy	
S. S. Victoria, Capt. H. M. Hayward, Nanaimo, Vancouvers Id†	29.90	759.5	47	8.3	92	calm	0		8					sm'h		cloudy	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. ——— S. 36° 00′, E. 175° 20′	29.83	757.7	60	15.6	94	n.	4		10		nnw.			mod.	nw.	rainy	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.93	760.2	74	23.3	81	calm	0		0			0	0			clear	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, Hong Kong, China†	30.46	773.7	61	16.1	70	n.	2		8		n.	0	0			fair	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn,																	E. Le Saik.
S. S. City of Tokio, Com. J. Maury,																	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, Acapulco, Mexico†	29.98	761.5	80	26.7	91	ene.	2		3		ene.	0	0			clear	
S. S. Granada, Capt. M. Connolly																	
S. S. South Carolina, Capt. W. J. Russell, Panama, Panama*†	29.89	759.2	81	27.2	87	nw.	2		5		nw.	0	0	sm'h		fine	
S. S. Zelandia, Capt. H. Webber, S. 9° 00′, W. 169° 22′	29.77	756.1	80	26.7	95	s.	2		8		sw.			mod.	s.	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.																	
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QUEBEC S. S. Co.																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke N. 34° 10′, W. 69° 20′	.....	.....	.....	.....	.....	nw.	4	.....	5	.....	.....	0	0	mod.	n.	fair	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, N. 43° 37′. W. 57° 49′*	29.85	758.2	38	3.3	71	nw.	2	.....	10	.....	nw.	0	0	light	wsw.	dull	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Eymond.
S. S. Waesland, Capt. H. Nickels, Antwerp, Belgium*	29.25	742.9	50	10.0	.....	s.	6	.....	10	.....	.....	sh'rs	shr's	.....	.....	overcast	.....
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
THINGVALLA LINE																	
Funch, Edye & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub N. 41° 44′, W. 59° 25′†	29.91	759.7	41.0	5.0	.....	wnw.	3	.....	10	.....	wnw.	5 h'r	5 h'r	r'gh	wsw.	raining	J. T. Ulberling
WARREN LINE.																	
Warren & Co , Agents, Boston.																	
S. S. Iowa, Capt. S. Walters	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent.																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 49° 12′, W. 34° 10′*†	30.00	762.0	48	8.9	85	s.	5	.....	10	.....	s.	8 h'r	h'vy	high	w.	raining	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 44° 37′, W. 53° 44′*†	29.87	758.7	61	16.1	82	sw.	4	.....	10	.....	w.	rain	rain	mod.	sw.	showery	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th Officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 33° 25′, W. 66° 30′†	30.13	765.3	60	15.6	70	nw.	3	0	5 k	.....	nw.	0.15	3.8	cross	sw. w.	fair	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona, N. 34° 23′, W. 41° 38′	30.54	775.8	66.9	19.4	.....	sse.	2	.....	9 s	.....	.....	.....	.....	sm'h	.....	cloudy	.....
Bk Alpha, Capt. Ole Grönn, Pozzuola, Italy *†	30.12	765.0	60	15.6	.....	sw.	1	.....	5	.....	w.	0	0	.....	.....	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, Downs Roads*†	29.30	744.2	55.0	12.8	.....	sw.	3	.....	8	.....	wsw.	1 h'r	light	.....	.....	threatening.	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. L. Lewis.
Bk. Dom Pedroll, Capt C. E. Coffin,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 26° 07′, W. 44° 48′†	30.40	772.1	.....	.....	.....	ese.	3	.....	5	.....	ese.	light	light	mod.	se.	.....	.....
S. Enoch Train, Capt. H. D. Chapman. N. 42° 05′, W. 41° 40′*	30.17	766.3	.....	.....	.....	ssw.	5	.....	8	.....	ssw.	0	0	short	ssw.	hazy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 37° 51′, W. 65° 53*′	30.00	762.0	.....	.....	.....	n.	6	.....	10	.....	w.	2 hr	hv'y	mod.	e.	drizzling	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.27	768.8	29	—1.7	.....	sw.	1	.....	1	.....	calm	.....	.....	sm'h	.....	fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 30° 04′, W. 46° 17′†	29.75	755.6	77	25.0	.....	nnw.	6	.....	10	.....	nnw; w.	0	0	mod.	n.	misty	G. D. Morrison.
Bk. Freya, Capt. Blaouw, Scattery Island, Ireland	.....	.....	41	5.0	.....	w. to n,	6	.....	8	.....	wnw.	4 h'r	hail	.....	.....	hailing	.....
Bk. Gamallel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.05	737.9	.....	.....	.....	nw.	2	.....	0	.....	.....	0	0	.....	.....	.....	.....
Bk. Geo. Booth, Capt. D. Williams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 41° 46′, W. 39° 00′*	30.53	775.4	62 2	16.8	96	ssw.	5	.....	8	.....	ssw.	6 h'r	6 h'r	light	wsw.	fair	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 0° 37′, W. 32° 39′*	29.79	756.7	.....	.....	.....	e.	1	.....	2	.....	ese.	1 h'r	light	mod.	ese.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 38° 01′, W. 38° 01′*†	30.70	779.8	.....	.....	.....	ssw.	3	.....	.....	.....	sw.	0	0	mod.	w.	cloudy	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.06	763.5	51	10.6	86	ssw	1	.....	5?	.....	sw.	.....	.....	.....	.....	cloudy?	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen. N. 45° 12′, W. 19° 28′†	30.29	769.3	55	12.8	.....	nw.	6	.....	5	.....	nnw.	1 h'r	light	r'gh	nw.	squally	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 35° 47′, W. 46° 14′*	30.37	771.4	66.0	18.9	97	sse	3	.....	3	.....	s.	.....	.....	mod.	s.	.....	.....
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	29.99	761.7	60	15.6	82	s.	2	.....	2	.....	wsw.	0	0	.....	.....	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert, N. 2° 56′, W. 29° 44′*†	30.10	764.5	.....	.....	.....	ne.	3	.....	2	.....	ene.	.....	.....	sm'h	.....	.....	I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. P. Dutton.

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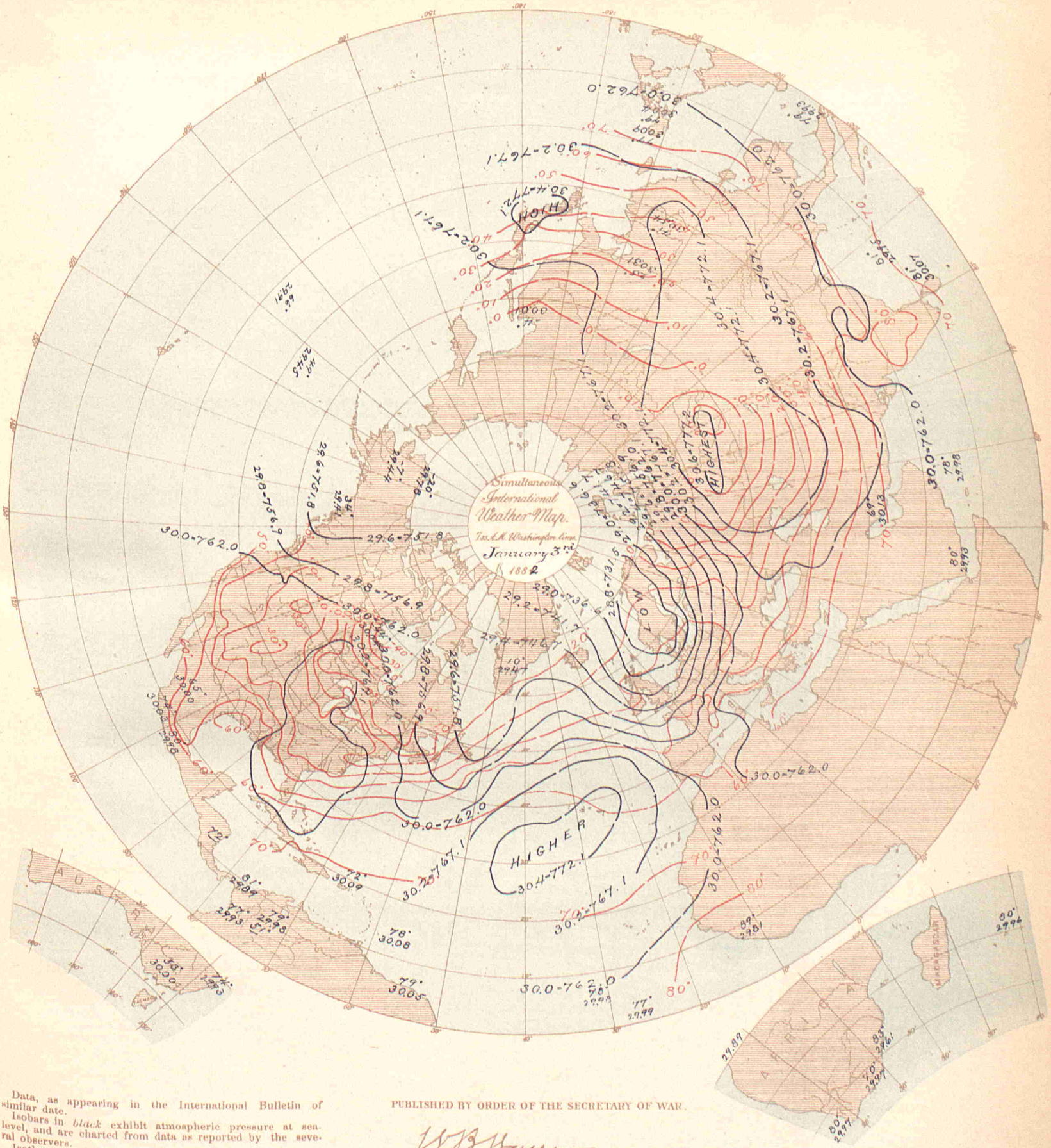
W. B. HAZEN,

Brig. & Bvt. Maj. Gen'l,

Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 4, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours																			
Algiers			29.85	758.2	65.8	18.8	81	sw.			2		4			0.685	17.4	cloudy	Moiroud.
La Calle			29.85	758.2	58.6	14.8	70	wnw.			2		4			0.047	1.2	cloudy	Nicolas.
Tunis			29.86	758.4	57.6	14.2	76	ssw.			4		4			0.079	2.0	cloudy	Fonfrède.
Sfax			29.85	758.2															Jacques.
Saida																			Gau.
Tebessa			29.92	760.0	46.4	8.0	83	n.			1		4			0.039	1.0	cloudy	Perès.
Geriville			30.01	762.3	48.9	9.4	84	ssw.			4		9			0.280	7.1	covered	Derché.
Laghouat					42.1	5.6	79	sw.			2		10			0.228	5.8	covered	Lonchamp.
Biskra			30.00	762.0	48.6	9.2	71	n.			1		2			0.276	7.0	fair	Herbin.
			30.00	761.9	46.4	8.0	100	calm			0		10			0.543	13.8	covered	Malan.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.75	755.6	29.84	757.9	59.4	15.2	83	ssw.	3	1.3			3			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.40	746.7	29.96	761.0	44.2	6.8	91	w.			2		8			0.004	0.1		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.13	739.9	29.92	759.9	38.8	3.8	80	wnw.	0	0.0			4			0	0		Dr. Wierzbiski.
Eperies	29.15	740.3	30.07	763.7	31.6	— 0.2	92	s.			3		10			0	0		Julius Mikolik.
Gratz	28.62	726.9	29.91	759.7	36.3	2.4	57	sw.			2		6			0	0		Andreas Rospini.
Hermannstadt	28.63	727.1	30.14	765.6	28.4	— 2.0	100	se.			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.53	724.6	29.93	760.3	30.6	— 0.8	96	e.			1		10			0	0	dense fog	The Staff.
Lemberg	28.96	735.5	29.98	761.6	32.9	0.5	76	s.			1		0			0	0		Dr. T. Stanecki.
Pola	29.88	758.9	29.99	761.8	51.4	10.8	86	se.			2		10			0	0		I. R. Hydrographic Office
Szathmar	29.58	751.2	30.04	762.9	36.0	2.2	80	ne.			2		0			0	0		Joseph Midlinszky, S. J.
Szegedin	29.74	755.3	30.03	762.7	38.5	3.6	90	se.			2		4			0	0		Karl Stancel.
Trieste	29.91	759.6	30.01	762.2	49.6	9.8	89	calm			0		10			0.268	6.8		Rieder.
Vienna	29.21	741.9	29.96	760.9	32.7	0.4	92	calm			0		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.66	753.4	29.76	755.9	36.0	2.2	66	wsw.	5	2.2			3			0.480	12.2	misty	W. Boswell.
Armagh, Observatory	29.60	751.8	29.85	758.2	37.9	3.3	85	s.	10	4.5			10					overcast	S. Call.
Bidston, Liverpool Obs'y			29.87	758.7	42.8	6.0	90	wsw.	23	10.3			6					d. clouds	John Hartnup.
Bolton, Sharples	29.31	744.5	29.85	758.2	41.4	5.2	87	sw.	6	2.7			8					drizzling	Thomas Mackereth, A.S.
Bradford, Yorkshire	29.44	747.8	29.83	757.7	41.1	5.1	81	w.			4		4			0.19	4.8	d. clouds	J. McLandsborough, F.R.
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	74.0	23.3	90	ne.			2		8					overcast	Pvt. J. Surgenor.
Cardington			29.90	759.4	40.0	4.4	81	w.			0.6		1					blue sky	John McLaren.
Chatham, School M. E.	29.70	754.4	29.83	757.7	41.1	5.1	76	calm			0		0					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.82	757.4	30.06	763.5	45.7	7.6	65	w.					2					misty	The Staff.
Fort Napier, Natal	27.58	700.5	29.80	756.9	81.2	27.3	53	calm			0		1					blue sky	Pvt. E. K. Annis, A. H. C.
Free Town, Sierra Leone	29.60	751.8	29.83	757.7	88.0	31.1	66	nw.			1		5					d. clouds	Sergt. John Robinson.
Galway, Queen's College					47	8.3	85	w.			2		10			0.16	4.1	raining	J. O'Donaghue.
Gibraltar, Mediterranean	29.94	760.5	29.99	761.7	57.5	14.2	84	w.			2		8					gloomy	Cpl. O. Baldwin.
Glasgow, Observatory	29.55	750.6	29.75	755.6	38.2	3.4	89	n.			2		10 k					misty	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.77	756.1	29.95	760.7	38.9	3.8	80	wsw.			1		0					misty	The Staff.
Guernsey	29.80	756.9	30.10	764.5	45.0	7.2	88	nw.			1		0					blue sky	A. Collenette, F. M. S.
Kew, Observatory	29.92	760.0	29.96	761.0	40.9	4.9	73	wsw.	9	4.0			0					misty	The Staff.
Leicester, Museum	29.64	752.8	29.90	759.4	40.0	4.4	80	sw.			1		0					misty	J. C. Smith.
Malta, Mediterranean	29.89	759.2	29.96	761.0	62.6	17.0	80	se.			2		8					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.33	770.4	30.37	771.4	69.5	20.8	58	ne.			3		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.39	746.5	29.92	760.0	41.6	5.3	79	sw.			1		0					blue sky	John Mac Email.
Oxford, Radcliffe Obs'y	29.71	754.6	29.94	760.5	40.3	4.6	77	wsw.			1		0					blue sky	The Staff.
Plymouth	29.94	760.5	30.01	762.2	43.0	6.1	84	nw.			1		5					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.64	752.8	34.9	1.6	91	ssw.	10	4.5			5					d. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.04	763.0	30.11	764.8	48.0	8.9	84	ne.			2		10					showery	W. H. Lyne
Sheffield	29.59	751.6	29.88	758.9	41.9	5.5	88	sw.			2		3			0.19	4.8	d. clouds	W. F. Cooper.
Silloth Rectory	29.78	756.4	29.81	757.2	41.2	5.1	84	wsw.			2		7			0.325	8.3	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.86	758.4	41.2	5.1	90	w.	5	2.2			10					overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.73	755.1	29.96	761.0	41.4	5.2	77	w.			2		0					blue sky	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.98	761.5	30.04	763.0	52	11.1	72	nw.			6		6					d. clouds	W. Newcombe.
Valencia, Observatory	29.91	759.7	29.94	760.5	46.4	8.0	88	sw.	15	6.7			10					raining	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.94	760.5	29.99	761.7	3	—16.1	81	wnw.	9	4.0		0	2 s			0	0	clear	H. J. Cundall, C. E.
Chatham, N. B.*	29.96	761.0	30.03	762.7	— 1	—18.3	100	sw.	3	1.3		0	0			0	0	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.17	766.3	30.19	766.8	2	—16.7	87	n.	25	11.2		2 k	5 s	w.	w.	0.06	1.5	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.26	743.2	30.15	765.8	15	— 9.4	96	se.	15	6.7		5 c	5 ks	se.	se.	0	0	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.90	759.4	30.04	763.0	11	—11.7	91	w.	5	2.2		0	0			0	0	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.31	769.9	30.70	779.8	— 9	—22.8	74	sw.	1	0.4		0	0			0.10	2.5	clear	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.33	770.4	30.57	776.5	— 8	—22.2	86	w.	14	6.3		0	0			0.01	0.3	clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.93	760.2	30.76	781.3	—18	—27.8	69	calm	0	0		0	0			0	0	clear	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.90	759.4	30.36	771.1	— 1	—18.3	100	n.	6	2.7		0	0			inap.	inap.	clear	H. Morgan.
Port Stanley, Ontario	29.94	760.5	30.68	779.3	— 2	—18.9	95	ne.	5	2.2		2 k	0	e.		inap.	inap.	clear	M. Payne.
Quebec, Quebec*	30.02	762.5	30.39	771.9	—12	—24.4	50	nw.			5		10 s		nw.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.19	766.8	30.73	780.5	—11	—23.9	78	nw.	2	0.9		0	0			0.08	2.0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.86	758.4	30.66	778.7	6	—14.4	100	ne.	11	4.9			10 ks			0.05	1.3	cloudy	K. Stewart.
St. Andrews, N. B.	30.06	763.5	30.11	764.8	1	—17.2	80	nw.	2	0.9		0	2 s			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	29.86	758.4	29.92	760.0	14	—10.0	87	w.	12	5.4		0	2 k		w.	0	0	clear	T. C. Hill, C. E.
Toronto, Ontario*	30.28	769.1	30.73	780.5	— 5	—12.6	79	n.	12	5.4		0	0			0.05	1.3	clear	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	30.00	762.0	30.07	763.8	15	— 9.4	76	ne.	4	1.8		0	5 k		n.	0	0	fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.68	753.9	29.94	760.5	25	— 3.9		w.				0	0			0.28	7.1		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	29.83	757.7	29.86	758.4	75.0	23.9	79	s.	3.7	1.7		3 c	0			0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.92	760.0	29.96	761.0	91.0	32.8	38	nw.	6	2.7		9	9			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Hankow	30.22	767.6	30.51	774.9	43.9	6.6	85	nne.			1		10			0	0	covered	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.31	769.9	30.34	770.5	45.5	7.5	93	ene.	2.7	1.2			10			0	0	covered	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.61	752.1	29.66	753.3	38.3	3.5	97	w.	13	6			10						
Fanöe	29.71	754.7	29.73	755.2	38.7	3.7	93	w.			4		2					foggy	Oversergent Fischer.
Godthaab, Greenland	28.95	735.3	28.99	736.4	14.7	—9.6	74	nne.			4		10						Overloerer Lauridsen.
Stykkisholm, Iceland	29.43	747.6	29.48	748.7	14.7	—9.6		e.			8		5						S. Kleinschmidt.
Thorshavn	29.35	745.6	29.39	746.5	36.3	2.4	87	sw.	7	3			5						A. O. Thorlacius.
Vestervig	29.56	750.8	29.65	753.1	39.4	4.1	85	w.			2		1						Overloerer Bergh.
																			Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.47	748.4	30.14	765.5	42.1	5.6	100	sse.			1	1 ck	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.47	748.6	30.02	762.6	40.6	4.8	97	nw.			3		n		s.	0.335	8.5		M. Nicot, Director.
Arras, Engineer School	29.71	754.6	29.97	761.2	40.5	4.7	84	nw.			1		n		se.	0.122	3.1		M. Klein, Commandant.
Avignon, Normal School	29.76	756.0	29.84	758.0	44.6	7	91	nne.			1		10		nne.	1.34	34.	raining	M. Giraud, Director.
Bar-sur-Seine	29.40	746.8	29.98	761.4	39.2	4.0	83	sw.			1		8			0.146	3.7	very cloudy.	M. Saillard, Director.
Beauvais, Normal School	29.71	754.5	29.98	761.4	41.9	5.5	78	nnw.			1		5		nnw.	0.138	3.5	cloudy	M. Frère Eugène Marié.
Besançon, Normal School			29.87	758.7	43.5	6.4	88	ne.			1		n			0	0		M. Gobin, Director.
Bordeaux, Observatory	29.84	757.9	30.11	764.7	44.8	7.1	71	n.			1		0			0.008	0.2	clear	M. Rayet, Director.
Bourges, Normal School	29.51	749.6	30.08	763.9	46.4	8	94	n.			1		kn		n.	0.098	2.5		M. Postel, Director.
Brest, Naval Observatory	29.86	758.4	30.10	764.6	53.2	11.8	67	wnw.			2		1		wnw.	0.039	1.0		M. de Kennaree, Dir.
Caen, Normal School	29.91	759.7	29.96	761.0	44.6	7	77	wnw.			1		5		nw.	0.020	0.5	cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.59	751.5	29.91	759.7	42.8	6.0	85	s.			1		2		nw.	0.268	6.8	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School																			M. Grimard, Director.
Clermont-Ferrand Obs'y	28.61	726.6	30.03	762.8	43.0	6.1	63	n.			2		8		n.	0.169	4.3	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.10	739.2	29.97	761.2	43.5	6.4	82	n.			1				sse.				M. de Villemontée, Dir.
Commercy, Normal School	29.11	739.5	30.04	763.1	40.3	4.6	93	w.			1		10kn	w.	w.	0.16	4.	covered	Dr. Coulet, Director.
Gap, Normal School	27.32	693.9	29.90	759.4	42.8	6	88					3 c	0	sw.		0.59	15.		M. Jeangirard, Director.
Gréasque, du. Rhone	28.57	725.7	29.71	754.6	45.9	7.7	97	e.			4		10		se.	0.413	10.5	covered	M. Kina, Director.
Grenoble, Normal School	29.11	739.5	29.91	759.6	41.0	5	97	n.			1		10			0.240	6.1	raining	M. Ablard, Director.
Guéret, Normal School	28.49	723.7	30.11	764.8	38.7	3.7	87	nnw.			1		5		nnw.	0.146	3.7	cloudy	M. Rivoire, Director.
Lamballe, Normal School	29.84	757.9	30.11	764.9	46.8	8.2	83	nw.			2		2		nw.	0.035	0.9	slightly cl'dy	M. Ollitrault, Director.
Lescar, Normal School	29.50	749.3	30.07	763.8	50.0	10	60	w.			1		2		n.	0.126	3.2	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	30.03	762.8	30.13	765.4	51.8	11.0	75	nw.			1		0			0	0	clear	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.89	733.7	29.97	761.2	42.1	5.6	88	n.			1		10n		n.	0.366	9.3	covered	M. André, Director.
Mans, Normal School	29.72	754.8	30.04	762.9	43.5	6.4	91	n.			4		0			0.31	8.	clear	M. Piboen, Director.
Marseille, Observatory	29.41	747.1	29.69	754.0	51.3	10.7	80	se.			0.1		10		sse.	0.969	24.6		M. Stephan, Director.
Montlouis l'Institutteur	24.60	624.8	29.44	747.8	26.0	—3.0	72	ne.	26.2	11.7			10	e.					M. Cave, for Dr. Fines.
Montpellier, Normal School	29.61	752.1	29.72	754.9	43.2	6.2	88	ne.			2		10			0.276	7.0	raining	M. Galzin, Director.
Nancy, Normal School	29.17	741.0	29.98	761.4	41.0	5	81	sw.			1		10kn			0	0	covered.	M. Hasse, Director
Nantes, Observatory	29.95	760.7	30.11	764.8	46.6	8.1	72	nw.			1–2		0			0.138	3.5		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	29.70	754.3	29.81	757.2	47.5	8.6	73	n.	18.6	8.3			10		nnw.	1.012	25.7	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	20.95	532.2			10.8	—11.8		ne.			2		10		ne.	1.110	28.2	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School					42.8	6.0	58	s.			4			s.	s.	0	0		M. Tallieu.
Puy de Dôme Obs'y, Summit	24.89	632.3			25.7	—3.5	100	n.			4		10			0.260	6.6	covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.06	763.4	30.09	764.2	46.0	7.8	89	w.			1		0			0.024	0.6	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.85	758.3	30.08	763.9	44.2	6.8	85	nw.			1		10			0.098	2.5	covered	M. Monillot, Director.
Rodez, Normal School	27.72	704.1	29.93	760.1	39.0	3.9	90	w.			3		10		s.			light rain	M. Colrat, Director.
Rouen, Normal School	29.90	759.4	29.95	760.6	42.1	5.6	94	nnw.			1		2			0.20	5.	slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.91	759.8	30.07	763.8	45.3	7.4	69	nnw.			1		1		nnw.	0.004	0.1	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.82	757.4	29.98	761.6	43.5	6.4	77	sw.			1		1		nw.	0.035	0.9	clear	M. Renou, Director.
Toulouse, Observatory	29.29	743.9	30.01	762.3	45.3	7.4	82	wnw.			3		8	nw.		0.248	6.3	very cloudy	M Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.50	749.2	29.98	761.6	41.0	5.0	81	nw.			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.98	736.1	29.83	757.7	39.2	4.0	88	sw.			1	0	9 k		sw.	0.051	1.3	raining	Prof. Dr. Hoh.
Berlin	29.57	751.0	29.74	755.5	43.9	6.6	88	nw.			4		10			0.031	0.8		Prof. Dr. Arndt.
Breslau	29.30	744.3	29.83	757.7	42.1	5.6	69	s.			1		7			0	0		Royal University Obs'y.
Carlsruhe	29.48	748.8	29.93	760.1	45.0	7.2	88	sw.			1		10	sw.		0	0		Albert Senz.
Cassel	29.10	739.0	29.81	757.1	42.3	5.7	77	s.			2		8	s.		0	0		Dr. H. Möhl.
Frankfort on the Main	29.50	749.2	29.87	758.7	44.1	6.7	84	wnw.			1		9			0	0		Physical Society.
Friedrichshafen	28.45	722.5	29.91	759.8	40.6	4.8	89	sw.			2		10	wsw.		0.303	7.7		Wilhelm, Chief Tel.
Hamburg	29.66	753.3	29.75	755.7	39.2	4.0	98	wsw.			3		10			0.071	1.8	rain and fog	E. Preller.
Kiel	29.69	754.0	29.70	754.4	40.6	4.8	92	wsw.			1		9			0.016	0.4		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.37	746.1	29.80	756.9	44.1	6.7	88	wsw.			2		10	wsw.				sprinkling	H. Leppig, Asst.
Magdeburg	29.57	751.0	29.76	755.9	44.8	7.1	87	ssw.			2		10 ks		wsw.	0.102	2.6		Dr. Assmann.
Memel	29.69	754.1	29.74	755.3	39.9	4.4	92	sw.			4		10 s						Issermann.
Munich	28.02	711.6	29.87	758.6	44.8	7.1	59	nw.			1		3	w.		0	0		Central Station.
Neufahrwasser	29.74	755.4	29.76	755.8	41.4	5.2	94	sw.			1		10			0.264	6.7	raining	A. Lothes.
Neustadt, Palatinate	29.34	745.3	29.87	758.6	45.0	7.2	77	w.			3		10	nw.		0	0		Dicknether.
Stuttgart	28.91	734.4	29.82	757.4	44.6	7.0	81	w.			1		10			0.059	1.5	raining	Prof. Dr. Schoder.
Wustrow	29.71	754.6	29.73	755.2	39.4	4.1	97	sw.			2	0	8 s			0.059	1.5		Profs. Brandes & Reimer
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.73	755.2	30.13	765.3	53.4	11.9		ne.			1.0		8 k			0.016	0.4		Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.97	761.1	30.02	762.4	72.9	22.7	50	sw.					0			0	0	blue sky	
Deesa	29.48	748.7	29.96	761.0	74.8	23.8	72	nnw.	10.9	4.9			0			0	0	blue sky	
Bombay	29.89	759.2	29.93	760.2	80.7	27.1	64	nnw.	15	6.7			0			0	0	blue sky	
Poona, Yarrowda	28.04	712.2	29.88	758.9	83.8	28.8	37	wnw.	15	6.7			8	w.		0	0	d clouds	
Belgaum	27.38	695.6	29.92	760.1	76.8	24.9	77	wsw.	5	2.2			7	sw.	sw.	0.11	2.8	'hnd'r-r'm	
Lahore	29.18	741.2	29.95	760 8	64.1	17.8	46	calm	1.0	0.4			0			0	0	blue sky	
Roorkee	29.00	736.6	29.93	760.3	64.2	17.9	43	w.	1.7	0.8			2			0	0		
Agra	29.38	746.1	29.96	760.9	70.2	21.2	53	nw.	3.9	1.7						0	0		
Nagpur	28.86	733.1	29.91	759.7	77.5	25.3	58	ssw.	3	1.3			6		sw.	0.42	10.7	d. clouds	
Jubbulpore	28.55	725.2	29.93	760.2	71.4	21.9	34	nw.	1.9	0.8			2			0	0	blue sky	
Lucknow	29.55	750.6	29.94	760.4	72.2	22.3	48	calm	1.0	0.4			0			0	0	blue sky	
Allahabad	29.58	751.4	29.90	759.5	70.8	21.6	49	ne.	0.9	0.4			0			0	0	blue sky	
Patna	29.76	755.9	29.95	760.8	67.0	19.4	59	calm	1.8	0.8			2	w.	w.	0	0		
Hazaribagh	27.88	708.2	29.94	760.4	68.3	20.2	37	n.	5.2	2.3			5		e.	0	0		
Cuttack	29.88	758.9	29.96	761.0	77.8	25.4	60	ssw.	1.4	0.6			2			0	0	d. clouds	
Calcutta, Alipore	29.92	759.9	29.94	760.5	72.5	22.5	65						0			0	0	blue sky	
Dhubri	29.93	760.3	30.06	763.4	65.4	18.6	63	calm	0.5	0.2			0			0	0	blue sky	
Chittagong	29.90	759.3	29.99	761.7	68.0	20.0	73	w.	1.7	0.8			0			0	0	blue sky	
Sibsagar	29.65	753.3	30.01	762 2	60.1	15.6	92	ne.	2.4	1.1			10	w.	w.	0.27	6.9	d. clouds	
Jeypore	28.48	723.5	29.96	761.0	69.7	20.9	41	nw.	4.5	2.0			0			0	0	blue sky	
Zanzibar, Africa	29.86	758.4			84.1	28.9	72	nne.	8.1	3.6		cs	6 fk		ne.	0.32	8.1	d. clouds	
Trichinopoly	29.71	754 6			80.3	26.8	85	calm	0	0			8			0	0	d. clouds	
Bellary	28.41	721.6			86.4	30.2	45	sse.	4.4	2.0			3			0	0	d. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.57	751.1	29.99	761.8	47.7	8.7	76	ne.	0.7	0.3			10			0.012	0.3		Prof. Giovanni Clodig.
Milan	29.46	748.2	30.00	761.9	39.0	3.9	98	ne.	0.7	0.3			10			0.654	16.6		Prof. Schiaparelli.
Padua	29.87	758.8	29.99	761.7	44.6	7.0	93	nne.	6.9	3.1			10			0.012	0.3		Prof. Dott. Lorenzoni.
Moncalieri	29.05	737.9	30.00	762.0	33.1	0.6	98	nw.	2.5	1.1			10			1.205	30.6		Prof. P. F. Denza.
Genoa	29.67	753.6	29.87	758.6	42.8	6.0	94	ne.	8.7	3.9			10	se.		1.067	27.1		Prof. G. M. Garibaldi.
Mondovi	28.00	711.2	29.99	761.8	32.2	0.1	98	w.			2		10			0	0		Prof. D. O. Bruno.
Pesaro	29.97	761 2	30.02	762.5	50.2	10.1	70	se.	3.8	1.7			10			0.012	0.3		Prof. Luigi Guidi.
Florence	29.63	752.6	29.89	759.3	50.5	10.3	71	e.			2		10			0	0		Prof. Costantino Pitter.
Leghorn	29.76	755.8	29.84	758.0	47.7	8.7	96	ene.	7.4	3.3			10			0.488	12.4		Prof. P. Monte.
Rome	29.73	755.1	29.91	759.6	52.5	11.4	63	e.	9.8	4.4			10			0	0		Prof. P. S. Ferrari.
Lecce	29.84	757.8	30.10	764.4	54.7	12.6	65	ese.	12.5	5.6			4			0	0		Prof. C. de Giorgi.
Cosenza	29.15	740.5	30.06	763.6	50.9	10.5	75	ssw.	3.1	1.4			7	sw.		0	0		Prof. D. Conti.
Cagliari	29.52	749.7	29.71	754.6	59.0	15.0	86	se.			4		10			0.047	1.2		Prof. A. Pacinotti.
Palermo	29.63	752.7	29.89	759.1	59.4	15.4	54	wsw.	5.6	2.5			10	wsw.		0	0		Prof. G. Ciacciatore.
Syracuse	29.97	761.2	30.01	762.3	58.8	14.9	74	sse.	4.2	1.9			10	s.		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.41	747.1	29.95	760.6	51.8	11.0	69	ne.	4.2	1.9			10	se.		0	0		Prof. T. Brioschi.
Stelvio	21.95	557.6			21.0	— 6.1	95	se.			2		10			0.197	5.0	covered	Prof. P. F. Denza.
Valdobbia	21.96	557.9			21.2	— 6.0	73	e.			2		10			0.827	21.0	covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.03	762.7	30.07	763.8	40.1	4.5	79	ssw.				ck	7 ks		sw.			fair	
Hakodate	30.02	762.5	30.03	762.7	41.4	5.2	70	nw.	1.2	0.5			8			0	0	overcast	
Hiroshima, I. M. Obs'y	30.18	766.6	30.19	766.8	45.6	7.6	87	nne.	4.6	2.1		cs	7 s			0	0	fair	K. Sasaki.
Kanazawa	30.44	773.2	30.55	776.0	40.0	4.4	85					ck;cs	4 s		sw.			fair	S. Endo.
Kioto	30.04	763.0	30.22	767.6	47.7	8.7	83	nnw.	1.1	0.5		ck	10 s			0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.96	761.0	30.17	766.3	54.3	12.4	85	nne.	4.8	2.1		o	0			0.240	6.1	clear	S. Takehayashi.
Neegata	30.16	766.1	30.19	766.8	37.5	3.1	73	se.	2.9	1.3		7 ck	0	sw.		0.055	1.4	cloudy	
Nobiru	30.14	765.5	30.16	766.0	29.1	— 1.6	91	nnw.	3.9	1.7		o	0			0	0	fair	H. Midzushina.
Supporo					20.1	— 6.6	83	calm	0	0			5			0	0	fair	
Tokei Obs'y, Yeddo	30.14	765 5	30.21	767.3	39.9	4.4	85	n.	5.4	2.4		7 c;cs	0			0	0	fair	The Staff.
Wakayama	30.14	765.5	30.19	766.8	51.2	10.7	79	ne.	2.2	1.0		10 ck	0	s.		0	0	cloudy	Y. Kuwamnea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.80	756.9	29.99	761.7	82.0	27.8	54	e.	17.0	7.6		1 sc	2 k;ks		s.	0	0	fair	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.75	603.3	29.97	761.3	47.3	8.5	68	calm	0	0			10 k		sw.	0	0	covered	Vicente Fernandez.
Leon	24.47	621.6	30.23	767.8	48.5	9.2	81	n.			1	10 c	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.77	756.1	30.03	762.8	66.0	18.9	94	ene.			1		10 ku		sw.	0	0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.11	587.1	30.31	769.8	43.7	6.5	64	calm	0	0		5 ck	5 ks			0	0	covered	The Staff.
Morelia	24.31	617.5	30.59	777.2	43.7	6.5	87	ne.			3	1 c	2 k	s.	s.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.96	608.5	30.06	763.5	47.8	8.8	63	calm			0		10 kn			0	0	covered	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.46	595.9	30.44	773.1	40.8	4.9	64	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.17	613.9	30.16	766 0	48.8	9.3	56	ne.			1		10		w.	0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.56	573.2	30.32	770.1	46.4	8.0	66	wsw.	9.3	4.1		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.89	759.3	29.89	759.3	42.1	5.6		w.			4					0.035	0.9		
Groningen	29.75	755.6	29.80	757.0	40.1	4.5		wsw.			1					0.106	2.7		
Helder	29.80	757.0	29.80	757.0	43.2	6.2		n.			2					0.035	0.9		
Hellevoetsluis	29.85	758.1	29.85	758.1	41.2	5.1	87	w.			3					0.161	4.1		
Utrecht	29.82	757.3	29.86	758.5	43.5	6.4	90	wsw.			1		5			0.114	2.9	cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.47	748.5	29.53	750.1	34.2	1.2	96	calm	0	0			8			0.173	4.4	snowing	
Brono	28.83	732.2	28.87	733.2	34.2	1.2	85	wsw.	36	16			10			0.071	1.8	snowing	
Christiania	29.28	743.7	29.43	747.5	30.7	— 0.7	79	wsw.	4	2			0			0.193	4.9		
Gjæsvær	28.78	731.0	28.80	731.6	28.8	- - 1.8		ne.			4		10						
Lodingen	28.69	728.8	28.74	730.0	35.1	1.7	71	s.			6		9			0.315	8.0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					55.9	13.3	91	nnw.	3.8	1.7			6			0	0		Dr. J. A. Sampaio.
Campo Major	28.96	735.6	29.98	761.5	50.2	10.1	48	n.	37.4	16.7			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.28	769.0	30.37	771.3	66.2	19.0	46	sw.	1.3	0.6			1			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.76	755.8	30.12	765.1	51.3	10.7	44	n.	36.7	16.4			0			0.098	2.5		The Staff.
Ponta Delgada, Azores	30.55	776.0	30.62	777.8	58.3	14.6	74	calm	0	0			4			0.039	1.0		
Saint Paul de Loando	29.69	754.1	29.89	759.2	82.0	27.8	82	w.	1.8	0.8			2	s.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.70	754.3	31.01	787.6	—27.6	—33.1		sse.	4	2		0	1 s			0	0		Major K. Lasarew.
Archangel	28.82	731.9	28.84	732.4	33.6	0.9	90	ssw.	13	6			10			0.063	1.6	light rain	Capt. Sselliwerstow.
Astrakhan	30.65	778.4	30.56	776.3	28.6	— 1.9	92	ese.	11	5		10 op	0			0	0	heavy cl'ds.	Capt. Wisganow.
Barnaul	30.34	770.5	30.94	785.9	—23.4	—30.8	78	sw.	9	4			0			0	0		Meteorological Obs'y.
Dorpat	29.37	746.1	29.62	752.4	38.7	3.7	78	sw.	11	5			10 s			0	0		Observatory.
Ekaterinburg	29.08	738.7	30.10	764.5	18.1	— 7.7	75	wsw.	31	14			10			0	0		Meteorological Obs'y.
Kasan	29.87	758.7	30.16	766.0	24.1	— 4.4	93	ssw.	27	12			10			0	0		Observatory.
Kertch	30.19	766.8	30.21	767.3	30.2	— 1.0	92	calm	0	0			10 n			0	0		Lagorio & Sastyrez.
Kieff	29.44	747.8	30.11	764.9	27.5	— 2.5	100	s.	9	4			10 n			0	0	foggy	Observatory.
Lugan	30.14	765.5	30.35	770.9	34.3	1.3	82	sse.	9	4			10			0	0		Meteorological Obs'y.
Moscow	29.37	745.9	29.86	758.4	34.2	1.2	80	se.	13	6		0	7 ks			0	0		Meteorological Obs'y.
Nikolaiev	30.20	767.0	30.27	768.8	36.5	2.5	93	s.	9	4			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor.	29.96	760.9	30.04	763.1	— 6.9	—21.6	86	calm	0	0			8			0	0		Lieut. Iwanow.
Pekin, China	30.30	769.7	30.45	773.3	37.9	3.3	30	n.	4	2		0	6 ks			0	0		Physical Observatory.
St. Petersburg	29.38	746.2	29.39	746.6	39.6	4.2	68	wsw.	29	13		0	7 ks;n			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.92	734.6	30.64	778.3	21.2	— 6.0	95	calm	0	0			0			0	0		Teich, A. M.
Tiflis	29.02	737.0	30.51	774.9	38.3	3.5	69	se.	2	1			10			0	0		Physical Observatory.
Warsaw	29.42	747.3	29.85	758.3	39.6	4.2	80	se.	7	3		10c;cs	0						Astronomical Obs'y.
Wilna	29.41	747.0	29.84	757.9	39.2	4.0	82	s	4	2			10			0	0	heavy cl'ds.	Berg, Assistant
Yeniseisk	30.46	773.6	30.80	782.3	—21.6	—29.8	77	calm	0	0			1			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.61	752.1	44	6.7	92	ssw.			4		10			0.2	5.	overcast	J. Youngchause.
North Unst, Shetland Isl'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.64	752.8	29.74	755.3	54.7	12.6	70	e.	0.4	0.2			7			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.05	763.2	30.11	764.7	47.8	8.8	95	n.	2.2	1.0		2	7	s.		0.685	17.4	almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.04	686.8	30.12	765.1	37.4	3.0	81	n.	12.5	5.6		0	3			0.197	5.0	light clouds.	Domingo Martin.
Madrid, Royal Obs'y	27.67	702.8	29.94	760.4	40.4	8.0	46	n.	36.5	16.3		1	0			0	0	light clouds	The Staff.
Murcia, Met. Obs'y	29.63	752.5	29.86	756.9	56.5	13.6	62	nw.	2.7	1.2		2	4	wsw.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.27	743.5	30.20	767.0	45.7	7.6	79	n.	5.6	2.5		0	8			0.165	4.2	misty	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.17	766.5	30.25	768.2	59.6	15.3	87	se.	1.1	0.5		1 ck	4 k;s	ene.	ene.	0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.98	761.6	30.04	763.1	76.9	24.9	72	nne.	7.3	3.3		0	3 ck		e.	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	29.77	756.1	29.87	758.7	51.1	10.6	68	nw.	10.3	4.6		0	8		nw.	0.041	1.0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.02	762.4	30.11	764.7	75.9	24.4	95	se.	10.7	4.8		5 k	2 kn	se.	se.	0.087	2.2	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Ids	29.96	761.0	30.09	764.3	75.0	23.9	78	n.	1.1	0.5		5 cs	1 ks	s.		0	0	cloudy	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	28.93	734.8	28.97	735.8	13.3	—10.4	39	sw.			2		10			0	0		
Umea	29.04	737.6	29.09	738.9	23.0	— 5.0	90	calm			0		7			0	0		
Hernosand	29.17	740.8	29.22	742.1	31.5	— 0.3	68	wsw.			2		0			0	0		
Stockholm	29.30	744.1	29.47	748.6	35.6	2.0	75	sw.			4		0			0.138	3.5		
Wisby	29.50	749.4	29.56	750.9	37.4	3.0	90	sw.			4		5			0.240	6.1		
Sub-Series.																			
Upsala	29.32	744.6	29.40	746.8	34.7	1.5	76	sw.	11.9	5.3			0			0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.48	723.4	29.95	760.8	38.8	3.8	100	se.			1					0.409	10.4	raining	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.15	765.8	47.5	8.6	75	n.	9	4.0			10		n.	0	0		The Observatory.
Valona			30.09	764.2	56.5	13.6		nw.			1		2			0	0	slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.09	764.2	64.9	18.3	60	sw.			3		9 n		sw.	0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.50	774.7	30.59	777.0	4	—15.6	72	nw.	12	5.4		0	0			0.01	0.3	clear	
Alpena, Michigan	29.96	761.0	30.67	779.0	7	—13.9	76	w.	6	2.7			10 s			0.03	0.8	cloudy	
Atlanta, Georgia	29.17	740.9	30.40	772.1	44.0	6.7	51	e.	9	4.0			10 k		calm	0	0	cloudy	
Atlantic City, New Jersey	30.54	775.7	30.56	776.2	12.8	—10.7	61	nw.	16	7.2		0	0			0	0	clear	
Augusta, Georgia	30.27	768.8	30.47	773.9	36.0	2.2	69	nw.	1	0.4			10s;2k			0	0	cloudy	
Baltimore, Maryland	30.57	776.5	30.62	777.7	20	— 6.7	70	n.	6	2.7		0	hz.			0	0	clear	
Barnegat, New Jersey	30.52	775.2	30.54	775.7	12.0	—11.1	70	nw.	22	9.8		0	1 k		nw.	0	0	clear	
Bismarck, Dakota	28.17	715.5	30.17	766.3	19	— 7.2	70	e.	5	2.2		1 c	0	calm		inap.	inap.	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.07	687.6	30.00	762.0	31.5	— 0.3	90	e.	12	5.4			10 s		calm	0.13	3.3	cloudy	
Boston, Massachusetts	30.15	765.8	30.32	770.1	5.0	—15.0	67	w.	20	8.9		0	0			0	0	clear	
Brownsville, Texas	29.99	761.7	30.04	763.0	65	18.3	100	s.	8	3.6			fg.			0	0	dense fog	
Buffalo, New York	29.85	758.2	30.65	778.5	5	—15.0	87	ne.	4	1.8			10 n			0.04	1.0	light snow	
Burlington, Vermont	30.26	768.6	30.57	776.5	— 4.5	—20.3	93	n.	9	4.0			10 s		n.	0.03	0.8	cloudy	
Cairo, Illinois	29.73	755.1	30.15	765.8	35.8	2.1	86	e.	10	4.5			10 s		calm	0.17	4.3	threatening	
Campo, California	27.48	698.0	30.11	764.8	19.8	— 6.8	87	nw.	3	1.3		8 c	0	w.		0	0	cloudy	
Camp Thomas, Arizona	27.39	695.7	30.22	767.6	29	— 1.7	88	calm			0	5 cs	4 ks			0	0	cloudy	
Cape Henry, Virginia	30.51	774.9	30.53	775.4	31	— 0.6	88	n.	14	6.3		0	0			0	0	clear	
Cape May, New Jersey	30.53	775.4	30.56	776.2	18	— 7.8	53	nw.	33	14.8		0	0			0	0	clear	
Castroville, Texas	29.22	742.2	30.07	763.8	60	15.6	100	s.	4	1.8			fg.			0	0	dense fog	
Cedar Keys Florida	30.38	771.6	30.40	772.1	44	6.7	68	ne.	6	2.7		4 c	0			0	0	fair	
Champaign, Illinois	29.48	748.8	30.45	773.4	23.6	— 4.7	86	ne.	15	6.7			10 n		e.	0.32	8.1	heavy snow	
Charleston, S. Carolina	30.43	772.9	30.49	774.4	37	2.8	89	w.	3	1.3		3 c	0	w.		0	0	clear	
Charlotte, N. Carolina	29.58	751.3	30.46	773.7	29.0	— 1.7	77	ne.	4	1.8			10 s		ne.	0	0	cloudy	
Chattanooga, Tennessee	29.51	749.5	30.37	771.4	35.0	1.7	89	ne.	5	2.2			10 n		s.	0.03	0.8	light rain	
Cheyenne, Wyoming	23.97	608.8	30.22	767.6	29.8	— 1.2	54	nw.	20	8.9		0	0			0.05	1.3	clear	
Chicago, Illinois	29.72	754.9	30.46	773.7	24.8	— 4.0	74	e.	12	5.4			10 k		e.	0	0	cloudy	
Chincoteague, Virginia	30.53	775.4	30.55	776.0	19	— 7.2	70	n.	24	10.7		hz	3 s;ks		w.	0	0	clear	
Cincinnati, Ohio	29.77	756.1	30.46	773.7	28.2	— 2.1	87	e.	8	3.6			10 n			0.04	1.0	light snow	
Cleveland, Ohio	29.80	756.9	30.58	776.7	15	— 9.4	86	e.	6	2.7			10 s		e.	0.01	0.3	cloudy	
Coleman City, Texas	28.18	715.8			54	12.2	86	nw.	8	3.6			10 s		se.	0	0	cloudy	
Columbus, Ohio	29.62	752.3	30.52	775.2	20	— 6.7	84	e.	9	4.0			10 s			inap.	inap.	cloudy	
Concho, Texas	28.08	713.2	30.10	764.5	50	10.0	100	w.	6	2.7			10 s			0	0	cloudy	
Davenport, Iowa	29.67	753.6	30.38	771.6	27	— 2.8	77	e.	16	7.2			10 s		calm	inap.	inap.	cloudy	
Dayton, Washington T'y	28.06	712.7	29.86	758.4	41	5.0	89	ne.	2	0.9			10 s		sw.	0.09	2.3	cloudy	
Deadwood, Dakota	25.29	642.4	30.24	768.1	26	— 3.3	58	n.	4	1.8		0	0			0	0	clear	
Decatur, Texas																			
Delaware Breakwater, Del.	30.52	775.2	30.54	775.7	23	— 5.0	88	n.	36	16.1		0	0			0	0	clear	
Denison, Texas	29.14	740.1	29.98	761.5	61.6	16.4	87	sw.	12	5.4			10 s			0	0	cloudy	
Denver, Colorado	24.73	628.1	30.25	768.3	39.2	4.0	46	w.	8	3.6		0	0			0	0	clear	
Des Moines, Iowa	29.34	745.2	30.32	770.1	25	— 3.9	88	se.	10	4.5			10 n		se.	0.12	3.0	light snow	
Detroit, Michigan	29.86	758.4	30.62	777.7	16.5	— 8.6	83	e.	5	2.2			10 s		calm	0.03	0.8	cloudy	
Dodge City, Kansas	27.50	698.5	30.25	768.3	29	— 1.7	88	n.	10	4.5			10 s			0	0	cloudy	
Dubuque, Iowa	29.67	753.6	30.44	773.2	21.2	— 6.0	58	e.	7	3.1			10 s		calm	0	0	cloudy	
Duluth, Minnesota	29.74	755.4	30.50	774.7	16	— 8.9	83	se.	4	1.8		10 k	0			inap.	inap.	cloudy	
Eagle Pass, Texas	29.23	742.4	30.07	763.8	48.3	9.1	93	se.	2	0.9			10 s		calm	0	0	cloudy	
Eagle Rock, Idaho	25.28	642.1	30.24	768.1	5	—15.0	79	n.	2	0.9			fg.			0.35	8.9	dense fog	
Eastport, Maine	30.08	764.0	30.14	765.5	1	—17.2	72	nw.	21	9.4			10 s		nw.	0	0	cloudy	
El Paso, Texas	26.30	668.0	30.18	766.6	36.5	2.5	49	w.	4	1.8		0	3 s		w.	0	0	clear	
Erie, Pennsylvania	29.85	758.2	30.62	777.7	13	—10.6	80	e.	5	2.2			10 s			0.32	8.1	cloudy	
Escanaba, Michigan	29.91	759.7	30.63	778.0	11	—11.7	80	ne.	10	4.5			10 s			0.02	0.5	cloudy	
Florence, Arizona																			
Fort Apache, Arizona	25.14	638.5	30.26	768.6	22	— 5.6	64	e.	2	0.9			10 s		calm	0	0	cloudy	
Fort Assinnaboine, Montana	27.02	686.3	30.06	763.5	31	— 0.6	52	sw.	8	3.6		1 c	0	w.		0	0	clear	
Fort Bennett, Dakota	28.45	722.6	30.19	766.8	18	— 7.8	64	calm	0	0		4 cs	0			0	0	fair	
Fort Benton, Montana	27.04	686.8	30.02	762.5	34	1.1	65	w.	8	3.6		3 k	0	calm		0	0	clear	
Fort Buford, Dakota	27.94	709.7	30.14	765.5	15	— 9.4	67	e.	4	1.8		7 k	0	calm		0	0	fair	
Fort Custer, Montana	26.76	679.7	30.14	765.5	25	— 3.9	82	nw.	5	2.2		0	0			0	0	clear	
Fort Davis, Texas	25.23	640.8	30.21	767.3	41	5.0	76	ne.	4	1.8			10 s		calm	0	0	cloudy	
Fort Elliott, Texas	27.26	692.4	30.18	766.1	30	— 1.1	52	n.	20	8.9			10 s		n.	0	0	cloudy	
Fort Gibson, Indian T'y	29.38	746.2	29.98	761.5	50.5	10.3	86	w.	4	1.8			10 s		w.	inap.	inap	cloudy	
Fort Grant, Arizona	25.33	643.4	30.23	767.8	38	3.3	40	ne.	6	2.7		8 cs	0			0	0	cloudy	
Fort Griffin, Texas	28.75	730.2	30.13	765.3	4[illegible]	6.1	74	n.	10	4.5		7 cs	0	calm		0	0	fair	
Fort Keogh, Montana	27.38	695.4	30.07	763.5	25	— 3.9	64	sw.	3	1.3		10 cs	0	se.		0	0	cloudy	
Fort Macon, North Carolina	30.48	774.2	30.49	774.4	30	— 1.1	77	nw.	6	2.7		hz.	hz.	calm	calm	0	0	dense haze	
Fort McKavett, Texas	27.79	705.9	30.18	766.6	50.9	10.5	86	sw.	4	1.8			10 s			0	0	cloudy	
Fort Missoula, Montana	26.61	675.9	30.07	763.8	25	— 3.9	76	calm	0	0			10 ks			0	0	cloudy	
Fort St. Michaels, Alaska	29.31	744.5	29.35	745.5	7	—13.9	77	ne.	5	2.2			10 ks			0	0	cloudy	
Fort Shaw, Montana	26.22	666.0	30.08	764.0	36	2.2	42	w.	23	10.3		7 cs	0	nw.		0	0	fair	
Fort Sill, Indian Territory	28.78	731.0	30.11	764.8	39.3	4.1	85	n.	16	7.2			10 s		nw.	0	0	cloudy	
Fort Stevenson, Dakota	28.10	713.7	30.16	766.1	14	—10.0	83	w.	2	0.9		3 c	7 s	calm	calm	0.07	1.8	cloudy	
Fort Verde, Arizona					28.8	— 1.8	59	w.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.26	717.8	30.08	764.0	58	14.4	100	sw.	5	2.2			10 s			0	0	cloudy	
Galveston, Texas	30.05	763.3	30.09	764.3	64	17.8	94	s.	8	3.6		10 ck	0	s.		0	0	cloudy	
Grand Haven, Michigan	29.87	758.7	30.58	776.7	10.0	—12.2	89	e.	6	2.7		0	0			0.01	0.3	clear	
Hatteras, North Carolina	30.50	774.7	30.52	775.2	34	1.1	88	nw.	6	2.7		0	0			0	0	clear	
Helena, Montana	25.67	652.0	30.10	764.5	35	1.7	56	nw.	1	0.4			10 s		calm	0	0	cloudy	
Henrietta, Texas	29.05	737.9	30.12	765.0	42	5.6	100	ne.	20	8.9			fg.			0	0	dense fog	
Huron, Dakota	28.75	730.2	30.29	769.4	21.8	— 5.7	58	se.	16	7.2		6 cs	0			0	0	fair	
Indianapolis, Indiana	29.55	750.6	30.39	771.9	24	— 4.4	88	ne.	8	3.6			10 n		ne.	0.30	7.6	light snow	
Indianola, Texas	30.03	762.7	30.06	763.5	65.2	18.4	93	s.	5	2.2		4 k	4 ks	s.		inap.	inap.	cloudy	
Jacksboro, Texas	28.81	731.8	30.05	763.3	48	8.9	77	nw.	12	5.4		0	8 s		nw.	0	0	cloudy	
Jacksonville, Florida	30.39	771.9	30.44	773.2	37	2.8	72	e.	3	1.3		5 cs	0			0	0	fair	
Keokuk, Iowa	29.57	751.1	30.27	768.8	26.0	— 3.3	84	e.	16	7.2			10 n		e.	0.03	0.8	light snow	
Key West, Florida	30.25	768.3	30.28	769.1	61.3	16.3	84	ne.	12	5.4		0	3 k; s		ne;c	0	0	clear	
Kittyhawk, North Carolina	30.51	774.9	30.53	775.4	28	— 2.2	77	n.	11	4.9		hz.	0			0	0	dense haze	
Knoxville, Tennessee	29.30	744.2	30.38	771.6	33.3	0.7	73	ne.	6	2.7			10 s			0	0	cloudy	
La Crosse, Wisconsin	29.62	752.3	30.46	773.7	13.4	—10.3	61	n.	3	1.3		0	5 s			0	0	fair	
La Mesilla, New Mexico	26.16	664.5	30.19	766.8	34.3	1.3	70	calm	0	0		5 c	0			0	0	fair	
Leavenworth, Kansas	29.24	742.7	30.20	767.1	30	— 1.1	88	ne.	6	2.7			10 s			0.02	0.5	cloudy	
Lewiston, Idaho	29.05	737.9	29.92	760.0	35	1.7	82	ne.	1	0.4			10 s		calm	0.04	1.0	cloudy	
Little Rock, Arkansas	29.69	754.1	30.02	762.5	50	10.0	93	calm	0	0			10 n		sw.	0.16	4.1	light rain	
Los Angeles, California	29.75	755.6	30.15	765.8	47.3	8.5	77	w.	4	1.8		5 c	0	calm		0	0	fair	
Louisville, Kentucky	29.72	754.9	30.31	769.9	30.0	— 1.1	88	e.	19	8.5			10 n		calm	inap.	inap.	light snow	
Lynchburg, Virginia	29.79	756.7	30.51	774.9	29.5	— 1.4	67	calm	0	0			10 s			0	0	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.39	746.5	30.48	774.2	18	— 7.8	67	ne.	8	3.6			10 s		calm	0	0	cloudy	
Marquette, Michigan	29.83	757.7	30.61	777.5	10	—12.2	80	sw.	4	1.8		0	2 s		sw.	0.03	0.8	clear	
Mason, Texas	28.35	720.1	30.09	764.3	58.8	14.9	81	sw.	6	2.7			10 s		sw.	0	0	cloudy	
Memphis, Tennessee	29.74	755.4	30.10	764.5	55	12.8	86	se.	8	3.6			10 s			0.03	0.8	cloudy	
Milwaukee, Wisconsin	29.72	754.9	30.52	775.2	22	— 5.6	87	e.	13	5.8			10 s		e.	0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.26	768.6	30.30	769.6	51.0	10.6	93	se.	3	1.3		7 cs	0	sw.		0	0	fair	
Montgomery, Alabama	30.08	764.0	30.32	770.1	42	5.6	83	e.	4	1.8		0	4 s			0	0	fair	
Moorhead, Minnesota	29.24	742.7	30.35	770.9	8	—13.3	76	s.	16	7.2		0	0			0.03	0.8	clear	
Morgantown, W. Virginia	29.52	749.8	30.58	776.7	16.0	— 8.9	67	e.	12	5.4			10 s			inap.	inap.	cloudy	
Mt. Washington, N. H.	23.42	594.9	30.05	763.3	—14.0	—25.6	82	nw.	70	31.3		0	6 s		nw.	0.13	3.3	fair	
Nashville, Tennessee	29.65	753.1	30.21	767.3	37.4	3.0	88	e.	4	1.8			10 ks			0.12	3.0	threatening.	
New Haven, Connecticut	30.34	770.6	30.46	773.7	5	—15.0	76	n.	7	3.1		0	0			0	0	clear	
New London, Connecticut	30.39	771.9	30.44	773.2	7	—13.9	74	nw.	9	4.0		0	0			0	0	clear	
New Orleans, Louisiana	30.19	766.8	30.25	768.3	58.0	14.4	80	se.	13	5.8		4 cs	0	w.		0	0	fair	
Newport, Rhode Island	30.33	770.4	30.38	771.6	9.7	—12.4	67	w.	16	7.2		0	0			0	0	clear	
New River, N. Carolina					29	— 1.7	77	n.	1	0.4		1 c	2 s	w.		0	0	clear	
New Shoreham, Rhode I'd.	30.36	771.1	30.39	771.9	10.2	—12.1	80	n.	24	10.7		2 k	0	w.		0.04	1.0	clear	
New York, New York	30.36	771.1	30.55	776.0	10	—12.2	58	w.	12	5.4		0	0			0	0	clear	
Norfolk, Virginia	30.50	774.7	30.53	775.4	31	— 0.6	78	n.	5	2.2		0	2 s			0	0	clear	
North Platte, Nebraska	27.11	688.6	30.23	767.8	27	— 2.8	77	se.	6	2.7		6 c	4 s	nw.	nw.	0.39	9.9	cloudy	
Olympia, Washington T'y	29.54	750.3	29.58	751.3	43.0	6.1	96	n.	3	1.3			10 n		calm	0.40	10.2	light rain	
Omaha, Nebraska	29.02	737.1	30.29	769.4	24.8	— 4.0	89	ne.	6	2.7			10 n			0.20	5.1	light snow	
Ooglaamie, Pt. Barrow, Alas-	29.76	755.9	29.78	756.4	—27.8	—33.2	78	ene.	11	4.9		0	1 s			0	0	clear	
Oswego, New York	30.28	769.1	30.64	778.2	4.0	—15.6	47	se.	7	3.1			10 s			0.18	4.6	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.30	769.6	30.32	770.1	53.8	12.1	86	e.	5	2.2		4 cs	0	calm		0	0	fair	
Philadelphia, Pa.	30.55	776.0	30.61	777.5	12	—11.1	80	n.	18	8.0		0	0			0	0	clear	
Pike's Peak, Colorado	17.56	446.0	30.26	768.6	4	—15.6	66	nw.	21	9.4		0	0			0.05	1.3	clear	
Pioche, Nevada	24.12	612.6	30.32	770.1	31	— 0.6	65	sw.	1	0.4		10 cs	0	sw.		0	0	cloudy	
Pittsburg, Pennsylvania	29.75	755.6	30.60	777.2	14.5	— 9.7	73	ne.	4	1.8		0	0			0.02	0.5	clear	
Port Eads, Louisiana	30.26	768.6	30.28	769.1	58.2	14.2	87	se.	11	4.9		0	2 s;hz		c.;se	0	0	clear	
Port Huron, Michigan	29.92	760.0	30.65	778.5	8.2	—13.2	96	e.	6	2.7			10 s		calm	0.08	2.0	cloudy	
Portland, Maine	30.22	767.6	30.27	768.8	9	—12.8	55	n.	15	6.7		0	1 s		calm	0.01	0.3	clear	
Portland, Oregon	29.59	751.6	29.66	753.4	44.1	5.7	93	s.	1	0.4			10 n		s.	0.06	16.8	light rain	
Portsmouth, N. Carolina					32	0.0	60	n.	12	5.4		3 ck	0	n.		0	0	clear	
Prescott, Arizona	24.80	629.9	30.18	766.6	25	— 3.9	46	sw.	3	1.3		1 cs	0	calm		0	0	clear	
Punta Rassa, Florida	30.32	770.1	30.34	770.6	51	10.6	69	ne.	13	5.8		1 c	0	calm		0	0	clear	
Red Bluff, California	29.68	753.9	30.06	763.5	49.0	9.4	96	se.	14	6.3			10 n			0.18	4.6	light rain	
Rio Grande City, Texas	29.74	755.4	30.00	762.0	56	13.3	68	calm	0	0		3 c	fg	calm		0	0	fair	
Rochester, New York	29.90	759.4	30.61	777.5	7	—13.9	76	nw.	8	3.6			10 n		nw.	0.06	1.5	light snow	
Roseburg, Oregon	29.21	741.9	29.78	756.4	48.4	9.1	85	w.	4	1.8			10 n			0.54	13.7	light rain	
Sacramento, California	30.04	763.0	30.12	765.0	51.2	10.7	93	se.	10	4.5			10 s			0.15	3.8	cloudy	
St. Louis, Missouri	29.58	751.3	30.22	767.6	30.1	— 1.1	88	e.	6	2.7			10 n			0.15	3.8	sleeting	
St. Paul, Minnesota	29.47	748.5	30.42	772.7	13.5	—10.3	68	e.	6	2.7		2 c	0	nw.		0	0	clear	
St. Vincent, Minnesota	29.24	742.7	30.22	767.6	10	—12.2	100	s.	20	8.9		4 cs	0			0	0	fair	
Salt Lake City, Utah	25.73	653.5	30.30	769.6	33	0.6	43	calm	0	0		3 c	0	calm		0.39	9.9	clear	
San Antonio, Texas	29.30	744.2	30.04	763.0	61.6	16.4	87	s.	5	2.2			10 ks			0	0	cloudy	
San Diego, California	30.00	762.0	30.07	763.8	51.6	10.9	81	ne.	8	3.6		7 ck	2 s	n.		0	0	cloudy	
Sandusky, Ohio	29.84	757.9	30.56	776.2	19.9	— 6.7	84	se.	12	5.4			10 s			0.03	0.8	cloudy	
Sandy Hook, New Jersey	30.51	774.9	30.55	776.0	11.0	—11.7	80	n.	27	12.1		0	0			0	0	clear	
San Francisco, California	30.04	763.0	30.10	764.5	52	11.1	90	se.	14	6.3			10 n		s.	0.16	4.1	light rain	
Santa Fé, New Mexico	23.18	588.8	30.19	766.8	30.5	— 0.8	76	calm	0	0		0	5 s		calm	0	0	fair	
Savannah, Georgia	30.37	771.4	30.47	773.9	35	1.7	79	se.	2	0.9		0	0			0	0	clear	
Shreveport, Louisiana	29.84	757.9	30.10	764.5	64	17.8	90	s.	6	2.7			10 s		s.	0	0	cloudy	
Silver City, New Mexico	24.29	617.0	30.15	765.8	34	1.1	74	n.	2	0.9		0	0			0	0	clear	
Sitka, Alaska	29.42	747.3	29.49	749.0	37.1	2.8	75	se.	8	3.6		6 k	0	se.		0	0	fair	
Smithville, North Carolina	30.46	773.7	30.50	774.7	30	— 1.1	68	n.	5	2.2		0	0			0	0	clear	
Spokane Falls, Wash. Ter.	27.82	706.6	29.96	761.0	31.5	— 0.3	94	calm	0	0			10 n		calm	0.18	4.6	light snow	
Springfield, Illinois	29.57	751.1	30.30	769.6	27	— 2.8	80	e.	15	6.7			10 n		w.	0.20	5.1	light snow	
Springfield, Massachusetts	30.32	770.1	30.46	773.7	6.8	—14.0	52	nw.	4	1.8		0	0			0.03	0.8	clear	
Springfield, Mo.	28.49	723.6	30.07	763.8	39	3.9	78	se.	8	3.6			10 s		s.	0.01	0.3	cloudy	
Stockton, Texas	27.00	685.8	30.14	765.5	49.0	9.4	58	calm	0	0			10 s		nw.	0	0	cloudy	
Thatcher's Island, Mass.	30.30	769.6	30.36	771.1	6.2	—14.3	76	nw.	31	13.9		3 k	0	nw.		0	0	clear	
Toledo, Ohio	29.80	756.9	30.54	775.7	18	— 7.8	83	ne.	12	5.4			9 s		ne.	inap.	inap.	cloudy	
Tucson, Arizona	27.60	701.0	30.10	764.5	43	6.1	60	s.	4	1.8		8 cs	0			0	0	cloudy	
Umatilla, Oregon	29.47	748.5	29.86	758.4	39.8	4.3	89	e.	5	2.2			10 n			0.04	1.0	light rain	
Uvalde, Texas	29.05	737.9	30.05	763.3	57	13.9	100	e.	3	1.3			10 s		calm	0	0	cloudy	
Vicksburg, Mississippi	29.92	760.0	30.19	766.8	60	15.6	81	s.	8	3.6			10 s		s.	0	0	threatening.	
Visalia, California	29.77	756.1	30.16	766.1	47	8.3	72	se.	6	2.7			10 n			inap.	inap.	light rain	
Washington, D. C.	30.50	774.7	30.62	777.7	20.0	— 6.7	84	n.	8	3.6		0	0			c	0	clear	
West Los Animas, Colorado	26.12	663.4	30.26	768.6	15	— 9.4	91	nw.	4	1.8		0	0			0	0	clear	
Wickenburg, Arizona					34	1.1	77	calm			0	0	1 s			0	0	clear	
Williamsport, Pa.					10	—12.2	80	nw.	6	2.7		0	0			0.01	0.3	clear	
Wilmington, N. Carolina	30.44	773.2	30.50	774.7	33	0.6	50	nw.	2	0.9		hz.	3 k;sk	calm	calm	0	0	fair	
Winnemucca, Nevada	25.56	649.2	30.10	764.5	35	1.7	82	ne.	6	2.7			10 s		calm	0	0	cloudy	
Wood's Holl, Mass.	30.28	769.1	30.32	770.1	10	—12.2	80	nw.	32	14.3		1 k	0	nw.		0	0	clear	
Yankton, Dakota	28.90	734.0	30.32	770.1	25	— 3.9	73	e.	11	4.9			10 ks			0	0	cloudy	
Yuma, Arizona	29.88	758.9	30.03	762.7	46.7	8.2	67	e.	3	1.3		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1			51.5	10.8	73	w.	3	1.3		0	3 s		s.	0.01	0.3	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.08	764.0	30.09	764.3	77	25.0	80	e.				5 k	5 ks	e.	e.	0.70	17.8	fair	J. A. Racker.
Buenaventura, U. S. C.	29.97	761.2	29.99	761.7	77	25.0	90	se.	8	3.6			10 ks		s.	0.01	0.3	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.02	762.5	30.04	763.0	75	23.9	90	e.				3 c	2 k		e.	0	0		B. Bigar.
Havana, Cuba, W. I.	30.21	767.3	30.26	768.6	64	17.8	93	calm	0	0		0	2 ks		se.	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	76.2	24.6	81	n.	1	0.4			10 s; n		e.	0.40	10.2	thnd'r str'm	Robert Johnstone
Navassa, W. I.	29.92	760.0	30.00	762.0	77	25.0	65	ne.	25	11.2		8 k	10 s	e.	ne.	0.25	6.3	cloudy	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	78	25.6	91	e.			2		10 n	e.	e.	3.740	95.0	rainy	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mba	29.44	747.8	30.00	762.0	78	25.6	95	calm			0		10 ks		calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua					72.5	22.5	88	ne.			4	3 ck	2 ks	se.	ne.	0.02	0.5		Earl Flint.
Santiago de Cuba, W. I.	30.15	765.8	30.18	766.6	73	22.8	76	n.	7.2	3.2		1 c	2 s		n.	0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.92	760.0	29.98	761.5	— 4.0	—20.0	82	s.	18	8.0		1 c	0	w.		0	0	fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore, India	29.91	759.7	79.2	26.2	85	calm			0		9							showery	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.03	762.7	62	16.7	82	se.			1		6	sse.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 11° 38′, E. 109° 53′	29.94	760.5	77	25.0	95	ene.			3–4		9					4	ne.	showery	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.96	761.0	70.5	21.4	69	sw.			1–2		1	sw.						blue sky	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.88	758.9	66	18.9	?	sse.			1		10					2	sw.	threatening.	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.22	767.6	48	8.9	92	nne.			1		10	nne.						showery	Capt. F. W. Egerton.
H. M. S. Coquette																			Lieut. J. L. Burr
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.22	767.6	49.5	9.7	86	n.			1		10							overcast	Capt. S. Long.
H. M. S. Diamond, S. 6° 10′, W. 27° 15′	29.99	761.7	80	26.7	82	ese.			3		4	wsw.				2	ese.	d. clouds	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	30.20	767.1	62	16.7	61	wnw.			2–3		3	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 52° 11′, W. 58° 52′	29.75	755.6	42	5.6	83	nw.			1–2		8					2	nnw.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.85	758.2	83	28.3		nne.			3		6					1	wsw.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. G. Robinson.
H. M. S. Espiegle																			Capt. C. A. P. Bridge.
H. M. S. Euryalus, N. 34° 53′, E. 19° 45′	30.09	764.3	62	16.7	71	wsw.			1		2	wsw.						d. clouds	Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′ E. 43° 12′	29.87	758.7	78.5	25.8	73	s.			6		1					3	s.	blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.19	766.8	52	11.1	86	calm			0		9	sw.						misty	Capt. R. F. Hoskyn.
H. M. S. Garnet, S. 36° 00′, W. 79° 00′	30.14	765.5	59	15.0	81	s.			5		10					2	ssw.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Montevideo, Uruguay	29.90	759.4	63	17.2	67	s.			8		4					3	se.	squally	Capt. L. Jones.
H. M. S. Iris, Alexandria, Egypt	30.12	765.0	65	18.3	58	wnw.			2–6		5					1	wnw.	d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.17	766.3	61	16.1	77	se.			1		5	e.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 19′, E. 109° 58′	30.11	764.8	66.3	19.1	96	e.			2		0					1	ese.	misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 16° 23′, E. 59° 47′	30.02	762.5	79	26.1	95	ene.			4		4	ne.				4	ne.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, St. John, Antigua, W. I.	30.08	764.0	79	26.1	82	ne.			2		7	ne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 32° 08′, E. 29° 25′	29.98	761.5	74	23.3	76	ene.			3		5	se.				2	se.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 39° 26′, W. 28° 36′	29.91	759.7	62	16.7	97	wsw.			1		3					3	wsw.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix, N. 19° 57′, W. 75° 15′	30.18	766.6	72	22.2	90	nw.			1		1					'sm'h		blue sky	Capt. H. H. Grenfell.
H. M. S. Ready																			Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′. W. 123° 27′	29.62	752.3	44	6.7	84	nne.			2		6							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, Ind	29.94	760.5	80.5	26.9	87	ne.			1		6	ne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull, S. 9° 00′, E. 40° 28′	29.27	743.4	84	28.9	91	n.			4		2	ne.				3	ne.	misty	Comm. M. Byles.
H. M. S. Serapis, N. 36° 30′, W. 2° 52′	29.78	756.4	56	13.3	80	ene.			2		10	ene.				1	ene.	d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 18° 11′, W. 76° 27′	30.12	765.0	78	25.6	86	ne.			4–5		10							showery	Capt. C. G. Fane.
H. M. S. Triumph, S. 8° 44′, W. 79° 48′	29.96	761.0	70	21.1	95	se.			1		8	se.				3	se.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.05	763.3	78	25.6		e.			2		8							thnd'r storm	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.22	767.6	69.5	20.8		nw.			2		0							misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	30.06	763.5	78.4	25.8	74	ne.			4		2					2	ne.	blue sky	C. da Silva Costa.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.29	769.4	58	14.4	82	ese.	5	2.2	.....	.....	8	.....	se.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	30.29	769.4	4	—15.6	.....	nnw.	18	8.0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Naval Hospital Yokohama, Japan	30.09	764.3	43	6.1	71	calm	.....	.....	0	.....	5	.....	w.	0	0	.....	.....	fair	
Adams, Mollendo, Peru	29.73	755.1	72	22.2	95	e.	.....	.....	0–1	.....	10	.....	.....	.....	.....	long	s.	cloudy	
Alaska, Callao, Peru	29.89	759.2	65	18.3	94	se.	.....	.....	1	.....	10	.....	.....	0	0	sm'h	.....	cloudy	
Alert, Hong Kong, China*	30.03	762.7	63	17.2	89	ene.	.....	.....	2	.....	8	.....	e.	0	0	sm'h	.....	hazy	
Alliance, Boston, Mass	30.31	769.9	10	—12.2	?	nnw.	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	clear	
Ashuelot, Tientsin, China	30.40	772.1	33	0.6	100	nne.	.....	.....	1	.....	8	.....	calm	.....	.....	.....	.....	cloudy	
Brooklyn, N. 5° 44′, W. 31° 23′	29.99	761.7	79	26.1	95	e.	22	9.8	.....	.....	10	.....	e.	0	0	mod	e.	cloudy	
Colorado, New York, N. Y	30.52	775.2	10	—12.2	100	nw.	24	10.7	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Essex, Norfolk, Va	30.52	775.2	32	0.0	90	n.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear	
Franklin, Norfolk, Va	30.47	773.9	30	— 1.1	.....	n.	5	2.2	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Galena, Sierra Leone, Africa	29.89	759.2	82	27.8	91	nnw.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Independence, N. Yard, Mare I'd, Cal	29.98	761.5	50	10.0	93	calm	0	0	.....	.....	10	.....	s.	0.05	1.3	.....	.....	overcast	
Kearsarge, New Orleans, La	30.25	768.3	57	13.9	87	se.	.....	.....	2	.....	2	.....	calm	.....	.....	.....	.....	fair	
Lackawanna, S. 32° 10′, W. 71° 58′	30.00	762.0	63	17.2	100	n.	.....	.....	2	.....	8	.....	.....	.....	.....	long	ssw.	cloudy	
Lancaster, Villafranca, France	29.80	756.9	55	12.8	80	ne.	.....	.....	0–1	.....	10	.....	ne.	.....	.....	.....	.....	light rain	
Michigan, Erie, Pa	30.57	776.5	12	—11.1	.....	ese.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I	30.37	771.4	9	—12.8	.....	nw.	13	5.8	.....	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Monocacy, Yokohama, Japan	30.28	769.1	45	7.2	76	calm	.....	.....	0	.....	5	.....	calm	.....	.....	.....	.....	fair	
Nipsic, N. 38° 10′, E. 15° 37′	30.04	763.0	60	15.6	76	sw.	.....	.....	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.07	763.8	65	18.3	100	sse.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	misty	
Palos, Hong Kong, China	30.18	766.6	62	16.7	88	ese.	.....	.....	2	.....	8	.....	n;e.	.....	.....	.....	.....	raining	
Passaic, Washington, D. C	30.58	776.7	21	— 6.1	.....	nw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear	
Pensacola, Callao, Peru	29.99	761.7	65	18.3	94	se.	1	0.4	.....	.....	10	.....	.....	.....	.....	.....	.....	overcast	
Powhatan, Boston, Mass	30.30	769.6	6	—14.4	90	sw.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	squally	
Quinnebaug, Tunis, Tunis, Africa	29.86	758.4	53	11.7	86	sse.	.....	.....	3	.....	10	.....	calm	.....	.....	sm'h	.....	rainy	
Ranger, N. 18° 33′, W. 103° 44′*	29.93	760.2	74	23.3	76	ne.	.....	.....	1	.....	10	.....	se.	0	0	sm'h	.....	cloudy	
Richmond, Apia, Samoa Islands*	29.73	755.1	77	25.0	95	s.	.....	.....	1	.....	0	.....	.....	0.10	2.5	.....	.....	clear	
Shenandoah, Montevideo, Uruguay*	30.10	764.5	64	17.8	58	ssw.	.....	.....	5	.....	5	.....	ssw.	.....	.....	r'gh	sw.	fair	
St. Louis, League Island, Pa	30.80	782.3	13	—10.6	61	n.	11	4.9	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Swatara, Yokohama, Japan†	30.12	765.0	47	8.3	77	nw.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	fair	
Tennessee, New York, N. Y	30.47	773.9	12	—11.1	.....	nw.	11	4.9	.....	.....	0	.....	.....	0	0	.....	.....	fair	
Vandalia, Plymouth Montserrat, W. I.	30.10	764.5	78	25.6	78	ne.	.....	.....	2	.....	2	.....	ne.	.....	.....	.....	.....	clear	
Wabash, Boston, Mass	30.31	769.9	5	—15.0	?	nw.	20	8.9	.....	.....	2	.....	nw.	0	0	.....	.....	clear	
Wachusetts, Sitka, Alaska	29.50	749.3	36	2.2	90	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	overcast	
Wyoming, Port Royal, S. C	30.44	773.2	39	3.9	82	ne.	3	1.3	.....	.....	5	.....	calm	0	0	.....	.....	fair	
Yantic, Aux Cayes, Hayti, W.I*	30.05	763.3	75	23.9	86	n.	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
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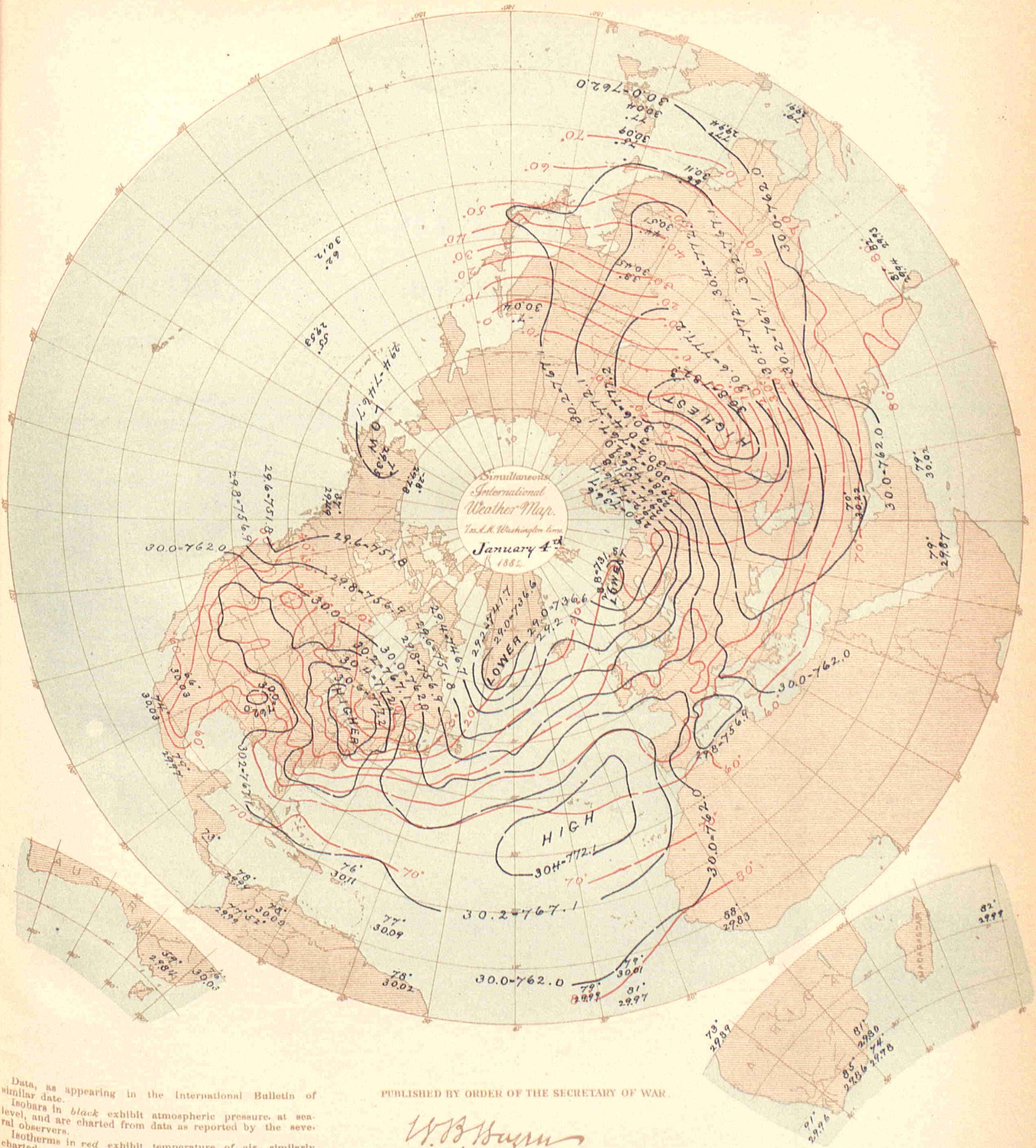
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon.
S. S. Nova Scotian, Capt. W. Richardson, N. 40° 56′, W. 66° 51′	30.01	762.2	29	—1.7		w.	5		10		wnw.			mod.	w.	cloudy	
S. S. Polynesian, Capt. Robt. Brown, N. 49° 32′, W. 44° 02′*	29.57	751.1	34	1.1		wsw.	6		3		wsw.	6 h'r	6 h'r	r'gh	wnw.	fair	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, Queenstown, Ireland*	29.95	760.7	43	6.1		w.	1		10		w.					cloudy	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore																	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, Liverpool, England	29.76	755.9	52	11.1	93	w.	6		2		w.					clear	Caulfman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	29.81	757.2	50	10.0	86	n.	3		2		n.	0	0			clear	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, N. 45° 23′ W. 51° 08′*†	30.01	762.2	37	2.8	100	w.	7		4		s.			long high	wsw.	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge																	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown																	J. Brown.
Utopia, Capt. A. McRitchie																	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause																	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 22° 10′, W. 74° 25′*	30.29	769.4	73	22.8		ene.	5		3		e.	0	0	sm'h	nw	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin																	W. H. Bennett.
S. S. Arden, Capt. [illegible] de Echevarrieta N. 18° 26′, W. 75° 16′						ne.	3					0	0	mod.	ne.		R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse, N. 18° —′, W. 73° —′	29.78	756.4				e.	3		2?		ne.	sh'rs	sh'rs	mod.	e.	cloudy?	Fisher & Welden.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S*†	30.10	764.5	60	15.6	70	n.						0	0			clear	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
Baroda, Capt. C. J. Russell																	
British Merchant, Capt. E. J. Molony, S. 16° 06′, E. 92° 00′	29.98	761.5	79.5	26.4	86	e.	4-5		8							showery	
Bk. Caldew, Capt. W. Peterson																	
S. S. Cipero, Capt. W. N. Lailey																	
S. City of Agra, Capt. Thos. Young, S. 28° 13′, W. 17° 42′	30.16	766.1	72.5	22.5		wnw.	3		0							blue sky	
Bk. Glaramara, Capt. R. Morton, N. 1° 52′, W. 27° 47′	29.97	761.2	81	27.2	74	ese.	2		3							d. clouds	
Glencairn, Capt. R. S. Tannock, S. 28° 16′, W. 26° 22′	30.13	765.3	80	26.7	82	nnw.	3-4		6							d. clouds	
S. S. Gordon Castle, Capt. W. Waring																	
Hermine, Capt. S. G. Jones																	
S. S. Humboldt, Capt. A. W. Jeffery, N. 7° 30′, W. 28° 15′	30.01	762.2	78.5	25.8	82	ne.	4		8							d. clouds	
S. Lochee, Capt. J. Raeburn, R. N. R., N. 7° 55′, E. 87° 23′	29.93	760.2	82	27.8	83	e.	2		3							d. clouds	
May Hulse, Capt. H. Youlden, R. N. R., N. 7° 15′, W. 25° 45′	29.96	761.0	79.5	26.4	82	ne.	4		7							d. clouds	
Bk. Mertola, Capt. E. W. Turner, N. 37° 06′, W. 7° 10′	29.96	761.0	50.9	10.5	93	nnw.	8		3							d. clouds	
Minho, Capt. J. Lawson																	
Naiad, Capt. J. Smith, S. 28° 55′, W. 22° 21′	30.14	765.5	71.8	22.1	95	nw.	4		4							d. clouds	
Pole Star, Capt. F. Norman, S. 34° 54′, W. 51° 24′	29.65	753.1	67.9	19.9	70	sw.	10		3							squally	
Queen of Cambria, Capt. M. Parry, S. 39° 15′, W. 33° 56′	29.80	756.9	61	16.1	77	nnw.	6		5							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson, N. 35° 00′, W. 69° 35′	30.21	767.3	53.5	11.9	60	wnw.	5		8							showery	
S. Superb, Capt. Berridge, S. 5° 18′, W. 23° 00′	30.00	762.0	78.7	25.9	90	ese.	3		10							d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham N. 47° 52′, W. 41° 12′*†	29.95	760.7	44	6.7		nw.	6		5		nw.	0	0	mod.	w.	fair	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO.																	
J. Birmingham, Agent, San Francisco.																	
S. S. Newbern, Capt. E. Y. Rogers,																	
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman																	Crowell & Henry.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains, Off Sandy Hook, N. J.*	30.58	776.7	28	—2.2		n.	5		8		nne.	0	0	sm'h		cloudy	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul,																	
S. S. St. Laurent, Capt. A. Servan																	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, N. Y.																	
S. S. Gellert, Capt. Kuhlewein																	P. Froehlich, 3d Off.
S. S. Silesia, Capt. A. Albers																	
S. S. Wieland, Capt. C. Hebich																	C. Jorgensen.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch																	
LAMPERT & HOLT S. S. CO.																	Patterson & Thompson.
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, N. 48° 00′, W. 10° —′*†	30.30	769.6	48	8.9		w.	3		8		nw.	0	0	long	wnw.	overcast	J. Carroll.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley																	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker																	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 16° 14′, W. 76° 11′†	30.02	762.5	80	26.7		nne.	4							con.	nne.	clear	
S. S. Bothnia, Capt. MacMackan																	
S. S. City of Alexandria, Capt. L. F. Timmerman																	E. F. Stembridge, 3d offi
S. S. City of Washington, Capt. J. W Reynolds																	
Havana, Cuba, W. I*†	30.30	769 6	78	25.6		ne.	3								w.	clear	
S. S. Maas, Capt. T. N. Bonjer																	
S. S. New York, Capt. R. B. Quick N. 25° 45′, W. 79° 55′*†	30.40	772.1	69	20.6		ene.	3								ne.		
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt E. M. Chevalier, N. 44° 40′, W. 49° 15′*	29.95	760.7	35	1.7		calm	0								sw.	clear	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander																	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer, N. 41° 18′, W. 57° 36′	29.96	761.0	39	3.9	91	nne.	3		10		ne.	5 h'r	5 h'r	mod	se.	light rain	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	29.61	752.1	41.0	5.0		wsw.	4		8		wsw.					showery	
S. S. Mosel, Capt. J. Hesse.																	
S. S. Neckar, Capt. R. Bussius																	J. Hesse.
S. S. Nurnburg, Capt. A, Jaeger																	Steinbrunn & Tanke.
S. S. Oder, Capt. C. Undeutsch																	
S. S. Ohio, Capt. G. Meyer																	Moutz & Kohlenbeck.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	E. Hattensauer.
S. S. Belgic, Capt. H. Davison, N. 40° 11′, W. 161° 44′†	29.53	750.0	55	12.8	80	wnw.	4		2		wsw.	0	0	high	w.	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Hong Kong, China*†	30.35	770.9	63	17.2	83	ne.	1		5?		e.					clear?	
S. S. Oceanic, Capt. J. Metcalf, N. 30° 27′. E. 173° 34′*	30.12	765.0	62	16.7	57	wnw.	4		3?		w.			5	wnw.	cloudy?	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Ga*†	30.04	763.0				e.	1		8?		nw.					clear?	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Savannah. Ga.†	30.02	762.5	59	15.0	59	ne.	1		0			0	0			clear	H. K. Hallett.
OREGON IMROVEMENT CO. *John L Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes																	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d officer
S. S. Columbia, Capt. Fred Bolles																	W. Irvine.
S. S. Oregon, Capt. E. Poleman, San Francisco, Calif	30.05	763.3	51	10.6	93	sse.	4		10		sw.					light rain	G. Roese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Calf	30.05	763.3	52	11.1	86	s.	3		10		s.					rain and fog	
S. S. Geo. W. Elder, Capt. H. G. Morse, Puget Sound†	29.73	755.1	41	5.0		se.	2		7		sw.	0	0	sm'h		cloudy	
S. S. Idaho, Capt. E. Alexander, San Francisco, Calf	30.08	764.0	52	11.1	93	se.	3		10		se.					raining	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 34° 27′, W. 120° 25′†	30.11	764.8	57	13.9	81	nw.	3		0					sm'h	wnw.	clear	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace. San Francisco, Calf	30.02	762.5	52	11.1	93	se.	3		10			to h'r	light			light rain	T. Wallace.
S. S. State of California, Capt. G. Debney, San Francisco, Calf	30.06	763.5	51	10.6	93	ese.	3		10		s.	0	0			cloudy	
S. S. Victoria. H. M. Hayward, San Francisco, Calf	29.74	755.5	47	8.3	100	n.	2		8					sm'h		light rain	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulley, Supt. New York.*																	
S. S. Australia, Capt. ———, S. 32° 39′, E. 177° 57′	29.75	755.6	66	18.9	100	ene.	5		10		ene.			long	ne.	threatening.	A. Bannerman, 2d Off
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	30.03	762.7	76	24.4	81	s.	1		0			0	0			clear	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, Hong Kong, China†	30.39	771.0	64	17.8	78	ne.	1		2		ne.	0	0			fine	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn,																	E. Le Sack.
S. S. City of Tokio, Com. J. Maury																	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 15° 34′, W. 96° 46′†	29.97	761.2	79	26.1	82	ne.	3		5		e.	0	0	small	con.	fair	
S. S. Grenada, Capt M. Connolly																	
S. S. South Carolina, Capt. W J. Russell, Panama, Panama*†	29.89	759.2	78	25.6	86	nw.	1		10			0	0	sm'h		fine	
S. S. Zelandia, Capt. H. Webber, S. 13° 51′ W. 170° 42′	29.83	757.7	82	27.8	91	calm	0		0					mod.	sw.	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke, N. 31° 35′, W. 67° 30′						wnw.	3		5			0	0	long	nw.	fair	G. S. Locke
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, N. 44° 59′, W. 51° 21′*	30.04	763.0	33	0.6	69	wsw.	2		5		wnw.	0	0	light	ssw.	fair	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A Beynon,																	M. Eymond.
S. S. Waesland, Capt. H. Nickels. Antwerp, Belgium*	29.71	754.6	48	8.9		ssw.	4		10		s.	0	0			cloudy	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W A. Scholten, Capt. G. J. Vis,																	
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub, N. 42° 43′, W. 54° 22′.†	30.09	764.3	40.1	4.5		nne.	2		3		wnw.	0	0	mod	wnw.	clear	J. T. Ulberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters.																	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry,																	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 47° 59′ W. 40° 47′*†	29.60	751.8	48	8.9	85	nw.	6		8		nw.	3 h'r	h'vy	high	wsw.	cloudy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. N. 42° 43′, W. 45° 37′*†	30.16	766.1	52	11.1	93	wnw.	4		5		nw.	shr's	shr's	mod.	wsw.	d. clouds	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, N. 31° 40′, W. 65° 55′†	30.45	773.4	63	17.2	72	nnw.	3	0	8 k		nw.	0	0	cross	w. nw.	cloudy	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona N. 34° 51′, W. 36° 30′	30.58	776.7	64.9	18.3		s.	1		10 s					sm'h		cloudy	
Bk. Alpha, Capt. Ole Grönn, Pozzuoli, Italy*†	30.00	762.0	58	14.4		s.	6		8		sw.	0	0			cloudy	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis																	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin,																	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	29.90	759.4				nw.	3		5		nw.	3 h'r	3 h'r			fair	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 23° 37′ W. 44° 11′†	30.30	769.6				e.	4		5		ese.	light	light	r'gh	e.		
S. Enoch Train, Capt. H. D. Chapman. N. 42° 56′, W. 37° 59′*	30.00	762.0				ssw.	6		7		ssw.	shr's	shr's	short	ssw.	squally	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 37° 39′, W. 63° 00′*	30.08	764.0				wnw.	6		8		wsw.	5 h'r	light	mod.	wsw.	cloudy	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.57	776.5	26	—3.3		n.	3		2		n.			sm'h		fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 31° 27′, W. 46° 05′†	29.98	761.5	69	20.6		sw.	6		2		sw.	½ hr	½ hr	h'vy	sw.	clear	G. D. Morrison.
Bk. Freya, Capt. Blaouw, Limerick, Ireland			42	5.6		ssw.	4		10		ssw.	5 hr	light			raining	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.05	737.9				n.	1		7		n.	3 h'r	3 h'r				
Bk. Geo. Booth, Capt D. Williams,																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 43° 05′, W. 34° 17′*	30.32	770.0	61.0	16.1	94	sw.	8		6		sw.	3 h'r	3h'r	r'gh	wsw.	stormy	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 1° 25′, W. 32° 42′*	29.82	757.4				se.	1		8		e. ese.	sh's	sh's	sm'h		threatening.	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 38° 08′, W. 34° 27′*†	30.70	779.8				ssw.	3				ssw.	0	0	mod.	ssw.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	29.97	761.2	51	10.6	86	sw.	3		10		sw.					rainy	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly,																	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen. N. 45° 54′, W. 17° 27′†	30.37	771.3	56	13.3		w.	4		10		w.	0	0	hv'y	wnw.	cloudy	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 35° 54′, W. 44° 12′*	30.30	769.6	68.0	20.0	95	sse.	6		6		s.			mod.	s.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.09	764.3	56	13.3	68	nne.	8		0			½h'r	½h'r			clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, N. 1° 03′, W. 30° 00′*†	30.10	764.5				se.	5		6		se.			mod.	se.		I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton,																	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure, at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 5, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.12	765.1	63.7	17.6	94	w.			2		4			0.394	10.0	cloudy	Moiroud.
Algiers			30.10	764.6	56.1	13.4	91	n.			7		10			0.406	10.3	covered	Nicolas.
La Calle			29.98	761.5	63.7	17.6	80	w.			3		4			0.039	1.0	cloudy	Fonfréde.
Tunis			29.97	761.2															Jacques.
Sfax																			Gau.
Saida			30.10	764.6	46.0	7.8	92	n.			1		4			0.228	5.8	cloudy	Perès.
Tebessa			30.08	764.1	50.7	10.4	68	sse.			1		7			0.110	2.8	very cloudy	Derché.
Geriville					41.7	5.4	82	nne.			1		10			0	0	covered	Lonchamp.
Laghouat			30.11	764.7	50.0	10.0	62	n.			4		7			0.236	6.0	very cloudy	Herbin.
Biskra			30.10	764.4	57.6	14.2	69	se.			1		4			0	0	cloudy	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.04	763.0	30.13	765.3	56.7	13.7	55	sw.	19	8.5			3			0.01	0.3	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.56	750.8	30.13	765.4	37.4	3.0	97	ne.			1		10			0.157	4.0	raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.35	745.6	30.15	765.9	34.3	1.3	96	wsw.	0.7	0.3			10			0.165	4.2		Dr. Wierzbiski.
Eperies	29.21	741.9	30.13	765.3	33.1	0.6	89	calm			0		10			inap.	inap.		Julius Mikolik.
Gratz	28.87	733.2	30.17	766.4	35.6	2.0	88	s.			1		10			0	0		Andreas Rospini.
Hermannstadt	28.69	728.7	30.22	767.6	23.4	— 4.8	100	w.			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.72	729.6	30.12	765.0	36.3	2.4	93	sw.			1		10			0.130	3.3	dense fog	The Staff.
Lemberg	29.08	738.5	30.11	764.7	34.3	1.3	89	s.			1		10			0.055	1.4		Dr. T. Stanecki.
Pola	29.88	758.9	29.99	761.8	50.4	10.2	79	e.			2		10			0.472	12.0		I. R. Hydrographic Office
Szathmar	29.66	753.4	30.12	765.1	34.2	1.2	78	e.			1		10			0.012	0.3		Joseph Midlinszky, S. J.
Szegedin	29.84	757.9	30.13	765.3	37.6	3.1	88	calm			0		10			0.031	0.8	raining	Karl Stancel.
Trieste	29.93	760.3	30.04	762.9	52.2	11.2	59	e.			2		10			0	0		Rieder.
Vienna	29.42	747.3	30.17	766.3	36.1	2.3	93	calm			0		10			0.055	1.4		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cue.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	28.92	734.6	29.02	737.1	46.0	7.8	85	s.	7	3.1			4			0.010	0.3	misty	W. Boswell.
Armagh, Observatory	29.23	742.4	29.47	748.5	49.0	9.4	81	w.	23	10.3			8					squally	S. Call.
Bidston, Liverpool Obs'y			29.48	748.8	50.8	10.4	88	wsw.	30	13.4			10					overcast	John Hartnup.
Bolton, Sharples	28.94	735.1	29.47	748.5	49.3	9.6	92	wsw.	24	10.7			10					raining	Thomas Mackereth.
Bradford, Yorkshire	29.03	737.3	29.43	747.5	49.9	9.9	94	w.			4		10			0.44	11.2	raining	J. McLandsborough, F.R.A.S.
Bridgetown, Barbadoes	30.00	762.2	30.03	762.7	80.0	26.7	82	ne.			1		3					d. clouds	Pvt. J. Surgenor.
Cardington			29.57	751.1	51.6	10.9	90	sw.			4.0		10					overcast	John McLaren.
Chatham, School M. E.	29.59	751.6	29.72	754.9	49.3	9.6	98	sw.			3		10			blank	blank	gloomy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.61	752.1	29.84	757.9	51.2	10.7	95	sw.					10					foggy	The Staff.
Fort Napier, Natal	27.54	699.5	29.76	755.9	89.2	31.8	49	calm			0		0					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.69	754.1	29.92	760.0	88.0	31.1	75	w.			1		3					d. clouds	Sergt. John Robinson.
Galway, Queen's College			29.59	751.6	50	10.0	78	w.			2		4			0.10	2.5	blue sky	J. O'Donnghue.
Gibraltar, Mediterranean	30.04	763.0	30.09	764.3	59.5	15.3	86	w.			2		0					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	29.05	737.9	29.25	742.9	49.3	9.6	84	w.			5		10					raining	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.52	749.8	29.69	754.1	50.8	10.4	93	sw.			4		10					overcast	The Staff.
Guernsey	29.61	752.1	29.91	759.7	51.2	10.7	97	wsw.			3		10					showery	A. Collenette, F. M. S.
Kew, Observatory	29.66	753.4	29.70	754.4	51.0	10.6	88	sw.	20	8.9			10					threatening	The Staff.
Leicester, Museum	29.28	743.7	29.53	750.0	52.5	11.4	83	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	29.86	758.4	29.94	760.5	64.6	18.1	79	sw.			2		6					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.38	771.6	30.43	772.9	69.5	20.8	67	ne.			1		5					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.03	737.3	29.55	750.6	50.2	10.1	91	sw.			4		10					squally	John Mac Email.
Oxford, Radcliffe Obs'y	29.42	747.3	29.65	753.1	51.4	10.8	86	sw.			6		10					squally	The Staff.
Plymouth	29.84	757.9	29.91	759.7	51.0	10.6	97	sw.			1		10					misty	John Merrifield.
Sandwick Manse, Orkneys			28.84	732.5	47.3	8.5	92	sw	40	17.9			10					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.17	766.3	30.24	768.1	45.6	7.6	82	s.			1		10					misty	W. H. Lyne
Sheffield	29.18	741.2	29.46	748.3	51.0	10.6	96	sw.			5		10			0.05	1.3	showery	W. F. Cooper.
Silloth Rectory	29.31	744.5	29.34	745.2	48.0	8.9	96	sw.			6		10			0.304	7.7	threatening	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.47	748.5	48.0	8.9	92	wsw.	27	12.1			10					raining	Rev. S. J. Perry.
Stratfield Turgiss	29.48	748.8	29.70	754.4	51.8	11.0	87	w.			2		10					overcast	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.78	756.4	29.84	757.9	54	12.2	93	nw.			4		10					raining	W. Newcombe.
Valencia, Observatory	29.72	754.9	29.74	755.4	51.3	10.7	85	w.	21	9.4			10					misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.52	775.2	30.56	776.2	9	—12.8	96	w.	7	3.1			10 n			0	0	threatening	H. J. Cundall, C. E.
Chatham, N. B.*	30.58	776.7	30.65	778.5	—14	—25.6	100	calm	0	0		0	0			0	0	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.68	779.3	30.70	779.8	0	—17.8	95	nw.	9	4.0		0	5 s		calm	0	0	fair	J. McWilliams.
Fort Garry, Manitoba*	29.10	739.1	29.98	761.5	16	— 8.9	96	s.	5	2.2		0	5 s		s.	0.045	1.2	hazy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.48	774 2	30.63	778.0	7	—13.9	96	nw.	4	1.8		0	0			0	0	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.36	771.1	30.75	781.0	— 8	—22.2	71	ne.	9	4.0		0	2 s?		ne.	0	0	cloudy?	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.55	776.0	30.79	782.1	— 4	—20.0	100	e.	3	1.3			10 s			0	0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.88	758.7	30.67	779.0	— 4	—20.0	83	e.	16	7.2			10 n		ne.	0	0	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.77	756.1	30.55	776.0	5	—15.0	100	ne.	12	5.4		10 k	0	e.		0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.78	756.4	30.50	774.7	8	—13.3	91	ne.	12	5.4		0	2 k		e.	0	0	clear	M. Payne.
Quebec, Quebec*	29.40	746.7	30.78	781.8	—10	—23.3	55	sw.			1	0	8 k			0	0	clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.21	741.9	30.77	781.5	—24	—31.1	72	calm	0	0		0	0			0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.78	756.4	30.59	777.0	2	—16.7	87	e.	10	4.5		0	0			0	0	clear	K. Stewart.
St. Andrews, N. B.	29.61	752.1	30.66	778.7	— 3	—19.4	83	nnw.	5	2.2		0	0			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	30.39	771.9	30.45	773.4	18	— 7.8	73	nw.	9	4.0		0	2 ks			0	0	clear	T. C. Hill, C. E.
Toronto, Ontario*	30.18	766.6	30.60	777.2	12	—11.1	83	ne.	15	6.7			10 ks		e.	0.07	1.8	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	30.55	776.0	30.63	778.0	13	—10.6	66	ne.	1	0.4			10 s		n.	0.05	1.3	light snow	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.01	762.2	30.28	769.1	15	— 9.4		w.				0	0			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	29.83	757.7	29.86	758.4	72.6	22.6	84	sw.	6.0	2.7		0	2 s			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.87	758.7	29.90	759.4	87.4	30.8	41	wnw.	11	4.9		6	1			0.060	1.5		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Hankow	30.16	766.1	30.45	773.4	41.4	5.2	96	ne.			2		10					raining	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.24	768.0	30.26	768.6	46.8	8.2	95	ne.	2.9	1.3		rock	0			0	0	covered	M. Marc Dechevrens, S.J

JANUARY 5, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.77	756.1	29.82	757.3	36.1	2.3	93	sw.	22	10			10						Oversergent Fischer.
Fanöe	29.44	747.7	29.46	748.2	36.3	2.4	94	ssw.			7		10					raining	Overloerer Lauridsen.
Godthaab, Greenland	29.11	739.3	29.15	740.4	9.0	—12.8	100	nnw.			5		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	28.77	730.8	28.82	731.9	22.3	— 5.4		e.			8		10					snowing	A. O. Thorlacius.
Thorshavn	28.61	726.7	28.65	727.6	40.3	4.6	92	ne.	13	6			10						Overloerer Bergh.
Vestervig	29.34	745.1	29.43	747.4	37.0	2.8	96	sse.			7		10					raining	Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.60	751.9	30.28	769.0	40.3	4.6	93	sw.			1		kn		n.	0	0		M. Labroue, Director.
Alençon, Normal School	29.48	748.8	30.03	762.8	40.6	4.8	97	sw.			3		n			0.091	2.3		M. Nicot, Director.
Arras, Engineer School	29.64	752.9	29.91	759.6	40.1	4.5	100	sw.			4		10		ne	0.004	0.1	light rain	M. Klein, Commandant.
Avignon, Normal School	29.96	761.0	30.04	763.0	44.6	7	71	n.			3		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.57	751.0	30.15	765.8	35.6	2.0	100	s.			1		10			0.004	0.1	covered	M. Saillard, Director.
Beauvais, Normal School	29.74	755.3	30.01	762.3	42.3	5.7	91	sw.			2		10		sw.	0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.19	766.8	42.4	5.8	88	ene.			1		n		nw.	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.99	761.8	30.26	768.7	39.9	4.4	93	s.			1		10			0.008	0.2	covered	M. Rayet, Director.
Bourges, Normal School	29.63	752.7	30.21	767.4	41.0	5	94	wsw.			1		n		wsw.	0	0		M. Postel, Director.
Brest, Naval Observatory	29.76	755.9	30.00	762.1	52.5	11.4	95	w.			2		10		w.	0.165	4.2	rain and fog	M. de Kennaree, Dir.
Caen, Normal School	29.85	758.3	29.93	760.3	48.2	9	89	sw.			2		10		sw.	0.08	2.	covered	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.74	755.5	30.08	764.0	36.5	2.5	85	s.			2		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.54	750.2	30.09	764.3	40.3	4.6	80	ssw.			1					0.67	17.		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.81	731.7	30.21	767.2	43.9	6.6	51	e.			1		2			0	0	¼ covered	M. Allnard, Director.
Cluny, Normal School	29.34	745.2	30.21	767.3	38.5	3.6	83	nnw.			1								M. de Villemontée, Dir.
Commercy, Normal School.	29.26	743.1	30.16	766.0	39.9	4.4	82	sw.			1		5 sn	sw.	sw.	0	0	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.48	697.9	30.08	764.1	38.8	3.8	83	s			1	1 c	0	sw.		0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.87	733.3	30.02	762.4	46.0	7.8	64	nw.			1		2		sw.	0.520	13.2	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.37	745.9	30.19	766.7	38.5	3.6	87	wnw.			1		kn		nw.	0.130	3.3		M. Ablard, Director.
Guéret, Normal School	28.54	725.0	30.17	766.4	39.6	4.2	74	sw.			2		8		sw.	0	0	very cloudy.	M. Rivoire, Director.
Lamballe, Normal School	29.75	755.6	30.02	762.6	51.8	11	90	sw.			3		10		sw.	0.177	4.5	covered	M. Ollitrault, Director.
Lescar, Normal School	29.67	753.6	30.24	768.2	49.1	9.5	45	nw.			1	1 c	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	29.96	761.0	30.06	763.6	53.6	12.0	87	wsw.			3		10		sw.	0.130	3.3	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.12	739.7	30.22	767.5	40.5	4.7	72	nnw.			1		0			0	0	clear	M. André, Director.
Mans, Normal School	29.74	755.4	30.06	763.5	42.4	5.8	90	ssw.			4		5			0.08	2.	cloudy	M. Piboen, Director.
Marseille, Observatory	29.72	754.8	29.99	761.7	49.8	9.9	65	wnw.			1		0			0	0	clear	M. Stephan, Director.
Montlouis Pinstituteur	24.81	630.2	29.65	753.2	33.6	1.0	15	n.	5.6	2.5			2	nw.					M. Cave, for Dr. Fines.
Montpellier, Normal School	29.97	761.1	30.08	763.9	48.9	9.4	57	nw.			3		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.32	744.8	30.14	765.5	38.8	3.8	70	sse.			1		10 sn			0	0	covered	M. Hasse, Director
Nantes, Observatory	29.95	760.8	30.11	764.9	50.0	10	93	ssw.			1.3		10		sw.	0.063	1.6	rainy	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.01	762.3	30.13	765.2	48.0	9.0	45	n.	22.4	10.0			1	ne.		0.047	1.2	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.16	537.5			20.5	—6.4		ene.			2	1	1	w.	ene.	0.039	1.0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.08	738.5	30.18	766.6	40.6	4.8	54									0	0		M. Tallieu.
Puy de Dôme Obs'y, Summit	25.15	638.8			23.4	—4.8	89	nw.			4		5		n.	0.004	0.1	½ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.20	767.1	30.23	767.9	44.2	6.8	88	s.			1		10			0.063	1.6	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.90	759.4	30.12	765.0	47.8	8.8	100	sw.			1		10			0	0	covered	M. Moullot, Director.
Rodez, Normal School	27.97	710.3	30.22	767.5	32.2	0.1	86	nw.			2		kn			0	0		M. Colrat, Director.
Rouen, Normal School	29.91	759.7	29.96	760.9	42.4	5.8	88	ssw.			1		8			0	0	very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.80	756.9	29.96	760.9	44.8	7.1	95	wnw.			1		10		sw.	0.067	1.7	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.88	759.0	30.05	763.2	40.1	4.5	80	sw.			2		10		sw.	0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.56	750.9	30.29	769.4	41.0	5.0	89	ssw.			1		1	nw.		0	0	clear	M Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.54	750.4	30.04	762.9	39.6	4.2	83	sw.			3					0.020	0.5		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.24	742.6	30.10	764.4	32.0	0.0	90	s.			3		10			0	0	heavy fog	Prof. Dr. Hoh.
Berlin	29.82	757.4	30.00	762.0	41.0	5.0	92	s.			2		8			0.138	3.5		Prof. Dr. Arndt.
Breslau	29.59	751.6	30.12	765.1	37.2	2.9	82	wnw.			1		1			0.043	1.1		Royal University Obs'y.
Carlsruhe	29.67	753.7	30.13	765.3	37.4	3.0	83	sw.			2		9	sw.		0	0		Albert Senz.
Cassel	29.21	741.8	29.92	760.0	36.7	2.6	72	s.			4		8	s.		0.098	2.5		Dr. H. Möhl.
Frankfort on the Main	29.71	754.5	30.08	764.1	38.8	3.8	75	ssw.			1		7			0	0		Physical Society.
Friedrichshafen	28.66	728.0	30.15	765.8	38.5	3.6	87	se.			1		10	w.		0.094	2.4		Wilhelm, Chief Tel.
Hamburg	29.77	756.2	29.87	758.6	37.4	3.0	85	s.			4		8			0.024	0.6		E. Preller.
Kiel	29.78	756.3	29.79	756.7	37.8	3.2	82	ssw.			4		10			0.028	0.7		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.63	752.6	30.07	763.7	38.3	3.5	75	ssw.			3		7	w.		0.020	0.5		H. Leppig, Asst.
Magdeburg	29.79	756.6	29.98	761.6	37.2	2.9	80	s.			3	c	10 ks		nw.	0	0		Dr. Assmann.
Memel	29.95	760.8	30.00	762.0	38.3	3.5	83	wnw.			5	0	8 ks						Issermann.
Munich	28.25	717.6	30.12	765.0	35.4	1.9	96	n.			2		10			0.130	3.3		Central Station.
Neufahrwasser	30.04	763.1	30.06	763.5	38.3	3.5	72	wsw.			3		10			0.130	3.3		A. Lothes.
Neustadt, Palatinate	29.59	751.6	30.12	765.0	41.0	5.0	69	w.			1		3			0	0		Dicknether.
Stuttgart	29.14	740.2	30.07	763.8	36.1	2.3	89	sw.			1		2	n.		0.016	0.4	raining	Prof. Dr. Schoder.
Wustrow	29.88	758.9	29.90	759.5	38.7	3.7	95	s.			4		10			0	0		Profs. Brandes & Reimer
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.87	758.7	30.26	768.7	55.2	12.9		n.			1.0		7			0	0	misty	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.93	760.2	29.98	761.5	73.9	23.3	43	sw.					0			0	0	blue sky	
Deesa	29.48	748.7	29.96	761.0	73.2	22.9	66	nne.	8.3	3.7			0			0	0	blue sky	
Bombay	29.90	759.6	29.94	760.5	78.1	25.6	59	nw.	12	5.4			0			0	0	blue sky	
Poona, Yarrowda	28.05	712.4	29.88	759.0	84.6	29.2	25	wnw.	14	6.3			1	wsw.		0	0	d. clouds	
Belgaum	27.38	695.4	29.92	759.9	77.3	25.2	68	w.	5	2.2			4	e.	se.	0	0	threatening.	
Lahore	29.25	742.9	30.02	762.6	61.6	16.4	46	calm	0.6	0.3			0			0	0	blue sky	
Roorkee	29.08	738.5	30.01	762.3	62.2	16.8	41	nw.	1.0	0.4			0			0	0		
Agra	29.44	747.9	30.03	762.8	66.3	19.1	46	w.	3.0	1.3			0			0	0		
Nagpur	28.87	733.2	29.91	759.8	79.2	26.2	53	sw.	2.4	1.1			0			0	0	blue sky	
Jubbulpore	28.60	726.4	29.99	761.7	69.3	20.7	49	calm	2.2	1.0			0			0	0	blue sky	
Lucknow	29.60	751.8	29.99	761.6	71.2	21.8	36	wsw.	2.7	1.2			0			0	0	blue sky	
Allahabad	29.65	753.0	29.97	761.2	65.8	18.8	68	calm	1.0	0.4			0			0	0	blue sky	
Patna	29.77	756.1	29.96	761.0	67.6	19.8	69	ene.	2.2	1.0			2	ene.	ene.	0	0		
Hazaribagh	27.87	707.8	29.92	760.0	67.8	19.9	44	wsw.	5.4	2.4			0			0.04	1.0		
Cuttack	29.88	758.9	29.96	761.0	77.1	25.1	83	wsw.	3.1	1.4			9			0	0	d. clouds	
Calcutta, Alipore	29.90	759.5	29.92	760.1	71.3	21.8	95						0			0.12	3.0	blue sky	
Dhubri																			
Chittagong	29.90	759.3	29.99	761.7	68.6	20.3	67	w.	1.3	0.6			10			0	0	overcast	
Sibsagar	29.65	753.0	30.00	762.0	59.9	15.5	94	ne.	2.9	1.3			10	w.	w.	0.12	3.0	overcast	
Jeypore	28.54	724.9	30.03	762.6	67.4	19.7	46	wnw.	2.8	1.2			0			0	0	blue sky	
Zanzibar, Africa	29.86	758.4			79.5	26.4	84	ene.					10			0.12	3.0	showery	
Trichinopoly	29.68	753.9			83.5	28.6	64	calm	0	0			4			0	0	d. clouds	
Bellary	28.42	721.9			84.0	28.9	53	nnw.	3.4	1.5		3 ck	6	e.		0	0	gloomy	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.63	752.6	30.01	762.3	51.4	10.8	65	e.	4.9	2.2			9			0.224	5.7		Prof. Giovanni Clodig.
Milan	29.54	750.4	30.08	764.1	45.3	7.4	86	sw.	1.3	0.6			5	e.		0.630	16.0		Prof. Schiaparelli.
Padua	29.93	760.3	30.05	763.2	47.8	8.8	80	nne.	8.7	3.9			10			0.205	5.2		Prof. Dott. Lorenzoni.
Moncalieri	29.13	740.0	30.09	764.2	40.3	4.6	85	n.	0	0			3			0	0		Prof. P. F. Denza.
Genoa	29.78	756.5	29.98	761.5	47.5	8.6	73	n.	13.6	6.1			4	s.		1.024	26.0		Prof. G. M. Garibaldi.
Mondovi	28.11	714.1	30.11	764.7	43.7	6.5	68	w.			2		9			0.945	24.0		Prof. D. C. Bruno.
Pesaro	29.95	760.6	30.00	761.9	45.0	7.2	96	nw.	2.5	1.1			10			0.043	1.1		Prof. Luigi Guidi.
Florence	29.68	753.8	29.94	760.5	51.8	11.0	67	ne.			2		5			0.874	22.2		Prof. Costantino Pitter.
Leghorn	29.82	757.4	29.91	759.6	50.9	10.5	77	e.	15.0	6.7			6			0.386	9.8		Prof. P. Monte.
Rome	29.66	753.4	29.84	757.9	50.9	10.5	91	nne.	4.9	2.2			10			1.079	27.4		Prof. P. S. Ferrari.
Lecce	29.80	756.8	30.06	763.4	55.4	13.0	84	sse.	16.1	7.2			10	se.		0.055	1.4		Prof. C. de Giorgi.
Cosenza	29.06	738.2	29.97	761.3	54.7	12.6	77	ne.	2.5	1.1			10	e.		0.500	12.7		Prof. D. Conti.
Cagliari	29.65	753.2	29.85	758.1	58.6	14.8	73	calm			0		5	w.		0.020	0.5		Prof. A. Pachiotti.
Palermo	29.65	753.0	29.90	759.4	63.3	17.4	61	sw.	7.4	3.3			7	sw.		0.480	12.2		Prof. G. Cincciatore.
Syracuse	29.87	758.8	29.92	759.9	60.8	16.0	85	se.	4.9	2.2			8	s.		0.500	12.7		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.33	745.0	29.86	758.4	55.4	13.0	99	sw.	2.5	1.1			10	sw.		1.728	43.9		Prof. T. Brioschi.
Stelvio	22.06	560.6			20.5	— 6.4	84	s.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.11	561.6			23.9	— 4.5	73	w.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.18	766.6	30.22	767.6	32.5	0.3	71	sw.				ck	7 ks		w.	0	0	fair	
Hakodate	30.15	765.8	30.17	766.3	31.5	— 0.3	81	nw.	12.0	5.4			0			0	0	clear.	
Hiroshima, I. M. Obs'y	30.05	763.3	30.07	763.8	53.2	11.8	87	nne.	9.9	4.4			10 n;s			0.025	0.6	light rain	K. Sasaki.
Kanazawa	30.44	773.2	30.55	776.0	39.5	4.2	90					10 ck	0	nw				cloudy	S. Endo.
Kioto	29.96	761.0	30.14	765.5	49.2	9.6	82	nnw.	1.2	0.5		ck	10 s			0.690	17.5	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.92	759.9	30.12	765.0	55.7	13.2	86	n.	3.8	1.7		9 ck	0			0	0	cloudy.	S. Takehayashi.
Neegata	30.19	766.8	30.23	767.8	39.5	4.2	90	ese.	1.5	0.7		10 ck	0	w.		0	0	cloudy	
Nobiru	30.15	765.8	30.17	766.3	38.5	3.6	77	nnw.	9.2	4.1		cs;ck	9 s	w.		0	0	cloudy	H. Midzushina.
Supporo					30.1	— 1.1	93	w.	18.0	8.0			10			0	0	covered	
Tokei Obs'y, Yeddo	30.06	763.5	30.13	765.3	45.8	7.7	69	nnw.	4.4	2.0			10 s		e.	0.170	4.3	cloudy	The Staff.
Wakayama	30.05	763.3	30.10	764.5	53.3	11.8	73	n.	9.8	4.4		10 ck	0			0.433	11.0	light rain	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.78	756.4	29.97	761.2	79.3	26.3	71	ssw.	12.5	5.6		0	9k;ks;n		s.			showery	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.78	604.1	30.00	762.1	48.6	9.2	79	calm	0	0		1 cs	0	w.		0	0	clear	Vicente Fernandez.
Leon	24.53	623.0	30.34	770.5	51.5	10.8	80	nw.			2	2 c	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.80	756.9	30.06	763.6	67.0	19.4	74	ene.			1	3 cs	0	sw.		0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.16	588.3	30.38	771.7	42.3	5.7	76	calm	0	0		0	0			0	0		The Staff.
Morelia	24.33	618.0	30.62	777.8	44.2	6.8	82	sse.			3	0	0			0	0		M. Tena, M. D.
Pabellon, Aguascalientes	23.99	609.2	30.10	764.4	50.5	10.3	74	calm			0		10 k		ssw.	0	0	covered	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.49	596.5	30.47	773.8	39.2	4.0	73	n.	0.2	0.1		0	1 cs			0	0	fine	P. P. Spina.
San Luis Potosi	24.29	617.0	30.32	770.1	48.3	9.1	54	ne.			1	3	0	w.		0	0	clear	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.57	573.2	30.33	770.4	45.5	7.5	60					4 c	0	sw.		0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.78	756.5	29.78	756.5	41.5	5.3		ssw.			6					0.008	0.2		
Groningen	29.65	753.0	29.70	754.4	38.5	3.6		s.			6					0.051	1.3		
Helder	29.63	752.5	29.63	752.5	40.3	4.6		ssw.			6					0.217	5.5		
Hellevoetsluis	29.74	755.3	29.74	755.3	39.9	4.4	95	sw.			6					0	0		
Utrecht	29.73	755.2	29.78	756.4	39.4	4.1	91	ssw.			5		10			0.106	2.7	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.11	739.4	29.18	741.0	39.6	4.2	65	se.	36	16			8			0.654	16.6	raining.	
Brono	29.17	740.9	29.21	741.9	33.8	1.0	66	w.	9	4			10			0	0		
Christiania	29.37	746.1	29.53	750.0	29.5	— 1.4	98	e.	0	0			10					snowing	
Gjæsvær	28.98	736.1	29.00	736.7	24.9	— 4.5		ene.			4		10						
Lodingen	28.86	733.0	28.91	734.2	35.1	1.7	83	s.			7		10			0.224	5.7	rain & snow.	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					58.6	14.8	80	wnw.	4.9	2.2			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.20	741.7	30.22	767.7	52.2	11.2	37	nne.	8.7	3.9			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.30	769.5	30.38	771.7	66.9	19.4	51	sw.	3.1	1.4			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.95	760.8	30.32	770.2	51.6	10.9	56	n.	27.3	12.2			1			0	0		The Staff.
Ponta Delgada, Azores	30.47	773.9	30.54	775.7	60.1	15.6	83	calm	0	0			3			0.028	0.7		
Saint Paul de Loando	29.67	753.7	29.87	758.8	78.1	25.6	87	wnw.	1.3	0.6			5	s.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.46	748.2	30.67	779.1	1.0	—17.2		sw.	45	20		3 cs	0			0	0		Major K. Lasarew.
Archangel	29.39	746.5	29.41	747.0	30.7	— 0.7	86	sw.	4	2			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.60	777.2	30.52	775.1	28.2	— 2.1	92	ese.	7	3		10 cp	0			0	0	heavy cl'ds.	Capt. Wisganow.
Barnaul	30.23	767.9	30.80	782.4	— 0.8	—18.2	77	sw.	13	6			10			0.024	0.6		Meteorological Obs'y.
Dorpat	29.60	751.9	29.85	758.3	34.2	1.2	75	w.	9	4		0	6 ks			0	0		Observatory.
Ekaterinburg	29.22	742.3	30.25	768.3	17.8	— 7.9	83	sw.	31	14			10			0	0		Meteorological Obs'y.
Kasan	29.90	759.5	30.19	766.7	31.6	— 0.2	83	ssw.	18	8			10			0	0		Observatory.
Kertch	30.28	769.1	30.30	769.6	30.0	— 1.1	94	nnw.	4	2			9 n			0	0		Lagorio & Sastyrez.
Kieff	29.43	747.6	30.10	764.5	34.0	1.1	81	sw.	7	3		c	10ks;n			0	0		Observatory.
Lugan	30.12	765.0	30.33	770.4	34.7	1.5	83	s.	4	2			10			0	0		Meteorological Obs'y.
Moscow	29.38	746.2	29.87	758.7	34.5	1.4	83	s.	7.8	3.5			10 s			0.039	1.0		Meteorological Obs'y.
Nikolaiev	30.24	768.2	30.32	770.0	39.6	4.2	92	sse.	13	6			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor.	30.01	762.3	30.10	764.5	— 6.2	—21.2	90	nw.	4	2			10			0	0	lunar co'na.	Lieut. Iwanow.
Pekin, China	30.36	771.2	30.50	774.8	30.6	— 0.8	51	calm	0	0		0	5 ks			0	0		Physical Observatory.
St. Petersburg	29.70	754.4	29.72	754.8	34.2	1.2	82	wnw.	13	6		0	6 ks;n			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.97	735.9	30.70	779.8	19.0	— 7.2	98	nw.	13	6			0			0	0		Teich, A. M.
Tiflis	28.98	736.0	30.48	774.1	34.0	1.1	72	calm	0	0			10			0	0		Physical Observatory.
Warsaw	29.67	753.5	30.11	764.7	30.7	2.6	93	wsw.	4	2			10 ks						Astronomical Obs'y.
Wilna	29.58	751.4	30.02	762.4	36.5	2.5	89	sw.	2	1			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniselsk	29.93	760.1	30.24	768.2	3.4	—15.9	84	w.	4	2			10			0.012	0.3	snowing	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.04	737.6	46	7.8	92	w.			8	10	5	w.		0.5	13.	h'vy clouds.	J. Youngclause.
North Unst, Shetland Isl'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.97	761.2	30.07	763.7	52.3	11.3	49	w.	0.4	0.2			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.23	767.8	30.29	769.3	47.5	8.6	93	se.	1.3	0.6			10			0.169	4.3	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.26	692.3	30.34	770.5	41.0	5.0	73	n.	5.8	2.6		0	8			0.039	1.0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	29.92	709.2	30.21	767.4	44.8	7.1	56	sw.	2.0	0.9		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.00	762.0	30.15	765.9	53.6	12.0	52	nw.	0.7	3.0		0	1			0	0	almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.35	745.6	30.28	769.0	48.0	8.9	85	calm	0	0			10			0.012	0.3	covered	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.22	767.6	30.29	769.3	64.8	18.2	81	e.	3.1	1.4		1 c	0	nw.		0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.93	760.2	29.98	761.6	78.0	25.6	76	nne.	4.5	2.0		0	2 ck		e.	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.08	764.0	30.18	766.6	51.4	10.8	40	nne.	13.8	6.2		0	2		nne.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.06	763.4	30.15	765.7	75.2	24.0	86	se.	12.5	5.6		3 k	4 kn	se.	se.	0.323	8.2	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Is'ds	29.91	759.7	30.05	763.3	76.9	24.9	79	nnw.	0	0			8 k		se.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.15	740.3	29.19	741.3	20.1	— 6.6	89	sw.			2		2			0	0		
Umea	29.28	743.7	29.33	745.0	24.1	— 4.4	100	w.			2		9			0	0		
Hernosand	29.39	749.5	29.44	747.8	28.2	— 2.1	65	sw.			2		10			0	0		
Stockholm	29.54	750.3	29.72	754.8	31.3	— 0.4	81	sw.			2		10			0	0		
Wisby	29.73	755.2	29.79	756.7	35.6	2.0	82	sw.			4		5			0	0		
Sub-Series.																			
Upsala	29.58	751.4	29.67	753.6	28.9	— 1.7	89	sw.	11.2	5.0			7	wnw.		0.146	3.7		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.70	729.0	30.17	766.2	41.0	5.0	66	ne.			1					0	0	covered	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.29	769.3	45.7	7.6	85	ne.	6	2.5			10		n.	0	0		The Observatory.
Valona			30.11	764.9	56.7	13.7		se.			1		10			0	0	covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.17	766.4	63.0	17.2	62	nw.			1	0	1 ks		e.	0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.70	779.8	30.79	782.1	6	—14.4	76	nw.	4	1.8		0	0			0	0	clear	
Alpena, Michigan	29.82	757.4	30.54	775.7	16	— 8.9	83	sw.	4	1.8			10 s			0.07	1.8	cloudy	
Atlanta, Georgia	29.22	742.2	30.45	773.4	36.0	2.2	92	e.	9	4.0			10 n		calm	0.11	2.8	light rain	
Atlantic City, New Jersey	30.64	778.2	30.65	778.5	25	— 3.9	84	n.	12	5.4			10 n			0.11	2.8	light snow	
Augusta, Georgia	30.32	770.1	30.52	775.2	40.0	4.4	73	nw.	1	0.4			10 s;sk			0	0	cloudy	
Baltimore, Maryland	30.61	777.5	30.66	778.7	21	— 6.1	84	ne.	5	2.2			10 n			0.12	3.0	light snow	
Barnegat, New Jersey	30.64	778.2	30.66	778.7	26.8	— 2.9	96	e.	16	7.2			10 n		ne.	0.03	0.8	light snow	
Bismarck, Dakota	28.00	711.2	30.00	762.0	23	— 5.0	73	e.	4	1.8			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.22	691.4	30.15	765.8	37	2.8	89	sw.	3	1.3			10 s		calm	0.16	4.1	cloudy	
Boston, Massachusetts	30.56	776.2	30.74	780.8	3.6	—15.8	69	w.	7	3.1		0	1 s			0	0	clear	
Brownsville, Texas	30.09	764.3	30.14	765.5	68.5	20.3	93	se.	4	1.8		10 cs	0			0.29	7.4	cloudy	
Buffalo, New York	29.74	755.4	30.54	775.7	5	—15.0	85	ne.	8	3.6		0	3 s;sk			0.01	0.3	clear	
Burlington, Vermont	30.45	773.4	30.76	781.3	— 6.0	—21.1	79	e.	5	2.2		0	5 s		e.	inap.	inap.	fair	
Cairo, Illinois	30.00	762.0	30.42	772.7	34.3	1.3	90	n.	4	1.8			10 s		calm	0.42	10.7	cloudy	
Campo, California	27.52	699.0	30.15	765.8	26.4	— 3.1	88	nw.	3	1.3		4 c	0	w.		0	0	fair	
Camp Thomas, Arizona	27.40	695.9	30.23	767.8	31.5	— 0.3	83	se.			1	hz.	0			0	0	clear	
Cape Henry, Virginia	30.54	775.7	30.56	776.2	36	2.2	89	ne.	11	4.9			10 n			0.50	12.7	heavy snow	
Cape May, New Jersey	30.59	777.0	30.62	777.7	22	— 5.6	87	ne.	12	5.4			10 n		ne.	0.02	0.5	light snow	
Castroville, Texas	29.41	747.0	30.26	768.6	54	12.2	86	e.	2	0.9			10 s			0	0	threatening	
Cedar Keys Florida	30.39	771.9	30.41	772.4	53	11.7	89	ne.	4	1.8		hz.	0			0	0	clear	
Champaign, Illinois	29.53	750.0	30.40	772.1	14.0	—10.0	64	ne.	7	3.1			10 s		ne.	0.26	6.6	cloudy	
Charleston, S. Carolina	30.42	772.7	30.48	774.2	46	7.8	93	ne.	6	2.7		5 c	0	w.		0	0	fair	
Charlotte, N. Carolina	29.58	751.3	30.47	773.9	32.0	0.0	78	ne.	4	1.8			10 s		ne.	0	0	cloudy	
Chattanooga, Tennessee	29.56	750.8	30.42	772.7	42.0	5.6	92	s.	8	3.6			10 ks		sw.	0.22	5.6	threatening	
Cheyenne, Wyoming	23.91	607.3	30.16	766.1	34.3	1.3	51	nw.	16	7.2		0	4 s			0	0	fair	
Chicago, Illinois	29.66	753.4	30.41	772.4	28.0	— 2.2	84	e.	5	2.2		5 k	0	e.		0.01	0.3	fair	
Chincoteague, Virginia	30.58	776.7	30.60	777.2	32	0.0	100	e.	6	2.7			10 n			0.35	8.9	heavy snow	
Cincinnati, Ohio	29.70	754.4	30.39	771.9	24	— 4.4	88	n.	3	1.3			10 s			1.01	25.7	cloudy	
Cleveland, Ohio	29.63	752.6	30.41	772.4	14.5	— 9.7	87	e.	5	2.2		0	0			inap.	inap.	clear	
Coleman City, Texas	28.40	721.3			42	5.6	79	ne.	4	1.8			10 s			0	0	cloudy	
Columbus, Ohio	29.44	747.8	30.34	770.6	20	— 6.7	84	ne.	4	1.8		0	0			0.48	12.2	clear	
Concho, Texas	28.26	717.8	30.28	769.1	44	6.7	76	e.	4	1.8			10 s			0	0	cloudy	
Davenport, Iowa	29.72	754.9	30.42	772.7	20	— 6.7	70	ne.	1	0.4			fg.		calm	0.15	3.8	dense fog	
Dayton, Washington T'y	28.27	718.0	30.07	763.8	38.7	3.7	90	sw.	3	1.3			10 s		sw.	0.11	2.8	cloudy	
Deadwood, Dakota	25.16	639.1	30.11	764.8	38	3.3	52	sw.	12	5.4			9 k		w.	0	0	cloudy	
Decatur, Texas																			
Delaware Breakwater, Del.	30.58	776.7	30.60	777.2	28	— 2.2	100	ne.	25	11.2			10 n		ne.	0.07	1.8	light snow	
Denison, Texas	29.46	748.3	30.30	769.6	36.3	2.4	61	ne.	6	2.7			10 s			0	0	cloudy	
Denver, Colorado	24.66	626.4	30.18	766.6	34.5	1.4	48	s.	6	2.7		0	0			0	0	clear	
Des Moines, Iowa	29.43	747.5	30.40	772.1	25	— 3.9	88	se.	5	2.2			10 s		se.	0.10	2.5	cloudy	
Detroit, Michigan	29.70	754.4	30.46	773.7	19.3	— 7.1	84	n.	10	4.5			10 s		calm	inap.	inap.	cloudy	
Dodge City, Kansas	27.48	698.0	30.23	767.8	30.5	— 0.8	86	s.	9	4.0		10 cs	0			0	0	cloudy	
Dubuque, Iowa	29.67	753.6	30.44	773.2	15.8	— 9.0	67	ne.	2	0.9			10 s		calm	0	0	cloudy	
Duluth, Minnesota	29.54	750.3	30.30	769.6	21.8	— 5.7	76	sw.	6	2.7			10 s			0	0	cloudy	
Eagle Pass, Texas	29.45	748.0	30.29	769.4	55.1	12.8	100	nw.	3	1.3			10 n		calm	inap.	inap.	light rain	
Eagle Rock, Idaho	25.29	642.4	30.25	768.3	30	— 1.1	80	sw.	22	9.8			10 s			0.22	5.6	threatening	
Eastport, Maine	30.60	777.2	30.67	779.0	— 2	—18.9	65	nw.	16	7.2		0	5 s		nw.	0	0	fair	
El Paso, Texas	26.38	670.0	30.26	768.6	42.2	5.7	30	w.	5	2.2		0	8 s		w.	0	0	cloudy	
Erie, Pennsylvania	29.70	754.4	30.47	773.9	11	—11.7	61	calm	0	0		0	0			0	0	clear	
Escanaba, Michigan	29.74	755.4	30.46	773.7	22	— 5.6	87	s.	12	5.4			10 s		s.	0.03	0.8	cloudy	
Florence, Arizona																			
Fort Apache, Arizona	25.09	637.3	30.21	767.3	24	— 4.4	67	ne.	3	1.3		0	5 s		calm	0	0	fair	
Fort Assiniboine, Montana	26.93	684.0	29.97	761.2	33	0.6	45	sw.	16	7.2		3 c	0	sw.		0	0	clear	
Fort Bennett, Dakota	28.21	716.5	29.95	760.7	28	— 2.2	88	s.	5	2.2			10 s		w.	0	0	cloudy	
Fort Benton, Montana	26.99	685.5	29.97	761.2	35	1.7	56	sw.	12	5.4		0	0			0	0	clear	
Fort Buford, Dakota	27.78	705.6	29.98	761.5	27	— 2.8	77	e.	2	0.9			10 s		calm	0	0	cloudy	
Fort Custer, Montana	26.69	677.9	30.07	763.8	25	— 3.9	82	n.	4	1.8			10 s		calm	0	0	cloudy	
Fort Davis, Texas	25.27	641.8	30.25	768.3	40	4.4	86	calm	0	0			10 s		calm	0	0	clo dy	
Fort Elliott, Texas	27.36	694.9	30.30	769.6	29	— 1.7	59	s.	8	3.6			10 s		s.	0	0	cloudy	
Fort Gibson, Indian T'y	29.73	755.1	30.33	770.4	36.0	2.2	79	e.	4	1.8			10 s			0	0	cloudy	
Fort Grant, Arizona	25.36	644.1	30.26	768.6	38	3.3	51	ne.	4	1.8		0	0			0	0	clear	
Fort Griffin, Texas	28.94	735.1	30.32	770.1	40	4.4	82	calm	0	0		10 c	0	calm		0	0	cloudy	
Fort Keogh, Montana	27.28	692.9	29.97	761.2	33	0.6	71	s.	5	2.2		10 cs	0			0	0	cloudy	
Fort Macon, North Carolina	30.46	773.7	30.47	773.9	40	4.4	89	n.	13	5.8			10 ks		sw.	0	0	cloudy	
Fort McKavett, Texas	27.94	709.7	30.33	770.4	46	7.8	71	ne.	4	1.8			10 s			0	0	cloudy	
Fort Missoula, Montana	26.65	676.9	30.11	764.8	27	— 2.8	88	sw.	4	1.8			10 ks			0	0	cloudy	
Fort St. Michaels, Alaska	29.37	746.0	29.40	746.7	8	—13.3	100	ne.	12	5.4			10 s			inap.	inap.	cloudy	
Fort Shaw, Montana	26.22	666.0	30.08	764.0	33	0.6	71	w.	5	2.2		6 cs	0			0	0	fair	
Fort Sill, Indian Territory	29.02	737.1	30.35	770.9	29.8	— 1.2	89	ne.	6	2.7			10 s			0	0	cloudy	
Fort Stevenson, Dakota	27.95	709.9	30.01	762.2	20	— 6.7	73	calm	0	0			10 s		calm	0	0	cloudy	
Fort Verde, Arizona					26.2	— 3.2	56	w.			1	3 k	4 s	s.	w.	0	0	fair	
Fredericksburg, Texas	28.42	721.9	30.24	768.1	48	8.9	86	ne.	1	0.4			10 s			0	0	cloudy	
Galveston, Texas	30.16	766.1	30.20	767.1	65	18.3	94	s.	4	1.8			10 ks		sw.	0	0	threatening	
Grand Haven, Michigan	29.76	755.9	30.46	773.7	13.0	—10.6	89	e.	7	3.1		0	0			0	0	clear	
Hatteras, North Carolina	30.41	772.4	30.43	772.9	43	6.1	93	nw.	16	7.2			10 s			0.05	1.3	cloudy	
Helena, Montana	25.65	651.5	30.08	764.0	30	2.2	64	nw.	6	2.7			10 s		w.	0.03	0.8	cloudy	
Henrietta, Texas	29.28	743.7	30.35	770.9	33	0.6	88	e.	6	2.7			fg.			0	0	dense fog	
Huron, Dakota	28.60	726.4	30.14	765.5	28.2	— 2.1	67	se	25	11.2			10 s			0	0	cloudy	
Indianapolis, Indiana	29.53	750.0	30.37	771.4	20.5	— 6.4	74	ne.	3	1.3			10 s		ne.	0.25	6.3	cloudy	
Indianola, Texas	30.16	766.1	30.19	766.8	65.3	18.5	93	s.	6	2.7		6 k	4 s	s.		0.64	16.3	cloudy	
Jacksboro, Texas	29.07	738.4	30.31	769.9	36	2.2	89	ne.	1	0.4			10 s		calm	0	0	cloudy	
Jacksonville, Florida	30.40	772.1	30.46	773.7	47	8.3	86	ne.	3	1.3		3 cs	fg.			0	0	fair	
Keokuk, Iowa	29.67	753.6	30.37	771.4	19.5	— 6.9	84	e.	5	2.2			10 s		e.	0.06	1.5	cloudy	
Key West, Florida	30.30	769.6	30.33	770.4	65.0	18.3	84	ne.	7	3.1			10 s		e.	0	0	cloudy	
Kittyhawk, North Carolina	30.48	774.2	30.50	774.7	41	5.0	92	ne.	16	7.2			10 n		w.	0.44	11.2	light rain	
Knoxville, Tennessee	29.31	744.5	30.39	771.9	39	3.9	98	ne.	1	0.4			10 s;fg		calm	0.42	10.7	cloudy	
La Crosse, Wisconsin	29.56	750.8	30.40	772.1	13	—10.6	80	se.	1	0.4			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.22	666.0	30.25	768.3	39.0	3.9	59	calm	0	0		2 ck	2 s			0	0	fair	
Leavenworth, Kansas	29.41	747.0	30.37	771.4	29	— 1.7	88	calm	0	0			10 s			0.02	0.5	cloudy	
Lewiston, Idaho	29.18	741.2	30.04	763.0	38	3.3	61	e.	1	0.4			10 s		calm	0.04	1.0	cloudy	
Little Rock, Arkansas	29.98	761.5	30.31	769.9	42	5.6	93	ne.	8	3.6			10 s			0.08	2.0	cloudy	
Los Angeles, California	29.73	755.1	30.13	765.3	44.3	6.8	76	ne.	5	2.2		2 c	0	calm		0	0	clear	
Louisville, Kentucky	29.77	756.1	30.36	771.1	30.0	— 1.1	78	n.	4	1.8			10 s		calm	1.02	25.9	cloudy	
Lynchburg, Virginia	29.84	757.9	30.56	776.2	23.0	— 5.0	88	ne.	1	0.4			10 s			0.67	17.0	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.35	745.5	30.44	773.2	19	— 7.2	70	e.	1	0.4		1 c	0	calm		inap.	inap.	clear	
Marquette, Michigan	29.62	752.3	30.40	772.1	20	— 6.7	70	s.	8	3.6		0	0			0	0	clear	
Mason, Texas	28.53	724.6	30.27	768.8	48	8.9	71	n.	4	1.8			10 s		n.	0	0	cloudy	
Memphis, Tennessee	30.02	762.5	30.38	771.6	38	3.3	100	n.	6	2.7			10 s		n.	0.23	5.8	cloudy	
Milwaukee, Wisconsin	29.63	752.6	30.43	772.9	29	— 1.7	88	se.	8	3.6			10 s		e.	inap	inap.	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.29	769.4	30.33	770.4	57.9	13.9	93	se.	1	0.4	.....	10 cs	0	.....	.....	0	0	cloudy	
Montgomery, Alabama	30.13	765.3	30.37	771.4	51.8	11.0	84	calm	0	0	.....	10 ck	0	w.	.....	0	0	cloudy	
Moorhead, Minnesota	29.03	737.5	30.14	765.5	25	— 3.9	100	s.	22	9.8	.....	.....	10 s	.....	.....	0.19	4.8	cloudy	
Morgantown, W. Virginia	29.31	744.5	30.37	771.4	26.5	— 3.1	78	se.	5	2.2	.....	.....	10 n	.....	.....	0.37	9.4	light snow.	
Mt. Washington, N. H	23.91	707.3	30.54	775.7	0.0	—17.8	62	n.	9	4.0	.....	0	0	.....	.....	0	0	clear	
Nashville, Tennessee	29.80	756.9	30.36	771.1	38.9	3.8	90	nw.	6	2.7	.....	.....	10 ks	.....	nw.	0.65	16.5	cloudy	
New Haven, Connecticut	30.60	777.2	30.72	780.3	3	—16.1	76	n.	12	5.4	.....	9 cs	0	sw.	.....	0	0	cloudy	
New London, Connecticut	30.69	779.5	30.74	780.8	5	—15.0	75	n.	8	3.6	.....	.....	10 s	.....	calm	0	0	cloudy	
New Orleans, Louisiana	30.22	767.6	30.28	769.1	60.5	15.8	89	se.	5	2.2	.....	6 c	sk	w.	.....	0	0	fair	
Newport, Rhode Island	30.66	778.7	30.71	780.0	10.3	—12.1	72	n.	10	4.5	.....	3 c	1 s	calm	n.	0	0	fair	
New River, N. Carolina	.....	.....	.....	.....	37	2.8	72	n.	.....	.....	1	4 ck	5 s	w.	.....	0	0	cloudy	
New Shoreham, Rhode I'd	30.68	779.3	30.71	780.0	20.1	— 6.6	56	e.	11	4.9	.....	0	4 s	.....	e.	0	0	fair	
New York, New York	30.54	775.7	30.73	780.5	14	—10.0	80	ne.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy	
Norfolk, Virginia	30.52	775.2	30.54	775.7	36	2.2	89	e.	1	0.4	.....	.....	10 n	.....	.....	0.53	13.5	heavy snow	
North Platte, Nebraska	27.04	686.8	30.16	766.1	21.6	— 5.8	78	e.	7	3.1	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	
Olympia, Washington T'y	29.90	759.4	29.94	760.5	41.5	5.3	96	s.	2	0.9	.....	.....	10 s	.....	s.	0.57	14.5	cloudy	
Omaha, Nebraska	29.06	738.1	30.33	770.4	29.0	— 1.7	88	s.	8	3.6	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	
Ooglaamie, Pt. Barrow, Alas	29.81	757.2	29.83	757.7	—32.4	—35.8	.....	ene.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	30.33	770.4	30.68	779.3	2.0	—16.7	57	se.	7	3.1	.....	0	0	.....	.....	inap.	inap.	clear	
Palestine, Texas	29.68	753.9	30.24	768.1	47	8.3	93	n.	4	1.8	.....	.....	10 n	.....	.....	inap.	inap.	light rain	
Pensacola, Florida	30.33	770.4	30.36	771.1	57.2	14.0	96	e.	4	1.8	.....	4 cs	fg	.....	.....	0	0	fair	
Philadelphia, Pa	30.63	778.0	30.69	779.5	15	— 9.4	100	e.	11	4.9	.....	.....	10 n	.....	.....	0.05	1.3	light snow	
Pike's Peak, Colorado	17.58	446.5	30.28	769.1	9	—12.8	80	nw.	46	20.6	.....	0	0	.....	.....	0	0	clear	
Ploche, Nevada	24.14	613.1	30.34	770.6	31	— 0.6	65	calm	0	0	.....	8 k	0	w.	.....	0	0	cloudy	
Pittsburg, Pennsylvania	29.56	750.8	30.41	772.4	21.0	— 6.1	76	ne.	7	3.1	.....	7 k	0	w.	.....	0.11	2.8	fair	
Port Eads, Louisiana	30.29	769.4	30.30	769.6	60.0	15.6	90	se.	12	5.4	.....	2 c	hz	w.	calm	0	0	clear	
Port Huron, Michigan	29.77	756.1	30.50	774.7	8.0	—13.3	91	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Portland, Maine	30.67	779.0	30.72	780.3	7	—13.9	76	nw.	3	1.3	.....	0	fg	.....	.....	0	0	clear	
Portland, Oregon	29.93	760 2	30.00	762.0	47.5	8.6	91	calm	0	0	.....	.....	10 n	.....	calm	0.23	5.8	light rain	
Portsmouth, N. Carolina	.....	.....	.....	.....	39	3.9	65	ne.	18	8.0	.....	.....	10 ks	.....	ne.	0	0	cloudy	
Prescott, Arizona	24.84	630.9	30.22	767.6	26	— 3.3	39	w.	3	1.3	.....	7 cs	0	w.	.....	0	0	fair	
Punta Rassa, Florida	30.36	771.1	30.37	771.4	58	14.4	86	ne.	8	3.6	.....	7 c	0	w.	.....	0	0	fair	
Red Bluff, California	29.78	756.4	30.16	766.1	52.0	11.1	100	s.	5	2.2	.....	.....	10 n	.....	.....	0.88	22.4	light rain	
Rio Grande City, Texas	29.88	758.9	30.13	765.3	68	20.0	87	se.	4	1.8	.....	.....	10 s	.....	se.	0	0	cloudy	
Rochester, New York	29.91	759.7	30.62	777.7	2	—16.7	45	se.	8	3.6	.....	.....	10 s	.....	s.	0.03	0.8	cloudy	
Roseburg, Oregon	29.41	747.0	29.98	761.5	45.2	7.3	95	calm	0	0	.....	.....	10 n	.....	.....	0.21	5.3	light rain	
Sacramento, California	30.12	765.0	30.20	767.1	54.9	12.7	86	se.	6	2.7	.....	.....	10 s	.....	.....	0.35	8.9	cloudy	
St. Louis, Missouri	29.78	756.4	30.42	772.7	22.1	— 5.5	88	nw.	4	1.8	.....	.....	10 s	.....	.....	0.29	7.4	cloudy	
St. Paul, Minnesota	29.41	747.0	30.36	771.1	17.0	— 8.3	83	se.	8	3.6	.....	.....	10 s	.....	se.	0	0	cloudy	
St. Vincent, Minnesota	29.08	738.6	30.06	763.5	13	—10.6	100	s.	18	8.0	.....	3 cs	6 s	calm	s.	inap.	inap.	cloudy	
Salt Lake City, Utah	25.69	652.5	30.26	768.6	36	3.3	65	calm	0	0	.....	.....	10 s	.....	calm	0.08	2.0	cloudy	
San Antonio, Texas	29.48	748.8	30.21	767.3	51.6	10.9	86	n.	6	2.7	.....	.....	10 ks	.....	n.	0	0	cloudy	
San Diego, California	29.99	761.7	30.06	763.5	48.0	8.9	77	n.	3	1.3	.....	4 ck	0	.....	.....	0	0	fair	
Sandusky, Ohio	29.67	753.6	30.39	771.9	22	— 5.6	73	e.	13	5.8	.....	0	0	.....	.....	0	0	clear	
Sandy Hook, New Jersey	30.70	779.8	30.74	780.8	17.0	— 8.3	83	e.	14	6.3	.....	10 k	0	e.	.....	0	0	cloudy	
San Francisco, California	30.16	766.1	30.23	767.8	56	13.3	93	sw.	5	2.2	.....	.....	10 n	.....	sw.	0.07	1.8	light rain	
Santa Fé, New Mexico	23.33	592.6	30.34	770.6	33	0.6	81	calm	0	0	.....	0	3 s	.....	calm	0	0	fair	
Savannah, Georgia	30.37	771.4	30.47	773.9	42	5.6	82	n.	4	1.8	.....	0	1 s	.....	.....	0	0	clear	
Shreveport, Louisiana	29.99	761.7	30.24	768.1	54	12.2	100	nw.	2	0.9	.....	.....	10 s	.....	calm	inap.	inap.	threatening.	
Silver City, New Mexico	24.34	618.2	30.20	767.1	39	3.9	59	n.	1	0.4	.....	4 cs	0	calm	.....	0.05	1.3	fair	
Sitka, Alaska	29.39	746.5	29.46	748.3	38.1	3.4	89	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	
Smithville, North Carolina	30.45	773.4	30.49	774.4	36	2.2	79	ne.	6	2.7	.....	3 ck	4 s	.....	ne.	0	0	fair	
Spokane Falls, Wash. Ter.	27.93	709.4	30.07	763.8	35	1.7	66	w.	7	3.1	.....	3 k	0	w.	.....	0.34	8.6	clear	
Springfield, Illinois	29.68	753 9	30.41	772.4	19	— 7.2	70	n.	4	1.8	.....	0	sk	.....	.....	0.55	14.0	clear	
Springfield, Massachusetts	30.63	778.0	30.77	781.5	2.0	—16.7	72	calm	0	0	.....	3 cs	0	.....	.....	0	0	clear	
Springfield, Mo	28.85	732.8	30.43	772.9	31	— 0.6	88	se.	3	1.3	.....	.....	fg	.....	.....	inap.	inap	dense fog	
Stockton, Texas	27.12	688.8	30.26	768.6	40.0	4.4	100	calm	0	0	.....	3 cs	5 s	nw.	nw.	0	0	cloudy	
Thatcher's Island, Mass	30.70	779.8	30.76	781.3	19.0	— 7.2	70	nw.	7	3.1	.....	.....	10 s	.....	nw.	0	0	cloudy	
Toledo, Ohio	29.65	753.1	30.39	771.9	22	— 5.6	73	ne.	14	6.3	.....	.....	10 s	.....	e.	inap.	inap.	cloudy	
Tucson, Arizona	27.63	701.8	30.13	765.3	49	9.4	71	se.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Umatilla, Oregon	29.09	754 1	30.08	764.0	38.5	3.6	87	n.	3	1.3	.....	5 cs	3 s	w.	w.	0.12	3.0	cloudy	
Uvalde, Texas	29.13	739.9	30.13	765.3	58	14.4	81	e.	5	2.2	.....	.....	10 s	.....	calm	0.02	0.5	cloudy	
Vicksburg, Mississippi	29.89	759 2	30.16	766.1	61	16.1	93	se.	5	2.2	.....	.....	10 n	.....	se.	0.80	20.3	light rain	
Visalia, California	29.83	757.7	30.22	767.6	48	8.9	86	se.	1	0.4	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	
Washington, D. C	30.53	775.4	30.05	778.5	20.0	— 6.7	100	se.	4	1.8	.....	.....	10 n	.....	.....	0.28	7.1	light snow	
West Los Animas, Colorado	26.02	660.9	30.16	766.1	26	— 3.3	94	ne.	4	1.8	.....	.....	10 s	.....	w.	0	0	cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	46	7.8	29	w.	.....	.....	0	0	6 s	.....	.....	0	0	fair	
Williamsport, Pa	.....	.....	.....	.....	14	—10.0	80	calm	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	
Wilmington, N. Carolina	30.42	772.7	30.49	774.4	37	2.8	82	se.	5	2.2	.....	.....	10 k	.....	e.	0	0	cloudy	
Winnemucca, Nevada	25.67	652.0	30.21	767.3	40	4.4	73	ne.	10	4.5	.....	.....	10 ks	.....	sw.	0.21	5.3	cloudy	
Wood's Holl, Mass	30.67	779.0	30.71	780.0	13	—10.6	100	sw.	10	4.5	.....	4 ck	fg	calm	calm	0	0	fair	
Yankton, Dakota	28.82	732.0	30.24	768.1	26	— 3.3	77	n.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy	
Yuma, Arizona	29.92	760.0	30.07	763.6	47.0	8.3	68	se.	3	1.3	.....	10 ck	0	.....	.....	0	0	cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.06	560.3	.....	.....	49.5	9.7	72	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.07	763.8	30.08	764.0	77	25.0	77	e.	.....	.....	.....	5 k	5 ks	e.	e.	0.60	15.2	fair	J. A. Racker.
Buenaventura, U. S. C	29.96	761.0	29.98	761.5	78	25.6	86	sw.	4	1.8	.....	1 ck	1 s	n.	s.	0.01	0.3	clear	J. I. Plume.
Guadeloupe, W. I	30.00	762.0	30.02	762.5	74	23.3	86	e.	.....	.....	.....	7 k	0	.....	.....	0.1	3.	.....	B. Bigar.
Havana, Cuba, W. I	30.28	769.1	30.33	770.4	66	18.9	90	sse.	1.2	0.5	.....	1 cs	2 ks	calm	calm	0	0	fair	A. Van Oaneghem, Ass't
Kingston, Jamaica, W. I	30.12	765.0	30.13	765.3	67.0	19.4	94	calm	0	0	.....	0	2 s	.....	e.	0	0	fair	Robert Johnstone
Navassa, W. I	30.05	763.3	30.13	765.3	77	25.0	61	e.	20	8.9	.....	5 k	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A	30.05	763 3	30.05	763.3	76	24.4	86	calm	.....	.....	2	.....	8 ks	e.	.....	0.150	3 8	cloudy	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mba	29.42	747.3	29.97	761.2	80	26.7	95	ne.	.....	.....	0	7 ck	2 ks	calm	s.	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	75	23.9	92	n.	.....	.....	3	1 ck	1 ks	e.	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I	30.17	766.3	30.20	767.1	74	23.3	78	.....	4.8	2.1	.....	0	1 ks	.....	n.	0	0	fair	Robert Mason.
St. Thomas, W. I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A	30.22	767.6	30.27	768.8	—29.0	—33.9	.....	nw.	10	4.5	.....	0	2 s	.....	nw.	0	0	fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore, India	29.89	759.2	82	27.8	82	w.			1		5							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.97	761.2	63.5	17.5	86	ssw.			1		9	wsw.						showery	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 8° 50', E. 108° 46'	29.90	759.4	79	26.1	90	ne.			2–3		9					3	ne.	showery	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11', E. 18° 26'	29.88	758.9	70	21.1	73	sw.			1–2		3	sw.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.86	758.4	68	20.0	100	calm			0		9							d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey.	30.34	770.6	46	7.8	92	se.			1									d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette																			Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.22	767.6	51.5	10.8	86	ne.			1		10							misty	Capt. S. Long.
H. M. S. Diamond, S. 8° 38', W. 28° 18'	30.00	762.0	80	26.7	86	ese.			4		3	wsw.				3	ese.	d. clouds	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.40	772.1	60	15.6	76	wnw.			2–3		4	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 52° 20', W. 59° 44'	29.39	746.5	52.8	11.6	95	nnw.			2–3		0					2	wnw.	blue sky	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10', E. 39° 11'	29.92	760.0	83	28.3		nne.			1		4							raining	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. G. Robinson.
H. M. S. Espiegle, N. 12° 37', W. 25° 40'	30.03	762.7	72	22.2	80	ne.			4–5		8	ene.				3	nne.	squally	Capt. C. A. P Bridge.
H. M. S. Euryalus, N. 35° 36', E. 16° 49'	30.08	764.0	64	17.8	67	sse.			4							3	sse.		Capt. R. D. King.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41', E. 135° 12'	30.11	764.8	55	12.8	84	calm			0		9							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 34° 10', W. 75° 30'	29.93	760.2	62	16.7	91	ssw.			3		10					3	ssw.	drizzling	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. Jones.
H. M. S. Iris, N. 31° 41', E. 30° 21'	30.22	767.6	62	16.7	71	nnw.			3–4		3	sse.				3	nnw.	d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16', E. 114° 10'	30.12	765.0	61	16.1	77	e.			1–2		8	e.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 15', E. 109° 46'	30.03	762.7	67.3	19.6	93	ene.			3–4		10					2–3	e.	misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 17° 23', E. 63° 45'	30.02	762.5	74	23.3	90	nne.			4		5	ne.				4	ne.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, St. John, Antigua, W. I.	30.08	764.0	78	25.6	82	e.			4		3	e.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, D'Urban, Natal, S. Africa	29.87	758.7	78	25.6	86	n.			3		0					3	ne.	blue sky	Capt. R. Kinahan.
H. M. S. Pelican, S. 40° 26', W. 26° 30'	29.14	740.1	61.5	16.4	100	nnw.			6		10					4	nne.	drizzling	Capt. F. R. Dickens.
H. M. S. Phœnix, N. 19° 58', W. 75° 54'	30.17	766.3	72	22.2	90	n.			3		4					2	n.	d. clouds	Capt. H. H. Grenfel.
H. M. S. Ready, Muscat, Arabia	30.11	764.8	74.1	23.4		n.			1									d. clouds	Capt. W. H Edwards.
H. M. S. Rocket, N. 48° 27', W. 123° 27'	29.91	759.7	44	6.7	?	wsw.			1		8							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	29.96	761.0	79.5	26.4	78	n.			1		4	n.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull, S. 6° 28', E. 39° 20'	29.29	744.0	84	28.9	91	nne.			3		1	n.						blue sky	Comm. M. Byles.
H. M. S. Serapis, N. 36° 58', E. 2° 44'	30.09	764.3	57	13.9	69	ne.			4		10	ne.				6	ne.	d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 18° 11', W. 76° 27'	30.16	766.1	77	25.0	82	ne.			4–5		7							showery	Capt. C. G. Fane.
H. M. S. Triumph, S. 6° 18', W. 81° 13'	29.97	761.2	69	20.6	95	e.			1		7	e.				3	se.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamacia, W I.	30.10	764.5	75	23.9		nne.			1		3							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.03	762.7	68.5	20.3		sw.			1		9	wsw.				3	w.	d. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	30.07	763.7	73.8	23.2	73	ne.			5		6		sw.			3	ne.	d. clouds	C. da Silva Costa.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.31	769.9	61	16.1	88	sse.	3	1.3			8		se	0	0			fair	
N. Yard, Portsmouth, N. H.	30.72	780.3	3	—16.1		calm	0	0			0			0	0			clear	
Naval Hospital Yokohama, Japan	29.94	760.5	44	6.7	72	calm			0		0			0	0			clear	
Adams, Mollendo, Peru	29.75	755.6	60	15.6	95	e.			1		10					light	s.	cloudy	
Alaska, Callao, Peru	29.89	759.2	68	20.0	90	calm			0		5			0	0	sm'h		fair	
Alert, Hong Kong, China*	29.98	761.5	67	19.4	84	e.			2		10		e.			sm'h		hazy	
Alliance, Boston, Mass.	30.63	778.0	14	—10.0	80	nnw.			1		0			0	0			clear	
Ashuelot, Tientsin, China	30.45	773.4	27	— 2.8	100	ene.			1		2		wsw.					clear	
Brooklyn, N. 3° 54′, W. 30° 50′	29.94	760.5	80	26.7	96	ene.	8	3.6			2		ene.	0	0	mod.	ene.	fair	
Colorado, New York, N. Y.	30.75	781.0	13	—10.6	†	ne.	3	1.3			10		ne.	0	0			overcast	
Essex, Norfolk, Va.	30.53	775.4	39	3.9	100	nne.			1		10		ne.					snowing	
Franklin, Norfolk, Va.	30.53	775.4	35	1.7		ene.	2	0.9			10		ene.	0.4	10.			cloudy	
Galena, N. 7° 22′, W. 13° 54′	29.93	760.2	83	28.3	91	nw.			1		8					sm'h		fair	
Independence, N. Yard, Mare I'd, Cal.	30.02	762.5	54	12.2	87	s.	6.0	2.7			10		s.	0.08	2.0			overcast	
Kearsarge, New Orleans, La.	30.28	769.1	61	16.1	94	calm			0		5							fair	
Lackawanna, Valparaiso, Chili†	30.07	763.8	60	15.6	100	ne.			1		10							cloudy	
Lancaster, Villafranca, France	29.97	761.2	55	12.8	74	ene.			0-1		2		e.	0	0			fair	
Michigan, Erie, Pa.	30.18	766.6	24	— 4.4		e.			3		8							fair	
Minnesota, Newport, R. I.	30.71	780.0	13	—10.6		n.	5	2.2			2					sm'h		clear	
Monocacy, Yokohama, Japan	30.15	765.8	48	8.9	70	wnw.			1		5		calm					fair	
Nipsic, Messina, Sicily	29.97	761.2	63	17.2	89	sw			2		8		sw.			sm'h		fair	
Onward, Callao, Peru†	30.07	763.8	67	19.4	94	calm			0		8		n.			long	w.	cloudy	
Palos, Hong Kong, China	30.11	764.8	66	18.9	79	e.			2		10		calm					rainy	
Passaic, Washington, D. C.	30.65	778.5	19	— 7.2		ne.			3		10							snowing	
Pensacola, Callao, Peru	29.98	761.5	69	20.6	95	calm	0	0			10			0	0	sm'h		cloudy	
Powhatan, Boston, Mass.	30.74	780.8	4	—15.6	90	wnw.			2		2							hazy	
Quinnebaug, N. 37° 35′, E. 10° 25′	29.92	760.0	60	15.6	71	nw.			4		5		nw.			long	ese.	fair	
Ranger, N. 18° 22′, W. 103° 33′*	29.98	761.5	73	22.8	85	calm			0		2		wsw.	0	0	sm'h		clear	
Richmond, Apia, Samoa Islands*	29.76	755.9	78	25.6	91	calm			0		2			0.05	1.3			clear	
Shenandoah, Montevideo, Uruguay*	30.14	765.5	64	17.8	73	nw.			0-1		1					sm'h		clear	
St. Louis, League Island, Pa.	30.88	784.3	16	— 8.9	67	ne.	4	1.8			10							snowing	
Swatara, Yokohama, Japan†	30.04	763.0	48	8.9	78	nnw.			2		0					sm'h		foggy	
Tennessee, New York, N. Y.	30.70	779.8	15	— 9.4		nne.	7	3.1			10			0	0			hazy	
Vandalia, N. 15° 47′, W. 61° 40′	30.09	764.3	78	25.6	82	e.			4		2		se.					fair	
Wabash, Boston, Mass.	30.73	780.5	3	—16.1		nw.	1	0.4			2			0	0			hazy	
Wachusetts, Sitka, Alaska	29.49	749.0	36	2.2	100	calm			0		10		ne.	0	0			overcast	
Wyoming, Port Royal, S. C.	30.45	773.4	41	5.0	91	nnw.	3	1.3			2		calm	0	0			clear	
Yantic, Aux Cayes, Hayti, W.I*	30.08	764.0	74	23.3	81	n.			2		2							clear	

MERCHANT-MARINE SERIES.

Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Nova Scotian, Capt. W. M. Richardson, N. 38° 16′, W. 71° 48′	30.51	774.9	37	2.8	.....	e.	2	.....	10	.....	wsw; se.	.....	.....	sm'h	.....	sleeting	.....
S. S. Polynesian, Capt. Robt. Brown, N. 47° 48′, W. 49° 25′*	29.84	757.8	23	—5.0	.....	w.	6	.....	9	.....	wsw.	1 h'r	hail	mod.	wnw.	cloudy	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. N. 51° 15′, W. 11° 48′*	29.80	756.9	54	12.2	.....	w.	6	.....	5	.....	w.	.....	.....	r'gh	w.	fair	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, Off Old Head, Ireland	29.70	754.4	52	11.1	93	wsw.	5	.....	5?	.....	w.	.....	.....	mod.	w.	clear?	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	29.53	750.0	49	9.4	85	w.	4	.....	8	.....	nw.	light	light	.....	.....	cloudy	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, N. 47° 13′, W. 44° 12′*†	29.92	760.0	30	—1.1	89	wnw.	7	.....	10	.....	wnw.	.....	.....	mod.	wnw.	squally	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 39° —′, W. 70° —′†	30.56	776.2	36	2.2	80	ene.	5	.....	3	.....	ene.	.....	.....	.....	.....	d. clouds	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Brown.
Utopia, Capt. A. McRitchie, N. 40° 21′, W. 69° 54′*†	30.40	772.1	33	0.6	79	e.	2	.....	9	.....	e.	0	0	sm'h	.....	cloudy	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 38° 08′, W. 74° —*†	30.55	776.0	37	2.8	90	e.	7	.....	10	.....	.....	10 h'vy	hour snow	short	ene.	heavy snow	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 19° 37′, W. 74° 55′..*	30.24	768.1	78	25.6	.....	ne.	6	.....	5	.....	ene.	0	0	sm'h	nw.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladiom	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 20° 00′, W. 74° 16′	.....	.....	.....	.....	.....	ne.	3	.....	.....	.....	.....	0	0	mod.	ne.	.....	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse, N. 18° —′, W. 73° —′	29.74	755.4	.....	.....	.....	e.	3	.....	2	.....	ne.	0	0	sm'h	e.	clear	Fisher & Welden.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
Baroda, Capt. C. J. Russel	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British Merchant, Capt. E. J. Molony S. 15° 07′, E. 91° 04′	29.82	757.4	79	26.1	90	ne.	1–2	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
Caldew, Capt. W. Peterson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Cipero, Capt. W. N. Lailey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. City of Agra, Capt. Thos. Young, S. 27° 05′, W. 17° 47′	30.16	766.1	78.7	25.9	.....	ne.	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
Bk. Glaramara, Capt. R. Morton, N. 2° 30′, W. 28° 59′	30.00	762.0	79.5	26.4	78	nne.	2	.....	5	.....	.....	.....	.....	...	.....	d. clouds	.....
Glencairn, Capt. R. S. Tannock, S. 30° 34′, W. 24° 20′	29.98	761.5	78	25.6	82	nnw.	5	.....	6	.....	.....	.....	.....	.....	.....	d clouds	.....
S. S. Gordon Castle, Capt. W. Waring	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. G. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery, N. 3° 50, W. 29° 17′	29.99	761.7	79.5	26.4	82	nne.	3	.....	9	.....	.....	.....	.....	.....	.....	raining	.....
S. Lochee, Capt. J. Raeburn, R. N. R., N. 6° 00′, E. 87° 10′	29.93	760.2	82.5	28.1	83	nne.	2	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, N. 4° 32′, W. 25° 34′	29.96	761.0	81	27.2	82	nne.	3	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Mertola, Capt. E. W. Turner, N. 37° 06′, W. 7° 16′	30.24	768.1	52.0	11.1	86	nnw.	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
Minho, Capt. J. Lawson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Naiad, Capt. John Smith. S. 28° 12′, W. 22° 22	30.10	764.5	71.0	21.7	95	nnw.	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 35° 14′, W. 51° 40′	30.01	762.2	67.2	19.6	74	ssw.	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Queen of Cambria, Capt. M. Parry. S. 40° 19′, W. 31° 41′	29.00	736.6	61	16.1	77	nnw.	6	.....	8	.....	.....	.....	.....	.....	.....	squally	.....
S. S. Strathleven, Capt. C. W. Pearson N. 36° 45′, W. 71° 45′	30.50	774.7	47.5	8.6	92	nne.	4	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
S. Superb, Capt. Berridge S. 3° 11′, W. 23° 36′	29.98	761.5	80	26.7	95	se.	3	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 49° 10′, W. 36° 35′*†	29.80	756.9	40	4.4	.....	ne.	6	.....	10	.....	w.	4 h'r	4 h'r	h'vy	wnw.	threatening	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO.																	
J. Birmingham, Agent, San Francisco.																	
S. S. Newbern, Capt. E. Y. Rogers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Crowell & Henry.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains, N. 40° 28′, W. 66° 46′*	30.62	777.7	30	—1.1	.....	n.	4	.....	8	.....	nne.	0	0	sm'h	.....	fair	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Behian, Agent, New York.																	
S. S. Canada, Capt. Frangeul, N. 40° 34′, W. 74° 14′	30.58	770.7	23.0	—5.0	.....	ne.	2	.....	8	.....	ne.	0	0	sm'h	.....	.....	.....
S. S. St. Laurent, Capt. A. Servan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York.																	
S. S. Gellert, Capt. Kuhlewein	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. Froehlich, 3d Off.
S. S. Silesia, Capt. A. Albers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. Jorgensen.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, N. 44° 00′, W. 12° —′*†	30.42	772.7	54	12.2	.....	wnw.	1	.....	5	.....	w.	0	0	long	nw.	fair	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley N. 40° 27′, W. 70° 30′*	30.56	775.2				ene.	1		10		ene.	0	0	light	ne.	cloudy	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker																	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips, N. 38° 00′, W. 74° 10′†	30.65	778.5	38	3.3		e.	3		10		ese.	6 h'r	rain snow	sm'h		raining	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Allan, Capt. J. W. Sansom, N. 19° 00′, W. 74° 25′†	30.15	765.8	79	26.1		nne.	5								n.		
S. S. Bothnia, Capt. W. McMickan																	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Timmer-																	
S. S. City of Washington, Capt. J. W. Rey- N. 22° 45′, W. 85° 18′*†	30.30	769.6	80	26.7		e.	3								w.	clear	
S. S. Maas, Capt. T. H. Bonjer																	
S. S. New York, Capt. R. B. Quick, N. 30° 45′, W. 79° 30′†*	30.52	775.2	70	21.1		var.	1							sm'h		clear	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier, N. 45° 50′, W. 43° 52′*	29.97	761.2	34	1.1		wnw.	6							high	wnw.	snow&hail	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander.																	G. H. Lose, 3d Off.
S. S. Leipzic, Capt. F. Pfeiffer, N. 43° 06′, W. 51° 48′	30.33	770.4	31	—0.6	79	nw.	5		10		nw.	3 h'r	3 h'r	mod.	nw.	cloudy	Cuppers & Walter
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	29.90	759.4	35.5	1.9		sse.	5–6		7		s.	0	0			cloudy	
S. S. Mosel, Capt. J. Hesse																	J. Hesse.
S. S. Neckar, Capt. R. Busslus																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. Undeutsch																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 40° 06′, W. 155° 32′†	29.93	760.2	55	12.8	80	s.	4		2		s.	0	0	mod.	w.	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Hong Kong, China*†	30.29	769.4	67	19.4	90	ese.	2		5?		se.					clear.?	
S. S. Oceanic, Capt. J. Metcalf, N. 30° 27′, E. 169° 25′*	30.18	766.6	64	17.8	63	wnw.	2		0					4	nw.	fine	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	30.10	764.5				calm	0		0							clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Savannah, Georgia†	30.22	767.6	70	21.1	75	calm	0		0			0	0			clear	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco*																	
S. S. Mississippi, Capt. E. W. Holmes,																	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d Off.
S. S. Columbia, Capt. F. Bolles																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 41° 31′, W. 124° 15′†	30.11	764.8	55	12.8	80	ssw.	4		10		ssw.					misty	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, San Francisco, Cal†	30.21	767.3	55	12.8	93	sw.	1		10		s.					foggy	
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†	29.73	755.1	41	5.0		se.	3		7		se.	0 h'r	0 h'r	sm'h		cloudy	
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	30.22	767.6	57	13.9	93	se.	1		fg.							foggy	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 37° 12′, W. 122° 25′†	30.22	767.6	54	12.2	93	calm.	0		fg		w.			sm'h	w.	foggy	G. H. Harisson.
S. S. Senator. Capt. Thos. Wallace, N. 35° 36′, W. 121° 20′†	30.28	769.1	50	13.3	94	nnw.	2		10		nw.	0	0	mod.	nw.	foggy	T. Wallace.
S. S. State of California, Capt. G. Dobney, San Francisco, Cal†	30.21	767.3	55	12.8	93	sw.	2		10		s.	0	0			cloudy	
S. S. Victoria, Capt. H. M. Hayward, Nanaimo, Vancouvers Id†	29.96	761.0	38	3.3	90	e.	2		0					sm'h		clear	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. ——, S. 28° 55′, W. 178° 48′	29.40	746.7	68	20.0	90	sse.	0		10		s.			very hv'y	se.		A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	30.25	768.3	71	21.7	95	se.	2		8			0	0			overcast	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, Hong Kong, China†	30.35	770.9	64	17.8	73	ne.	2		0			0	0			clear	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn,																	E. Le Saik.
S. S. City of Tokio, Com. J. Maury,																	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 15° 01′, W. 93° 01′†	29.96	751.0	78	25.6	90	ne.	3		3		calm	0	0	small	con.	clear	
S. S. Grenada, Capt. M. Connolly,																	
S. S. South Carolina, Capt. W. J. Russell, N. 7° 10′, W. 86° 21′*†	29.88	758.9	80	26.7	86	n.	2		2		n.	0	0	light	sw.	fair	
S. S. Zealandia, Capt. H. Webber, S. 17° 59′, W. 172° 09′	29.86	758.4	80	26.7	95	w.	2		5?		w.			mod.	sw.	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co.																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke N. 28° 2c′, W. 66° 00′						ne.	3		2			0	0	long	n.	fair	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, N. 46° 38′, W. 44° 48′*	30.03	762.7	29	—1.7		wnw.	6		8		wnw.	0.3	8.	high	wnw.	snowy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon,																	M. Eymond.
S. S. Waesland, Capt. H. Nickels, Antwerp, Belgium*	29.60	751.8	48	8.9		ssw.	6		10		ssw.	1 h'r	driz.			cloudy	
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis																	
THINGVALLA LINE																	
Funch, Edye & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub N. 44° 01′, W. 48° 53′†	30.25	768.3	31.1	—0.5		wnw.	3		5?		wnw.	9 h'r	rain; snow	long r'gh	wnw.	clear.?	J. T. Ulberling
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters																	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent.																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry,																	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 46° 02′, W. 47° 40′*†	29.84	757.9	28	—2.2	77	nw.	5		8		nw.	20 h'r	mod.	high	wnw.	cloudy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 45° 26′, W. 37° 40′0′†	29.90	759.4	55	12.8	87	wnw.	6		8		nw.	sh'rs	shr's	r'gh	w.	squally	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer.
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 30° 19′, W. 66° 53′†	30.63	778.0	65	18.3	63	ne.	3		10 k		ne.	0	0	mod.	n.	cloudy	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona, N. 35° 17′, W. 31° 01′	30.56	776.3	64.9	18.3		sw.	1	0	7 8					sm'h		cloudy	
Bk Alpha, Capt. Ole Grönn, Pozzuola, Italy †.	29.92	760.0	60	15.6		s.	7		10		s.	2 h'r	h'vy			raining	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis.																	L. L. Lewis.
Bk. Dom Pedroll, Capt C. E. Coffin,																	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	29.52	749.8				wnw.	6		5		wnw.	6 h'r	6 h'r			fair	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 21° 21′, W. 43° 54′†	30.30	769.6				e.	4		2		ese.	light	sh'rs	r'gh	ne.		
S. Enoch Train, Capt. H. D. Chapman. N. 43° 30′, W. 34° 15′*	29.75	755.6				ssw.	6		10		sw.	shr's	shr's	h'vy	sw.	squally	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 37° 33′, W. 59° 26′*	30.40	772.1				wnw.	6–7		8		nw.	rain	rain	mod.	wsw.	heavy rain	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.59	777.0	28	—2.2		nne.	3		10		nne.			sm'h		snowing	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 31° 49′, W. 46° 12′†	30.16	766.1	69	20.6		ne.	1		1		n.	0	0	h'vy	s.	clear	G. D. Morrison.
Bk Freya, Capt. Blaouw, Limerick, Ireland			43	6.1		wsw.	6		5?		wsw.	2 h'r	light			cloudy.?	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.07	738.4				sse.	3		10		sse.	9 hr	9 hr				
Bk. Geo. Booth, Capt. D. Williams																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 44° 44′, W. 29° 52′*	30.05	763.2	59.7	15.4	93	sw.	8		10		sw.	0	0	h'vy	sw.	stormy	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 2° 21′, W. 32° 41′*	29.79	756.7				se.	3		3		se.	3 hr	h'v'y	sm'h		fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 37° 56′, W. 30° 52′*†	30.60	777.2				sw.	3				sw.	3 h'r	3 h'r	long	w.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	29.98	761.5	53	11.7	66	ne.	2		8		sw.					cloudy	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly																	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen. N. 47° 14′, W. 14° 20′†	30.17	766.3	57	13.9		wsw.	4		10		wsw.	3 h'r	light	h'vy	w.	rainy	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 35° 37′, W. 41° 00′*	30.36	771.1	66.2	19.0	93	s.	6		3		s.			r'gh	se.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.31	769.9	59	15.0	76	nne.	5		0			0	0			clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, N. 0° 50′, W. 30° 19′*†	30.10	764.5				e.	4		3		ese.			sli't	n. s.		I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton																	N. P. Dutton.

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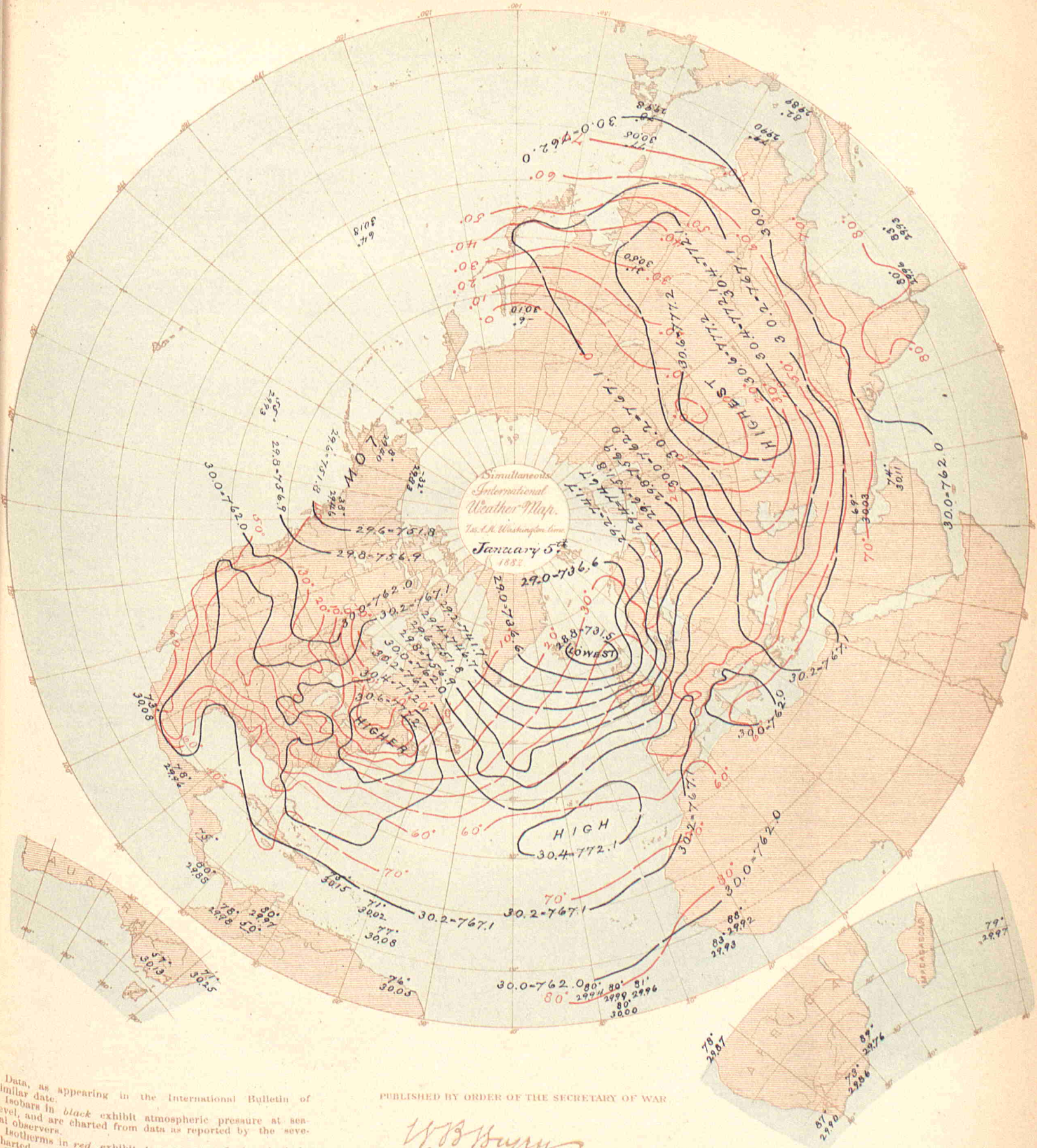
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

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Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 6, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours																			
Algiers			30.28	769.2	59.0	15.0	87	w.			2		3			0	0	pretty fair	Moiroud.
La Calle			30.24	768.0	55.8	13.2	85	nne.			6		10			0.091	2.3	covered	Nicolas.
Tunis			30.08	764.0	60.4	15.8	75	e.			4		4			0	0	cloudy	Foufrède.
Sfax			30.07	763.8															Jacques.
Saida																			Gau.
Tebessa			30.21	767.3	40.3	4.6	100	n.			3		0			0.173	4.4	cloudy	Perès.
Geriville			30.12	765.1	47.5	8.6	87	e.			3		9			inap.	inap.	covered	Derchô.
Laghouat					43.9	6.6	74	n.			1		10			0.105	4.2	covered	Lonchamp.
Biskra			30.15	765.7	42.8	6.0	85	n.			4		4			0	0	cloudy	Herbin.
			30.14	765.5	55.8	13.2	87	se.			1		10			0.008	0.2	covered	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.05	763.5	30.15	765.8	55.0	12.8	70	se.	4	1.8			0			0	0.	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.63	752.5	30.20	767.0	39.9	4.4	94	s.			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.25	743.0	30.04	763.0	40.3	4.6	84	w.	3.1	1.4			6			0	0		Dr. Wierzbiski.
Eperies	29.19	741.4	30.11	764.7	35.2	1.8	93	s.			2		10			0.094	2.4		Julius Mikolik.
Gratz	28.89	733.7	30.19	766.9	39.1	2.3	89	s.			1		7			0	0		Andreas Rospini.
Hermannstadt	28.72	729.6	30.22	767.5	35.2	1.8	71	w.			1		4			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.75	730.2	30.13	765.4	39.7	4.3	84	ne.			1		9			0	0	covered	The Staff.
Lemberg	28.99	736.3	30.00	762.1	38.5	3.6	82	s.			1		5			0	0		Dr. T. Stanecki.
Pola	30.07	763.8	30.19	766.7	52.0	11.6	91	ssw.			1		9			0.098	2.5		I. R. Hydrographic Office
Szathmar	29.69	751.2	30.10	766.1	38.1	3.4	92	e.			1		10			0.020	0.5		Joseph Midlinszky, S. J.
Szegedin	29.89	759.2	30.18	766.6	38.7	3.7	92	calm			0		10			0	0		Karl Stancel.
Trieste	30.10	764.4	30.20	767.0	48.9	9.4	85	e.			1		10			0	0		Rieder.
Vienna	29.42	747.3	30.16	765.1	39.4	4.1	85	calm			0		7			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	28.52	724.4	28.62	726.9	43.5	6.4	58	ssw.	46	20.6			6			0.020	0.5	squally	W. Boswell.
Armagh, Observatory	29.04	737.6	29.29	744.0	43.2	6.2	68	wsw.	31	13.9			0					squally	S. Ball.
Bidston, Liverpool Obs'y			29.43	747.5	47.8	8.8	64	wsw.	55	24.6			1					blue sky	John Hartnup.
Bolton, Sharples	28.88	733.5	29.41	747.0	45.5	7.5	87	wsw.	36	16.1			1					blue sky	Thomas Mackereth, A.S.
Bradford, Yorkshire	28.98	736.1	29.37	746.0	46.4	8.0	69	sw.			5		4			0.07	1.8	d. clouds	J. McLandsborough, F.R.
Bridgetown, Barbadoes	29.97	761.2	30.00	762.0	79.0	26.1	70	ne.			2		2					d. clouds	Pvt. J. Surgenor.
Cardington			29.53	750.0	52.6	11.4	91	sw.			7		10					drizzling	John McLaren.
Chatham, School M. E.	29.55	750.6	29.68	753.9	51.3	10.7	94	sw.			2		10			blank	blank	gloomy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.59	751.6	29.82	757.4	49.0	9.4	89	w.					10					foggy	The Staff.
Fort Napier, Natal	27.31	693.7	29.53	750.0	83.0	28.3	65	ne.			4		2					blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.72	754.9	29.95	760.7	87.0	30.6	72	sw.			1		5					d. clouds	Sergt. John Robinson.
Galway, Queen's College			29.42	747.3	50	10.0		wnw.			7		10			0.35	8.9	raining	J. O'Donaghue.
Gibraltar, Mediterranean	30.21	767.3	30.26	768.6	62.0	16.7	74	sw.			1		0					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	28.67	728.2	28.88	733.5	45.0	7.2	95	wsw.			10		10					squally	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.48	748.8	29.65	753.1	52.8	11.6	84	sw.			6		10					drizzling	The Staff.
Guernsey	29.61	752.1	29.91	759.7	51.5	10.8	93	wsw.			3		10					showery	A. Collenette, F. M. S.
Kew, Observatory	29.63	752.6	29.66	753.4	52.3	11.3	88	sw.	29	13.0			10					squally	The Staff.
Leicester, Museum	29.27	743.4	29.53	750.0	48.5	9.2	60	nw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	29.95	760.7	30.02	762.5	63.8	17.7	85	ne.			3		9					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.32	770.1	30.37	771.4	71.0	21.7	67	ne.			3		8					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.07	738.4	29.59	751.6	50.3	10.2	87	ssw.			4		7					squally	John Mac Email.
Oxford, Radcliffe Obs'y	29.38	746.2	29.60	751.8	52.4	11.3	90	ssw.			8		10					drizzling	The Staff.
Plymouth	29.72	754.9	29.80	756.9	50.0	10.0	94	sw.			5		10					drizzling	John Merrifield.
Sandwick Manse, Orkneys			28.18	715.8	41.3	5.2	89	s.	45	20.1			5					d. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.14	765.5	30.20	767.1	46.6	8.1	84	s.			1		9					gloomy	W. H. Lyne
Sheffield	29.17	740.9	29.45	748.0	48.0	8.9	74	sw.			6		1			0.06	1.5	blue sky	W. F. Cooper.
Silloth Rectory	29.13	739.9	29.16	740.7	45.3	7.4	65	wsw.			7		5			0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.38	746.2	46.0	7.8	76	w.	41	18.3			0					squally	Rev. S. J. Perry.
Stratfield Turgiss	29.47	748.5	29.68	753.9	52.5	11.4	89	w.			3-4		10					raining	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.79	756.7	29.84	757.9	54	12.2	86	w.			6		10					raining	W. Newcombe.
Valencia, Observatory	29.64	752.8	29.67	753.6	46.5	8.1	62	w.	40	17.9			8					squally	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.48	774.2	30.53	775.4	10	-12.2	98	sw.	3	1.3		5 c	2 s			0	0	fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.43	772.9	30.50	774.7	-8	-22.2	100	sw.	2	0.9		0	0			0	0	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.38	771.6	30.40	772.1	3	-16.1	87	sw.	15	6.7		2 cs	5 s	calm	calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	28.96	735.6	29.85	758.2	12	-11.1	100	calm	0	0		fg.	fg.			0.050	1.3	dense fog	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.45	773.4	30.59	777.0	13	-10.6	96	w.	3	1.3		2 k	0	w.		0	0	fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.95	760.7	30.31	769.9	17	-8.3	96	ne.	6	2.7		10 s		s.		0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.19	766.8	30.42	772.7	8	-13.3	80	e.	6	2.7			10 s			0	0	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.48	748.8	30.23	767.8	17	-8.3	83	e.	11	4.9		10 n		se.		0	0	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.44	747.8	30.18	766.6	24	-4.4	100	calm	0	0		10 n				inap.	inap.	threatening	H. Morgan.
Port Stanley, Ontario	29.48	748.8	30.16	766.1	29	-1.7	92	e.	20	8.9		10 n		e.		inap.	inap.	cloudy	M. Payne.
Quebec, Quebec*	29.13	739.9	30.49	774.4	-1	-18.3	68	w.			1	0	5 s		w.	0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.81	757.2	30.32	770.1	5	-15.0	87	se.	6	2.7			10 n			0	0	threatening	W. H. McIntyre.
Saugeen, Ontario*	29.38	746.2	30.14	765.5	21	-6.1	96	se.	6	2.7			10 ks			0	0	cloudy	K. Stewart.
St. Andrews, N. B.	30.51	774.9	30.56	776.2	5	-15.0	93	calm	0	0		0	hz.			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	30.48	774.2	30.54	775.7	15	-9.4	91	sw.	16	7.2		8 c	0			0	0	fair	T. C. Hill, C. E.
Toronto, Ontario*	29.79	756.7	30.20	767.1	23	-5.0	88	ne.	5	2.2			10 ks		se.	0.01	0.3	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	30.48	774.2	30.56	776.2	18	-7.8	76	e.	2	0.9			10 k		w.	0.01	0.3	cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.23	767.8	30.50	774.7	21	-6.1		w.				0	0			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	29.83	757.7	29.86	758.4	68.0	20.0	71	w.	14.0	6.3		0	9 ks			0	0	stormy	John Duthie.
Cape Town, C. G. H. Obs'y	29.97	761.2	30.01	762.2	73.0	22.8	54	w.	12	5.4		2	6			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Hankow	30.36	771.1	30.65	778.5	32.8	0.4	95	nnw.			4		10			0.81	20.6	snowing	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.13	765.4	30.16	766.1	46.4	8.0	97	ene.	6.9	3.1			10 n			0.311	7.9	raining	M. Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.48	748.7	29.52	749.9	41.2	5.2	90	wsw.	18	8			10						Oversergent Fischer.
Fanöe	29.30	744.3	29.32	744.8	43.2	6.2	99	ssw.			6		10					raining	Overloerer Lauridsen.
Godthaab, Greenland	29.29	744.0	29.34	745.1	5.7	—14.6	87	nw.			2		9						S. Kleinschmidt.
Stykkisholm, Iceland	28.65	727.7	28.69	728.8	28.8	— 1.8		e.			2		8						A. O. Thorlacius.
Thorshavn	28.30	718.9	28.34	719.8	36.7	2.6	87	w.	11	5			10						Overloerer Bergh.
Vestervig	29.09	738.9	29.18	741.2	42.3	5.7	96	s.			7		10					raining	Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France. Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.64	752.9	30.30	769.7	51.8	11	80	s.			1	0	8 n			0	0	very cloudy	M. Labroue, Director.
Alençon, Normal School	29.52	749.9	30.08	763.9	51.4	10.8	95	sw.			2		n		sw.	0.047	1.2		M. Nicot, Director.
Arras, Engineer School	29.65	753.2	29.91	759.8	51.3	10.7	90	sw.			4		k		e.	0.020	0.5		M. Klein, Commandant.
Avignon, Normal School	30.12	765.0	30.20	767.0	50.4	10.2	62	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.58	751.2	30.14	765.6	46.4	8.0	93	s.			1		10			0.035	0.9	covered.	M. Saillard, Director.
Beauvais, Normal School	29.70	754.3	29.96	761.0	51.4	10.8	88	sw.			2		10		wsw.	0.020	0.5	covered	M. Frère Eugène Marie.
Besançon, Normal School			30.19	766.8	45.3	7.4	94	s.			1		n		s.	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.99	761.7	30.25	768.4	52.7	11.5	97	wsw.			1		10		wsw.	0.028	0.7	covered	M. Rayet, Director.
Bourges, Normal School	29.60	751.9	30.10	766.1	50.0	10	97	sw.			1		n		sw.	0.04	1.		M. Postel, Director.
Brest, Naval Observatory	29.78	756.5	30.03	762.7	53.2	11.8	95	sw.			3		10		sw.	0.059	1.5	rain & fog	M. de Kennaree, Dir.
Caen, Normal School	29.88	759.0	29.95	760.8	54.3	12.4	83	ssw.			3		8		sw.	0	0	very cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.60	753.4	29.97	761.2	48.6	9.2	94	sse.			3		10			0.039	1.0	covered	M. Jadot, Director.
Charleville, Normal School	29.45	747.9	29.96	761.0	47.1	8.4	78	sw.			3		10			0.16	4.	raining	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.83	732.2	30.19	766.9	52.9	11.6	67	e.			1		5		w.	0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.35	745.5	30.22	767.6	48.2	9	86	sw.			2		fg		ene.			foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.21	741.9	30.09	764.3	45.5	7.5	97	sw.			3		5 kn	sw.	sw.	0.035	0.9	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.63	701.9	30.23	767.9	43.5	6.4	65	s.			1	0	0			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.04	737.6	30.19	766.7	51.6	10.9	56	nw.			2		2		sw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.46	748.3	30.26	768.5	42.3	5.7	86	ssw.			1	0	2 s			0	0	slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.01	726.7	30.21	767.3	44.6	7	91	sw.			2		10			0.012	0.3	covered	M. Rivoire, Director.
Lamballe, Normal School	29.76	755.9	30.04	762.9	54.5	12.5	78	sw.			1		5		sw.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.73	755.2	30.30	769.6	59.0	15	68	sw.			1	0	1 s			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.02	762.4	30.12	765.0	53.6	12.0	100	sw.			6		10			0.079	2.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.17	740.8	30.26	768.5	42.3	5.7	77	ene.			1	0	5 n		w.	0	0	¼ covered	M. André, Director.
Mans, Normal School	29.76	755.8	30.07	763.7	50.7	10.4	96	wsw.			1		8		w.	0.051	1.3	very cloudy	M. Piboen, Director.
Marseille, Observatory	29.88	759.0	30.15	765.9	55.6	13.1	60	w.			0.1		4		nw.	0	0		M. Stephan, Director.
Montlouis Pinstituteur	24.95	633.7	29.79	756.7	41.0	5.0	79	nw.	3.8	1.7			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.07	763.8	30.18	766.0	53.8	12.1	72	nnw.			2		2		se.	0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.31	744.4	30.11	764.8	43.5	6.4	88	ssw.			1		10 kn			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.03	762.7	30.19	766.8	53.4	11.9	93	sw.			2-3		9n; kn	wsw.	sw.	0.134	3.4		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.11	764.7	30.22	767.5	57.9	14.4	61	n.	13.0	5.8			3			0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.34	542.0			33.8	1.0		nne.			1		1		nne.	0.079	2.0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School					50.0	10.0	74									0	0		M. Tallieu.
Puy de Dôme Obs'y, Summit	25.25	641.3			33.6	0.9	100	w.			4		10			0.252	6.4	foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.19	766.9	30.22	767.7	53.2	11.8	100	ssw.			1		10			0.031	0.8	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.93	760.3	30.15	765.8	53.6	12	93	w.			1		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	28.05	712.4	30.26	768.7	40.5	4.7	93	se.			1		10			0.04	1.	light rain	M. Colrat, Director.
Rouen, Normal School	29.92	759.9	29.97	761.1	53.2	11.8	85	wsw.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	29.79	756.6	29.95	760.6	52.7	11.5	80	sw.			2		5		nw.	0.028	0.7	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.86	758.4	30.02	762.6	50.7	10.4	93	sw.			3		10		sw.	0.008	0.2	covered	M. Renou, Director.
Toulouse, Observatory	29.60	751.9	30.33	770.4	48.6	9.2	83	w.			1		8		nw.	0	0	very cloudy.	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.91	759.7	30.01	762.2	50.4	10.2	95	sw.			3					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.17	740.8	30.02	762.5	42.8	6.0	80	sw.			2	0	8 k;s		wsw.	0.051	1.3		Prof. Dr. Hoh.
Berlin	29.61	752.1	29.79	756.6	44.6	7.0	78	sw.			4		9			0	0		Prof. Dr. Arndt.
Breslau	29.45	747.9	29.98	761.4	42.8	6.0	76	sw.			2		8			0.008	0.2		Royal University Obs'y.
Carlsruhe	29.62	752.3	30.06	763.6	48.6	9.2	74	sw.			5		10	sw.		0.055	1.4		Albert Senz.
Cassel	29.11	739.5	29.83	757.6	40.3	4.6	97	s.			6		10	s.		0	0		Dr. H. Möhl.
Frankfort on the Main	29.62	752.3	29.99	761.8	42.0	5.9	90	sw.			2		10			0.004	0.1		Physical Society.
Friedrichshafen	28.70	729.0	30.18	766.5	42.8	6.0	79	s.			1		5	ne.		0	0		Wilhelm, Chief Tel.
Hamburg	29.57	751.0	29.66	753.4	45.7	7.6	90	sw.			6		10			0.307	7.8		E. Preller.
Kiel	29.53	750.0	29.54	750.4	45.7	7.6	93	sw.			3		10			0.488	12.4		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.48	748.9	29.91	759.8	43.2	6.2	81	ssw.			2		10	sw.		0.004	0.1	sprinkling	H. Leppig, Asst.
Magdeburg	29.62	752.3	29.81	757.2	45.3	7.4	83	s.			4		10 ks		w.	0.004	0.1		Dr. Assmann.
Memel	29.46	748.2	29.50	749.3	40.6	4.8	87	w.			8		10 ks						Issermann.
Munich	28.26	717.8	30.13	765.3	44.1	6.7	71	w.			2		3	nw.		0.020	0.5		Central Station.
Neufahrwasser	29.67	753.6	29.69	754.0	44.1	6.7	70	wnw.			3		3			0.063	1.6		A. Lothes.
Neustadt, Palatinate	29.48	748.9	30.01	762.2	48.2	9.0	77	ssw.			4		8	s.		0	0		Dicknether.
Stuttgart	29.09	738.8	30.00	762.0	45.0	7.2	90	sw.			1		5	w.		0	0		Prof. Dr. Schoder.
Wustrow	29.60	751.7	29.62	752.3	44.8	7.1	98	s.			5	0	8 s			0.138	3.5		Profs. Brandes & Reimer
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.84	758.0	30.24	768.0	56.7	13.7		n.			1.0		4			0.024	0.6	misty	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.00	761.9	30.05	763.2	75.1	23.9	43	ne.					0			0	0	blue sky	
Deesa	29.53	750.0	30.01	762.3	73.8	23.2	72	nne.	8.6	3.8			0			0	0	blue sky	
Bombay	29.90	759.5	29.94	760.5	77.8	25.4	58	nnw.	15	6.7			0			0	0	blue sky	
Poona, Yarrowda	28.04	712.2	29.88	758.8	85.4	29.7	32	w.	15	6.7			1	w		0	0	d. clouds	
Belgaum	27.36	695.0	29.87	758.7	82.8	28.2	46	calm					0			0	0	blue sky	
Lahore	29.28	743.7	30.06	763.4	62.6	17.0	42	calm	1.0	0.4			0			0	0	blue sky	
Roorkee	29.07	738.3	30.00	762.1	63.2	17.3	39	nw.	2.6	1.2			0			0	0		
Agra	29.47	748.5	30.06	763.5	64.3	17.9	41	nw.	4.2	1.9			0			0	0		
Nagpur	28.91	734.4	29.96	761.1	77.7	25.4	38	se.	3.2	1.4			0			0	0	blue sky	
Jubbulpore	28.64	727.6	30.04	763.0	67.2	19.6	34	ne.	1.4	0.6			0			0	0	blue sky	
Lucknow	29.64	752.8	30.03	762.7	66.3	19.1	43	sw.	5.6	2.5			0			0	0	blue sky	
Allahabad	29.70	754.4	30.03	762.7	62.0	16.7	66	calm	1.8	0.8			0			0	0	blue sky	
Patna	29.81	757.1	30.00	762.0	63.8	17.7	50	w.	4.0	1.8			0			0	0	blue sky	
Hazaribagh	27.94	709.6	30.02	762.4	62.6	17.0	49	nw.	7.6	3.4			0			0	0	blue sky	
Cuttack	29.89	759.3	29.98	761.4	77.5	25.3	72	calm	0.6	0.3			0			0	0	blue sky	
Calcutta, Alipore	29.94	760.5	29.96	761.0	71.4	21.9	58						0			0.01	0.3	blue sky	
Dhubri																			
Chittagong	29.88	759.0	29.98	761.4	72.4	22.4	83	calm	2.6	1.2			3			0	0	blue sky	
Sibsagar	29.69	754.0	30.04	763.0	58.4	14.7	94	ssw.	3.8	1.7			10	sw.	sw.	0.16	4.1	d. clouds	
Jeypore	28.58	725.9	30.07	763.8	66.2	19.0	36	nne.	4.2	1.9			0			0	0	blue sky	
Zanzibar, Africa	29.84	757.9			86.1	30.1	65	ne.				c	4 fk		ne.	0.01	0.3	d. clouds	
Trichinopoly	29.68	753.9			84.2	29.0	59	calm	0	0			0			0	0	blue sky	
Bellary	28.41	721.6			87.0	30.6	49	se.	2.9	1.3		2 k	6	s.		0	0	d. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.77	756.1	30.19	766.8	51.1	10.6	60	calm	0	0			6			0	0		Prof. Giovanni Clodig.
Milan	29.68	753.9	30.22	767.6	42.8	6.0	91	sw.	3.1	1.4			2			0	0		Prof. Schiaparelli.
Padua	30.08	764.0	30.19	766.9	47.5	8.6	73	calm	0	0			2			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.27	743.4	30.22	767.6	36.1	2.3	89	nne.	0.7	0.3			4			0	0		Prof. P. F. Denza.
Genoa	29.98	761.5	30.18	766.5	56.3	13.5	70	calm	0	0			2			0	0		Prof. G. M. Garibaldi.
Mondovi	28.24	717.4	30.24	768.0	41.9	5.5	59	w.			2		0			0.717	18.2		Prof. D. C. Bruno.
Pesaro	30.15	765.8	30.20	767.1	50.0	10.0	62	n.	3.8	1.7			8			0	0		Prof. Luigi Guidi.
Florence	29.94	760.4	30.20	767.1	54.1	12.3	71	e.			2		10			0	0		Prof. Costantino Pitter.
Leghorn	30.07	763.8	30.16	766.0	53.6	12.0	63	ne.	2.5	1.1			6			0	0		Prof. P. Monte.
Rome	29.97	761.1	30.14	765.6	57.6	14.2	80	n.	0.7	0.3			10			0.075	1.9		Prof. P. S. Ferrari.
Lecce	29.95	760.8	30.21	767.4	57.2	14.0	82	ene.	4.9	2.2			6	e.		0.469	11.9		Prof. C. de Giorgi.
Cosenza	29.27	743.4	30.18	766.5	56.1	13.4	77	sse.	1.8	0.8			9	se.		0	0		Prof. D. Conti.
Cagliari	29.91	759.6	30.10	764.5	58.6	14.8	70	calm			0		1			0	0		Prof. A. Pacinotti.
Palermo	29.87	758.7	30.12	765.1	61.7	16.5	80	calm	0	0			7	wsw.		0	0		Prof. G. Ciacciatore.
Syracuse	30.08	764.0	30.12	765.1	59.5	15.3	88	e.	6.3	2.8			10	se.		0.236	6.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.61	752.1	30.13	765.4	59.0	15.0	81	s.	1.3	0.6			4	sw.		1.799	45.7		Prof. T. Brioschi.
Stelvio	22.23	564.7			28.9	— 1.7	68	e.			1		3			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.26	565.5			30.7	— 0.7	70	e.			2		2			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.22	767.6	30.25	768.3	30.1	— 1.1	95	nw.					10 s		w.			overcast	
Hakodate	30.23	767.8	30.25	768.3	21.0	— 6.1	91	n.	3.0	1.3			1			0	0	clear	
Hiroshima, I. M. Obs'y †	30.16	766.0	30.17	766.3	46.1	7.8	75	ne.	8.1	3.6		cs	3 ks			0	0	clear	K. Sasaki.
Kanazawa	30.45	773.5	30.55	776.0	35.9	2.2	92					1 ck	0					fair	S. Endo.
Kioto	30.02	762.5	30.20	767.1	38.2	3.4	88	nw.	1.3	0.6		0	0			0.016	0.4	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.98	761.5	30.19	766.8	48.9	9.4	80	nnw.	0.7	0.3		8c,cs	0			0.040	1.0	cloudy	S. Takehayashi.
Neegata	30.23	767.8	30.26	768.6	35.4	1.9	95	ssw.	1.7	0.8		6 ck		w.	n.	0.020	0.5	cloudy	
Nobiru	30.21	767.3	30.23	767.8	30.2	— 1.0	79	nnw.	5.2	2.3		0	0			0	0	clear	H. Midzushina.
Supporo					25.4	— 3.7	43	w.	10.2	4.6			8			0.005	0.1	overcast	
Tokei Obs'y, Yeddo	30.13	765.3	30.20	767.1	36.3	2.4	96	n.	5.4	2.4			1c s			0.658	16.7	cloudy	The Staff.
Wakayama	30.14	765.5	30.20	767.1	44.6	7.0	75	ne.	5.3	2.4		10 ck;cs	0			inap.	inap.	cloudy	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.76	755.9	29.95	760.7	80.4	26.9	68	w.	5.0	2.2		0	8 k;ks;n		sse.	0.06	1.5	cloudy.	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.76	603.6	29.98	761.6	45.5	7.5	83	calm	0	0		2 cs	3 k	s.	s.		0	½ cloudy	Vicente Fernandez.
Leon	24.53	623.0	30.35	770.8	50.6	10.3	80	n.			2	1 c	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.79	756.7	30.05	763.4	65.0	18.3	94	ene.			1		10 n		wsw.	0	0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.16	588.4	30.39	771.9	41.9	5.5	81	calm	0	0		0	0			0	0		The Staff.
Morelia	24.25	616.0	30.52	775.3	44.6	7.0	75	sw.			4	1 c	1 k	se.	se.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.00	609.5	30.11	764.7	48.2	9.0	77	calm			0	2c	1 s	sw.		0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.6	30.43	773.0	40.3	4.6	73	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.32	617.7	30.32	770.1	44.6	7.0	58	ne.			1	0	8		w.	0	0	cloudy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Chávaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.57	573.3	30.31	769.9	47.3	8.5	61					0	2 s		sw.	0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.74	755.5	29.74	755.5	49.6	9.8		sw.			6					0.067	1.7		
Groningen	29.55	750.5	29.60	751.9	45.9	7.7		sw.			7					0.161	4.1		
Helder	29.56	750.8	29.56	750.8	46.0	7.8		ssw.			5					0.079	2.0		
Hellevoetsluis	29.71	754.6	29.71	754.6	48.4	9.1	89	sw.			6					0.118	3.0		
Utrecht	29.67	753.6	29.72	754.8	49.3	9.6	93	sw.			5		10			0.024	0.6	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	28.74	730.0	28.80	731.6	40.3	4.6	84	s	36	16			10			0.701	17.8	raining	
Brono	28.88	733.6	28.92	734.6	31.3	— 0.4	70	ne.	4	2			9			0	0		
Christiania	28.98	736.0	29.13	739.8	31.3	— 0.4	96	w.	0	0			10			0.272	6.9	foggy	
Gjæsvær	28.85	732.7	28.87	733.3	25.0	— 3.9		nnw.			7		8						
Lodingen	29.06	738.2	29.11	739.4	21.0	— 6.1	79	ne.			2		1			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					61.9	16.6	85	w.	4.3	1.9			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.29	744.0	30.32	770.0	54.0	12.2	52	ese.	0.7	0.3			5			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.34	770.6	30.43	772.9	66.2	19.0	67	sw.	1.3	0.6			3			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.02	762.4	30.38	771.7	54.3	12.4	82	ne.	4.3	1.9			2			0	0		The Staff.
Ponta Delgada, Azores	30.46	773.6	30.53	775.4	61.9	16.6	81	sw.	8.7	3.9			3			0	0		
Saint Paul de Loando	29.71	754.6	29.91	759.7	77.4	25.2	98	wnw.	1.8	0.8			9			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.37	746.1	30.61	777.4	— 4.2	—20.1		sw.	13	6		0	0			0	0		Major K. Lasarew.
Archangel	29.52	749.8	29.54	750.3	27.0	— 2.8	83	ssw.	9	4			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.43	773.0	30.35	770.9	28.2	— 2.1	87	se.	2	1			10 ks			blank	blank		Capt. Wisganow.
Barnaul	29.94	760.5	30.49	774.5	12.2	—11.0	70	sw.	13	6			10			0	0		Meteorological Obs'y.
Dorpat	29.03	737.4	29.28	743.7	33.6	0.9	94	s.	10	7			10 n			0.110	2.8		Observatory.
Ekaterinburg	29.19	741.4	30.21	767.2	19.6	— 6.9	81	wsw.	18	8			10			0	0		Meteorological Obs'y.
Kasan	29.86	758.5	30.15	765.7	26.2	— 3.2	97	s.	11	5			10			0.012	0.3		Observatory.
Kertch	30.20	767.0	30.22	767.5	32.5	0.3	90	calm	0	0			9 n			0	0		Lagorio & Sastyrez.
Kieff	29.31	744.5	29.98	761.4	32.7	0.4	90	se.	7	3			10 n			0	0	light fog	Observatory.
Lugan	30.00	762.0	30.21	767.4	30.9	— 0.6	85	wsw.	4	2			10			blank	blank		Meteorological Obs'y.
Moscow	29.39	746.5	29.89	759.1	32.4	0.2	89	s.	4	2			10 s			0.016	0.4		Meteorological Obs'y.
Nikloniev	30.11	764.8	30.18	766.6	39.2	4.0	100	s.	13	6			10 n			0	0	heavy fog	Capt. Kurdakow.
Nikolnievsk, on the Amoor.	30.00	762.1	30.09	764.3	— 8.3	—22.4	69	w.	4	2			0			0	0		Lieut. Iwanow.
Pekin, China	30.33	770.3	30.47	773.9	29.1	— 1.6	44	nw.	27	12		0	5 k			0	0		Physical Observatory.
St. Petersburg	29.41	747.1	29.43	747.5	32.0	0.0	83	sse.	18	8			10 n			0.031	0.8	light snow	Central Physical Obs'y.
Tashkend, Laboratory	28.84	732.5	30.57	776.5	16.9	— 8.4	94	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.84	732.5	30.34	770.6	32.9	0.5	59	nw.	13	6			0			0	0		Physical Observatory.
Warsaw	29.45	747.9	29.88	758.9	39.6	4.2	85	sw.	22	10			10 ks						Astronomical Obs'y.
Wilna	29.21	741.8	29.63	752.7	35.4	1.9	93	wsw.	9	4			10			blank	blank	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.74	755.5	30.05	763.3	17.2	— 8.2	93	w.	34	15			10			0.063	1.6	snowing	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			28.28	718.3	46	7.8	76	w.			9		10			0.5	13.	sleeting	J. Youngclause.
North Unst, Shetland Isl'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.11	764.7	30.21	767.2	55.4	13	62	w.	0	0			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.25	768.4	30.31	769.9	51.8	11.0	77	e.	1.1	0.5			10			0.047	1.2	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.32	693.8	30.37	771.5	46.0	7.8	72	n.	6.7	3.0			0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.05	712.5	30.34	770.5	50.0	10.0	64	nw.	2.7	1.2			0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.15	765.8	30.31	769.8	55.0	12.8	54	wnw.	1.6	0.7			0			0	0	clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.39	746.5	30.31	769.8	49.5	9.7	98	calm	0	0			10			0.016	0.4	foggy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.13	765.4	30.20	767.1	65.4	18.6	83	e.	2.0	0.9		1 c;cs	0	w.		0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.91	759.8	29.97	761.2	78.9	26.1	82	ese.	0.7	0.3		0	k			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.22	767.6	30.32	770.2	54.0	12.2	72	nne.	2.8	1.3		0	3		se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.04	763.0	30.13	765.3*	74.1	23.4	94	s.	2.2	1.0		6 k	5 kn	s.	s.	0.283	7.2	raining	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Ids	29.87	758.7	30.00	762.0	76.6	24.8	82	ssw.	2.4	1.1		0	2 ck		s.	0.08	2.0	clear	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.17	740.8	29.21	741.8	26.2	— 3.2	87	sw.			2		10			0.146	3.7		
Umea	29.04	737.6	29.09	738.9	32.4	0.2	96	s.			2		10			0.157	4.0		
Hernosand	28.99	736.3	29.04	737.6	33.6	0.9	90	sse.			2		10			0.020	0.5		
Stockholm	28.95	735.3	29.13	739.8	34.2	1.2	89	wnw.			6		3			0.063	1.6		
Visby	29.18	741.1	29.24	742.6	41.0	5.0	81	w.			6		0			0.358	9.1		
Sub-Series.																			
Upsala	29.01	736.9	29.10	739.1	32.7	0.4	94	w.	6.5	2.9			7		w.	0.413	10.5		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.78	730.9	30.23	767.9	44.6	7.0	66	ene.			2					0	0	clear	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.26	768.5	48.2	9.0	81	s.	7	3.0			10		sw.	0	0		The Observatory.
Valona			30.23	767.8	56.7	13.7		se.			1		10					rainy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.14	765.6	64.0	17.8	65	nw.			2	0	5 ks		nw.	0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.38	771.6	30.47	773.9	29	— 1.7	78	s.	4	1.8			10 s			0	0	cloudy	
Alpena, Michigan	29.38	746.2	30.09	764.3	21.3	— 5.9	84	s.	9	4.0			10 s			0	0	cloudy	
Atlanta, Georgia	29.17	740.9	30.40	772.1	44.0	6.7	86	e.	7	3.1			10 s		calm	0.03	0.8	cloudy	
Atlantic City, New Jersey	30.38	771.6	30.39	771.9	36.8	2.7	100	n.	3	1.3			fg			0.27	6.9	dense fog	
Augusta, Georgia	30.24	768.1	30.44	773.2	48.0	8.9	77	calm	0	0			10s;sk			0.03	0.8	cloudy	
Baltimore, Maryland	30.38	771.6	30.43	772.9	30	— 1.1	100	ne.	2	0.9			fg.			0.07	1.8	dense fog	
Barnegat, New Jersey	30.35	770.9	30.37	771.4	42.0	5.6	96	se.	11	4.9			10 s		se.	0.17	4.3	threatening.	
Bismarck, Dakota	27.96	710.2	29.96	761.0	22	— 5.6	73	nw.	4	1.8		0	0			0.01	0.3	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.18	690.4	30.11	764.8	28	— 2.2	88	e.	10	4.5			10 n		calm	0.20	5.1	light rain	
Boston, Massachusetts	30.38	771.6	30.55	776.0	21.0	— 6.1	84	nw.	2	0.9			10s;fg		n.	inap.	inap.	cloudy	
Brownsville, Texas	30.07	763.8	30.12	765.0	69	20.6	93	se.	6	2.7		10 cs	0			0.18	4.6	cloudy	
Buffalo, New York	29.40	746.7	30.20	767.1	28.5	— 1.9	90	e.	5	2.2			10 s;sk			0	0	cloudy	
Burlington, Vermont	30.10	764.5	30.41	772.4	20.5	— 6.4	69	s.	11	4.9			10 s		w.	0	0	cloudy	
Cairo, Illinois	29.79	756.7	30.21	767.3	40.8	4.9	96	w.	4	1.8			fg.			0.28	7.1	dense fog	
Campo, California	27.50	698.5	30.13	765.3	24	— 4.4	88	se.	4	1.8		5 c	0	w.		0	0	fair	
Camp Thomas, Arizona	27.40	695.9	30.23	767.8	32	0.0	85	calm			0	3 cs	0			0	0	clear	
Cape Henry, Virginia	30.43	772.9	30.45	773.4	34	1.1	88	w.	6	2.7			10 s			0.04	1.0	cloudy	
Cape May, New Jersey	30.37	771.4	30.40	772.1	36	2.2	89	calm	0	0			fg.			0.02	0.5	dense fog	
Castroville, Texas	29.31	744.5	30.16	766.1	59	15.0	100	calm	0	0			10 n			0.26	6.6	light rain	
Cedar Keys Florida	30.38	771.6	30.40	772.1	55	12.8	80	e.	4	1.8		6 ck	0			0	0	fair	
Champaign, Illinois	29.16	740.7	30.03	762.7	32.0	0.0	88	sw.	12	5.4			10 s		sw.	0	0	cloudy	
Charleston, S. Carolina	30.36	771.1	30.42	772.7	48	8.9	93	n.	4	1.8		0	8 s		sw.	0	0	cloudy	
Charlotte, N. Carolina	29.52	749.8	30.42	772.7	35.0	1.7	100	e.	2	0.9			fg.			0.17	4.3	dense fog	
Chattanooga, Tennessee	29.48	748.8	30.34	770.6	46.0	7.8	100	se.	7	3.1			10 n		s.	0.67	17.0	light rain	
Cheyenne, Wyoming	23.90	607.0	30.15	765.8	39.6	4.2	41	sw.	10	4.5			10 s			0	0	cloudy	
Chicago, Illinois	29.25	742.9	30.00	762.0	31.3	— 0.4	84	sw.	7	3.1			10 n			inap.	inap.	light snow	
Chincoteague, Virginia	30.40	772.1	30.42	772.7	34	1.1	100	w.	3	1.3			10 s			inap.	inap.	cloudy	
Cincinnati, Ohio	29.38	746.2	30.07	763.8	35.2	1.8	89	e.	6	2.7			10 n			0.25	6.3	light rain	
Cleveland, Ohio	29.35	745.5	30.13	765.3	29	— 1.7	88	se.	10	4.5			10 s		s.	0	0	cloudy	
Coleman City, Texas	28.31	719.1			51	10.6	93	s.	2	0.9			fg.			0	0	dense fog.	
Columbus, Ohio	29.25	742.9	30.15	765.8	32	0.0	100	s.	4	1.8			10 n			0.26	6.6	heavy rain	
Concho, Texas	28.17	715.5	30.19	766.8	52	11.1	100	w.	4	1.8			10 s			0	0	cloudy	
Davenport, Iowa	29.33	745.0	30.04	763.0	31	— 0.6	78	sw.	7	3.1			10 s		calm	0.02	0.5	cloudy	
Dayton, Washington T'y	28.16	715.3	29.96	761.0	39.2	4.0	73	sw.	14	6.3			10 s		sw.	0.21	5.3	threatening	
Deadwood, Dakota	25.14	638.5	30.10	764.5	29	— 1.7	80	sw.	2	0.9		0	0			0	0	clear	
Decatur, Texas																			
Delaware Breakwater, Del.	30.38	771.6	30.40	772.1	35	1.7	100	calm	0	0			fg.			0.02	0.5	dense fog	
Denison, Texas	29.33	745.0	30.17	766.3	50.0	10.0	100	s.	5	2.2			10 n			0.02	0.5	light rain	
Denver, Colorado	24.64	625.8	30.16	766.1	39.6	4.2	44	e.	5	2.2		7 k	0	n.		0	0	fair	
Des Moines, Iowa	29.04	737.6	30.01	762.2	36	2.2	89	w.	7	3.1			10 s		w.	0	0	cloudy	
Detroit, Michigan	29.31	744.5	30.07	763.8	36.3	2.4	79	e.	8	3.6			10 s		calm	inap.	inap.	cloudy	
Dodge City, Kansas	27.36	694.9	30.10	764.5	29	— 1.7	88	w.	4	1.8		0	9 k			0	0	cloudy	
Dubuque, Iowa	29.25	742.9	30.02	762.5	24.2	— 4.3	73	e	3	1.3			10 s		calm	0.22	5.6	cloudy	
Duluth, Minnesota	29.11	739.4	29.87	758.7	26	— 3.3	88	sw.	2	0.9			10 s		sw.	0.04	1.0	cloudy	
Eagle Pass, Texas	29.35	745.5	30.19	766.8	57.3	14.1	93	ne.	1	0.4			10 s		calm	inap.	inap.	cloudy	
Eagle Rock, Idaho	25.15	638.8	30.11	764.8	32	0.0	92	sw.	22	9.8			10 s			0.30	7.6	threatening	
Eastport, Maine	30.47	773.9	30.54	775.7	11	—11.7	70	w.	3	1.3		0	hz			0	0	clear	
El Paso, Texas	26.37	669.8	30.25	768.3	38.7	3.7	42	nw.	2	0.9		0	1 s			0	0	clear	
Erie, Pennsylvania	29.40	746.7	30.17	766.3	30	— 1.1	81	s.	14	6.3			10 s			0	0	cloudy	
Escanaba, Michigan	29.22	742.2	29.94	760.5	29	— 1.7	92	se.	17	7.6			10 n			0.03	0.8	heavy snow	
Florence, Arizona																			
Fort Apache, Arizona	25.10	637.5	30.22	767.6	25	— 3.9	67	e.	2	0.9		0	4 s		calm	0	0	fair	
Fort Assinnaboine, Montana	26.82	681.2	29.86	758.4	36	2.2	64	sw.	8	3.6			10 s		calm	0	0	cloudy	
Fort Bennett, Dakota	28.26	717.8	30.00	762.0	19	— 7.2	70	w.	1	0.4		5 cs	0	w.		0	0	fair	
Fort Benton, Montana	26.89	683.0	29.87	758.7	37	2.8	72	calm	0	0			10 s		calm	0	0	cloudy	
Fort Buford, Dakota	27.78	705.6	29.98	761.5	21	— 6.1	73	sw.	1	0.4		2 ck	0			0	0	clear	
Fort Custer, Montana	26.60	675.6	29.98	761.5	33	0.6	100	n.	6	2.7			10 s		calm	0	0	threatening.	
Fort Davis, Texas	25.24	641.1	30.22	767.6	41	5.0	76	s.	3	1.3		9 cs	0	calm		0	0	cloudy	
Fort Elliott, Texas	27.22	691.4	30.15	765.8	31	— 0.6	52	nw.	12	5.4		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.56	750.8	30.16	766.1	46.5	8.1	100	se.	4	1.8			fg.			0	0	dense fog	
Fort Grant, Arizona	25.34	643.6	30.24	768.1	42	5.6	54	e.	4	1.8		0	0			0	0	clear	
Fort Griffin, Texas	28.80	731.5	30.18	766.6	44	6.7	93	s.	2	0.9			fg.			0	0	dense fog	
Fort Keogh, Montana	27.24	691.9	29.93	760.2	32	0.0	54	se.	2	0.9		6 c	0			0	0	fair	
Fort Macon, North Carolina	30.43	772.9	30.44	773.2	40	4.4	89	n.	8	3.6			10 ks		nw.	0	0	cloudy	
Fort McKavett, Texas	27.87	707.9	30.26	768.6	56.6	13.7	93	sw.	4	1.8			10 s			0	0	cloudy	
Fort Missoula, Montana	26.56	674.6	30.02	762.5	35	1.7	72	sw.	8	3.6		0	0			0.03	0.8	clear	
Fort St. Michaels, Alaska	29.34	745.2	29.37	746.0	5	—15.0	100	ne.	7	3.1		0	5 s		ne.	0	0	fair	
Fort Shaw, Montana	26.03	661.2	29.89	759.2	34	1.1	55	sw.	13	5.8		8 cs	0			0	0	cloudy	
Fort Sill, Indian Territory	28.83	732.3	30.16	766.1	39.7	4.3	100	s.	6	2.7			fg.			0	0	dense fog	
Fort Stevenson, Dakota	27.90	708.6	29.96	761.0	27	— 2.8	88	nw.	7	3.1			10 s		nw.	inap.	inap.	cloudy	
Fort Verde, Arizona					30	— 1.1	71	w.			1	0	2 s		w.	0	0	fair	
Fredericksburg, Texas	28.36	720.3	30.18	766.6	58	14.4	93	calm	0	0			10 s			0.04	1.0	cloudy	
Galveston, Texas	30.16	766.1	30.20	767.1	63	17.2	100	s.	8	3.6			fg.			inap.	inap.	dense fog	
Grand Haven, Michigan	29.27	743.4	29.98	761.5	28.0	— 2.2	88	se.	7	3.1			10 n		calm	0.01	0.3	light snow	
Hatteras, North Carolina	30.45	773.4	30.47	773.9	39	3.9	100	n.	6	2.7			10 s			0.19	4.8	cloudy	
Helena, Montana	25.55	649.0	29.98	761.5	35	1.7	66	sw.	22	9.8			10 s		w.	0	0	cloudy	
Henrietta, Texas	29.12	739.6	30.18	766.6	44	6.7	93	s.	8	3.6		0	0			0	0	clear	
Huron, Dakota	28.44	722.4	29.98	761.5	27	— 2.8	67	w.	10	4.5		0	0			0	0	clear	
Indianapolis, Indiana	29.17	740.9	30.01	762.2	33.5	0.8	84	se.	2	0.9			10s;fg		se;c	inap	inap.	cloudy	
Indianola, Texas	30.13	765.3	30.16	766.1	66.6	19.2	93	s.	7	3.1		6 ck	3 k	sw.		0.07	1.8	cloudy	
Jacksboro, Texas	28.94	735.1	30.18	766.6	48	8.9	93	s.	6	2.7			fg.			0	0	light fog	
Jacksonville, Florida	30.36	771.1	30.41	772.4	50	10.0	93	se.	1	0.4			fg.			0	0	dense fog	
Keokuk, Iowa	29.45	748.0	30.15	765.8	32.3	0.2	85	w.	4	1.8			10 s		sw.	0.01	0.3	cloudy	
Key West, Florida	30.26	768.6	30.30	769.6	66.7	19.3	81	ne.	7	3.1		1 cs	7 ks		e.	0	0	cloudy	
Kittyhawk, North Carolina	30.45	773.4	30.47	773.9	37	2.8	89	w.	6	2.7			10s;fg			0.06	1.5	cloudy	
Knoxville, Tennessee	29.25	742.9	30.33	770.4	45	7.2	98	s.	1	0.4			10 n		calm	0.54	13.7	light rain	
La Crosse, Wisconsin	29.11	739.4	29.95	760.7	27	— 2.8	88	s.	8	3.6			10 s			0.06	1.5	cloudy	
La Mesilla, New Mexico	26.21	665.7	30.24	768.1	31.8	— 0.1	85	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.18	741.2	30.14	765.5	33	0.6	78	calm	0	0		0	2 s			0.02	0.5	clear	
Lewiston, Idaho	29.06	738.1	29.93	760.2	37.5	3.1	55	se.	4	1.8		6 cs	0	se.		0.14	3.6	fair	
Little Rock, Arkansas	29.85	758.2	30.18	766.6	48	8.9	93	sw.	1	0.4			10 s			0.13	3.3	cloudy	
Los Angeles, California	29.78	756.4	30.18	766.6	50.2	10.1	93	s.	1	0.4			fg.		calm	0	0	dense fog	
Louisville, Kentucky	29.50	749.3	30.09	764.3	40.0	4.4	89	sw.	4	1.8			10 n		calm	0.54	13.7	light rain	
Lynchburg, Virginia	29.67	753.6	30.39	771.9	28.2	— 2.1	77	calm	0	0			10 n		sw.	inap.	inap.	light rain	
Mackinac City, Michigan																			
Madison, Wisconsin	28.90	734.0	29.99	761.7	25	— 3.9	88	s.	6	2.7			10 s		calm	0.10	2.5	cloudy	
Marquette, Michigan	29.11	739.4	29.89	759.2	30	— 1.1	88	s.	5	2.2			10 n		calm	0.01	0.3	light snow	
Mason, Texas	28.47	723.1	30.21	767.3	56.5	13.6	76	calm	0	0			10 s		se.	0	0	cloudy	
Memphis, Tennessee	29.86	758.4	30.22	767.6	46	7.8	100	w.	2	0.9			10 n			0.25	6.3	light rain	
Milwaukee, Wisconsin	29.17	740.9	29.97	761.2	29	— 1.7	88	sw.	6	2.7			10 s			0.04	1.0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.25	768.3	30.29	769.4	59.0	15.0	93	s.	4	1.8		5 ck	0	sw.		0	0	fair	
Montgomery, Alabama	30.09	764.3	30.33	770.4	54	12.2	86	nw.	2	0.9			10 s			inap.	inap.	cloudy	
Moorhead, Minnesota	28.80	731.5	29.91	759.7	25	— 3.9	100	calm	0	0			10 s			0.05	1.3	cloudy	
Morgantown, W. Virginia	29.14	740.1	30.20	767.1	38.5	3.6	80	calm	0	0			10 s			inap.	inap.	cloudy	
Mt. Washington, N. H.	23.80	604.5	30.43	772.9	7.8	—13.4	84	nw.	48	21.5			fg		nw.	0	0	light fog	
Nashville, Tennessee	29.60	751.8	30.16	766.1	49.0	9.4	100	sw.	6	2.7			10 n		sw.	0.14	3.6	light rain	
New Haven, Connecticut	30.34	770.6	30.46	773.7	20	— 6.7	84	ne.	14	6.3			10 s			0	0	cloudy	
New London, Connecticut	30.46	773.7	30.51	774.9	28	— 2.2	77	ne.	4	1.8			10 s		calm	0	0	cloudy	
New Orleans, Louisiana	30.19	766.8	30.25	768.3	63.5	17.5	88	se.	7	3.1		5 c	0	sw.		0	0	fair	
Newport, Rhode Island	30.46	773.7	30.51	774.9	30.0	— 1.1	77	ne.	4	1.8			10 s		s.	0	0	cloudy	
New River, N. Carolina					38	3.3	89	n.			1		10 s			0	0	cloudy	
New Shoreham, Rhode I'd.	30.46	773.7	30.49	774.4	35.2	1.8	69	se.	14	6.3			10 s		se.	0	0	cloudy	
New York, New York	30.28	769.1	30.46	773.7	31	— 0.6	100	ne.	14	6.3			10s;fg			0.01	0.3	cloudy	
Norfolk, Virginia	30.41	772.4	30.44	773.2	33	0.6	88	nw.	3	1.3			fg			0.05	1.3	dense fog	
North Platte, Nebraska	27.01	686.0	30.13	765.3	22.6	— 5.2	84	calm	0	0		2 k	3 s			0	0	fair	
Olympia, Washington T'y	29.74	755.4	29.78	756.4	44.0	6.7	83	s.	6	2.7			10 n		calm	1.84	46.7	light rain	
Omaha, Nebraska	28.79	731.3	30.06	763.5	28.0	— 2.2	70	s.	2	0.9		0	fg			inap.	inap.	clear	
Ogdaamie, Pt. Barrow, Alas-	29.86	758.4	29.88	758.9	—32.6	—35.9		calm	0	0		0	0			0	0	clear	
Oswego, New York	29.94	760.5	30.29	769.4	27.6	— 2.4	78	se.	10	4.5			10 s		sw.	0	0	cloudy	
Palestine, Texas	29.62	752.3	30.18	766.6	61	16.1	100	ne.	4	1.8			10 n			0.58	14.7	heavy rain	
Pensacola, Florida	30.29	769.4	30.32	770.1	59.0	15.0	100	e.	4	1.8		0	5s;fg		s.	0	0	fair	
Philadelphia, Pa.	30.36	771.1	30.42	772.7	30	1.1	100	e.	7	3.1			fg			0.03	0.8	dense fog	
Pike's Peak, Colorado	17.00	447.0	30.30	769.6	10	—12.2	80	sw.	24	10.7		0	3 s		sw.	0	0	clear	
Ploche, Nevada	24.07	611.4	30.27	768.8	35	1.7	61	s.	10	4.5		10 cs	0	w.		0	0	cloudy	
Pittsburg, Pennsylvania	29.34	745.2	30.19	766.8	33.0	0.6	79	ne.	2	0.9			10n;fg		calm	inap.	inap.	light rain	
Port Eads, Louisiana	30.26	768.6	30.28	769.1	59.0	15.0	96	se.	8	3.6		0	hz		calm	0	0	clear	
Port Huron, Michigan	29.35	745.5	30.08	764.0	26.0	— 3.3	97	se.	4	1.8			10s;fg		calm	inap.	inap.	cloudy	
Portland, Maine	30.48	774.2	30.53	775.4	21.5	— 5.8	87	nw.	3	1.3			10 s		nw.	0	0	cloudy	
Portland, Oregon	29.93	760.2	30.00	762.0	44.0	6.7	93	sw.	12	5.4			10 n		sw.	0.85	21.6	light rain	
Portsmouth, N. Carolina					41	5.0	82	ne.	7	3.1			10 s		calm	inap.	inap.	cloudy	
Prescott, Arizona	24.81	630.2	30.19	766.8	28	— 2.2	70	w.	4	1.8		2 cs	0	calm		0	0	clear	
Punta Rassa, Florida	30.32	770.1	30.33	770.4	60	15.6	81	ne.	9	4.0		2 c	1 s	calm	calm	0	0	clear	
Red Bluff, California	29.78	756.4	30.16	766.1	48.5	9.2	82	ne.	5	2.2		0	9 s		w.	0.34	8.6	cloudy	
Rio Grande City, Texas	29.87	758.7	30.12	765.0	68	20.0	93	se.	1	0.4			10 s		se.	0	0	cloudy	
Rochester, New York	29.55	750.6	30.26	768.6	26	— 3.3	88	se.	9	4.0			10 s		se.	0	0	cloudy	
Roseburg, Oregon	29.66	753.4	30.24	768.1	39.8	4.3	87	se.	1	0.4			10 n			c.49	12.4	light rain	
Sacramento, California	30.08	764.0	30.16	766.1	54.5	12.5	93	s.	9	4.0			10 s			0	0	cloudy	
St. Louis, Missouri	29.49	749.0	30.13	765.3	35.1	1.7	89	w.	14	6.3			10 s			0	0	cloudy	
St. Paul, Minnesota	28.93	734.8	29.88	758.9	26.3	— 3.2	87	s.	8	3.6			10 s			0	0	cloudy	
St. Vincent, Minnesota	28.91	734.3	29.89	759.2	20	— 6.7	100	n.	3	1.3			10 s		calm	0.05	1.3	cloudy	
Salt Lake City, Utah	25.52	648.2	30.09	764.3	43	6.1	53	se.	2	0.9			10 s			0	0	cloudy	
San Antonio, Texas	29.41	747.0	30.14	765.5	60.6	15.9	93	calm	0	0			10 n			0.32	8.1	light rain	
San Diego, California	30.02	762.5	30.09	764.3	52.5	11.4	88	e.	5	2.2			10 s			0	0	cloudy	
Sandusky, Ohio	29.35	745.5	30.07	763.8	30	— 1.1	78	se.	6	2.7			10 s			0	0	cloudy	
Sandy Hook, New Jersey	30.42	772.7	30.46	773.7	38.9	3.3	82	se.	17	7.6			10 s		calm	0.01	0.3	cloudy	
San Francisco, California	30.14	765.5	30.21	767.3	53	11.7	90	w	12	5.4			10 s		nw.	0.07	1.8	cloudy	
Santa Fé, New Mexico	23.29	591.6	30.30	769.6	31.5	— 0.3	87	calm	0	0		0	5 s		calm	0	0	fair	
Savannah, Georgia	30.32	770.1	30.42	772.7	48.5	9.2	82	se.	2	0.9		0	9 ks		se.	0	0	cloudy	
Shreveport, Louisiana	29.95	760.7	30.20	767.1	56	13.3	100	calm	0	0			10 s		s.	0.38	9.7	cloudy	
Silver City, New Mexico	24.32	617.7	30.18	766.6	32	0.0	74	n.	1	0.4		0	0			0	0	clear	
Sitka, Alaska	29.80	756.9	29.87	758.7	38.1	3.4	85	e.	6	2.7		7 k	0	e.		0.35	8.9	fair	
Smithville, North Carolina	30.40	772.1	30.44	773.2	43	6.1	93	ne.	6	2.7			10 s		w.	0	0	cloudy	
Spokane Falls, Wash. Ter.	27.79	705.9	29.93	760.2	36	2.2	72	sw.	16	7.2			10 n		sw.	0.23	5.8	light snow	
Springfield, Illinois	29.35	745.5	30.08	764.0	37	2.8	82	w.	5	2.2			10 s		sw.	0.01	0.3	cloudy	
Springfield, Massachusetts	30.38	771.6	30.52	775.2	19.6	— 6.9	91	n.	3	1.3			10 s			0	0	cloudy	
Springfield, Mo.	28.68	728.5	30.26	768.6	45	7.2	83	w.	7	3.1			10 k		w.	0.04	1.0	cloudy	
Stockton, Texas	27.07	687.6	30.21	767.3	38.2	3.4	100	sw.	4	1.8		5c	0	sw.		0	0	fair	
Thatcher's Island, Mass.	30.53	775.4	30.59	777.0	26.7	— 2.9	64	ne.	7	3.1			10 s		n.	0	0	cloudy	
Toledo, Ohio	29.34	745.2	30.08	764.0	31	— 0.6	78	e.	5	2.2			10 s			0	0	cloudy	
Tucson, Arizona	27.64	702.0	30.14	765.5	42	5.6	00	se.	7	3.1		3 cs	0			0	0	clear	
Umatilla, Oregon	29.56	750.8	29.95	760.7	42.5	5.8	56	sw.	22	9.8		8 cs	0	sw.		0.16	4.1	cloudy	
Uvalde, Texas	29.14	740.1	30.14	765.5	61	16.1	100	calm	0	0			fg			0.03	0.8	dense fog	
Vicksburg, Mississippi	29.99	761.7	30.26	768.6	63	17.2	93	s.	3	1.3			10 s		calm	0.51	13.0	threatening	
Visalia, California	29.80	756.9	30.20	767.1	49	9.4	86	nw.	3	1.3		0	3 s			0	0	clear	
Washington, D. C.	30.31	769.9	30.43	772.9	25.0	— 3.9	100	calm	0	0			10s;fg			0.08	2.0	cloudy	
West Los Animas, Colorado	26.00	660.4	30.14	765.5	20	— 6.7	87	nw.	1	0.4		0	4 s		w.	0	0	fair	
Wickenburg, Arizona					38	3.3	82	calm			0	9 c	1 s			0	0	cloudy	
Williamsport, Pa.					28	— 2.2	64	e.	4	1.8			10 s			inap.	inap.	threatening	
Wilmington, N. Carolina	30.36	771.1	30.42	772.7	42	5.6	82	ne.	4	1.8			10s;fg		calm	0	0	cloudy	
Winnemucca, Nevada	25.50	647.7	30.04	763.0	44	6.7	68	sw.	16	7.2			10 ks		sw.	0.11	2.8	cloudy	
Wood's Holl, Mass.	30.47	773.9	30.51	774.9	34	1.1	78	se.	8	3.6			10 s		sw.	0	0	cloudy	
Yankton, Dakota	28.58	725.9	30.10	762.0	29	— 1.7	77	sw.	2	0.9		0	0			0	0	clear	
Yuma, Arizona	29.90	759.4	30.05	763.3	45.9	7.7	60	ne.	5	2.2		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.03	559.6			50.0	10.0	81	s.	1	0.4		0	3 s			0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.04	763.0	30.05	763.3	77	25.0	82	e.				5 k	5 ks	e.	e.	0.08	2.0	fair	J. A. Racker.
Buenaventura, U. S. C.	30.00	762.0	30.02	762.5	78	25.6	86	s.	8	3.6			10 ks		s.	3.80	96.5	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.98	761.5	30.00	762.0	74	23.3	90	e.				3 c	0			0.3	8.	clear	B. Bigar.
Havana, Cuba, W. I.	30.24	768.1	30.29	769.4	67	19.4	93	calm	0	0		2 cs	2 ks	calm	calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.09	764.3	30.10	764.5	68.6	20.3	91	calm	0	0		0	2 s		e.	0	0	fair	Robert Johnstone
Navassa, W. I.	30.01	762.2	30.09	764.3	77	25.0	65	ne.	12	5.4		2 ck	2 s	se.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	77	25.0	91	e.			1	4 c	4 s	e.		2.500	63.5	fair	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.93	760.2	81	27.2	85	calm			0	7 ck	2 ks	calm	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua					74.5	23.6	94	ne.			4	0	1 ks		ne.	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.14	765.5	30.17	766.3	72	22.2	81	n.	16.8	7.5		2 ck	4 s	ne.	ne.	0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.22	767.6	30.28	769.1	—28.0	—33.3		n.	22	9.8		6 k	4 s.	nw.	n.	0.12	3.0	snowing	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore, India	29.90	759.4	79	26.1	82	nw.			3		9							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.05	763.3	63.5	17.5	88	ene.			3		10							raining	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 6° 50′, E. 107° 12′	29.87	758.7	78	25.6	95	nne.			2–3		10					3	nne.	showery	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.97	761.2	68	20.0	64	sw.			2		1	calm						blue sky	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.92	760.0	69	20.6	100	calm			0		8							d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey.	30.31	769.9	44	6.7	84	ssw.			1		10	sse.						misty	Capt. F. W. Egerton
H. M. S. Coquette																			Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.04	763.0	47.5	8.6	85	ene.			2		10							raining	Capt. S. Long.
H. M. S. Diamond, S. 11° 28′, W. 29° 11′	30.00	762.0	80	26.7	88	ese.			4		2	w.				3	e.	d. clouds.	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.50	774.7	61	16.1	77	nne.			1–2		3	nne.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 52° 08′, W. 60° 55′	29.26	743.2	51.2	10.7	98	nnw.			4		8					4	wsw.	showery	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.82	757.4	84	28.9		nne.			1–2		5							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. G. Robinson.
H. M. S. Espiegle, N. 9° 20′, W. 25° 35′	29.98	761.5	76	24.4	?	ne.			4–5		8	ssw.				3	nne.	d. clouds	Capt C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.88	758.9	77.5	25.3	77	s.			4		1					3	s.	blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.19	766.8	49	9.4	85	n.			1		5							misty	Capt. R. F. Roskyn.
H. M. S. Gannet, S. 32° 30′, W. 73° 30′	30.02	762.5	62.5	16.9	78	s.			3-4		10					3	s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 37° 12′, W. 55° 12′	29.91	759.7	66	18.9	78	nnw.			4		10							overcast	Capt. L. Jones.
H. M. S. Iris, N. 31° 57′, E. 34° 26′	30.15	765.8	66	18.9	78	s.			3		7	s.				3		d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.03	762.7	64	17.8	78	ene.			1		9	ne.						showery	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 15′, E. 109° 46′	29.96	761.0	69.5	20.8	91	ene.			1–2		2					1	ese.	misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 18° 18′ E. 67° 45′	29.98	761.5	79	26.1	86	ne.			2		4	ne.				2	ne.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, St. Christopher, W. I.	30.06	763.5	78.5	25.8	77	ne.			3		5	ne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 29° 39′, E. 31° 40′	29.65	753.1	78	25.6	90	ssw.			5		8					3	ssw.	misty	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 39° 50′, W. 22° 50′	29.15	740.4	60	15.6	100	nnw.			6		7	wnw.				7	nnw.	drizzling	Capt. F. R. Dicken.
H. M. S. Phœnix, N. 20° 00′, W. 75° 54′	30.15	765.8	72	22.2	85	nnw.			1		1					sin'h		blue sky	Capt. H. H. Grenfell.
H. M. S. Ready, Muscat, Arabia	30.01	762.2	75.1	23.9		ese.			1									blue sky	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	29.80	756.9	42	5.6	100	ene.			4		9							raining	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	29.93	760.2	82.5	28.1	79	ne.			1		2	ne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 37° 16′, E. 7° 20′	30.02	762.5	59	15.0	44	ne.			3		8	ne.				4	ene.	d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 18° 11′, W. 76° 27′	30.12	765.0	78.5	25.8	81	ne.			2–3		6							d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, Payta Bay, Peru	29.96	761.0	69	20.6	90	se.			1		1	calm						blue sky	Capt. A. H. Markham.
H. M. S. Tyne, N. 34° 46′, E. 20° 07′	30.18	766.6	65	18.3	100	ese.			3–4		10	ese.				4	ese.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.07	763.8	75	23.9		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	29.91	759.7	64.5	18.1		s.			4–5		10	s.						showery	Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Santiago, Cape Verd Ids	30.12	765.0	71.6	22.0	74	ene.			4		10					2	ne.	overcast	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.30	769.6	61	16.1	82	nne.	4	1.8			8		se.	0	0			foggy	
N. Yard, Portsmouth, N. H.	30.54	775.7	20	— 6.7		nw.	2	0.9			10		nw.	0	0			cloudy	
Naval Hospital Yokohama, Japan	30.00	762.0	37.5	3.1	90	n.			3		10		n.	0.74	18.8			misty	
Adams, Mollendo, Peru	29.77	756.1	70	21.1	90	se.			0–1		2					light	s.	fair	
Alaska, Callao, Peru	29.95	760.7	67	19.4	95	calm			0		5			0	0	sm'h		fair	
Alert, Hong Kong, China*	29.89	759.2	66	18.9	89	e.			3		10		e.			sm'h		misty	
Alliance, Boston, Mass	30.53	775.4	27	— 2.8	100	calm			0		10			0	0			cloudy	
Ashuelot, Tientsin, China	30.46	773.7	34	1.1	100	ese.			2		1		wsw.					clear	
Brooklyn, N. 1° 38′, W. 29° 48′	29.95	760.7	81	27.2	87	ese.	6	2.7			2		se.	0.13	3.3	light	e.	fair	
Colorado, New York, N. Y	30.45	773.4	31	— 0.6	94	ne.	4	1.8			10		calm	sll't	sll't			misty	
Essex, Norfolk, Va	30.47	773.9	35	1.7	90	nw.			1		10							foggy	
Franklin, Norfolk, Va	30.47	773.9	32	0.0	100	w.	1	0.4			10			0	0			foggy	
Galena, Monrovia, Liberia, Africa	29.93	760.2	80	26.7	100	calm			0		10					sm'h		cloudy	
Independence, N. Yard, Mare I'd, Cal	30.04	763.0	54	12.2	87	sw.	1.2	0.5			5?		sw.	0	0			cloudy.?	
Kearsarge, New Orleans, La	30.25	768.3	63	17.2	94	se.			1		10							cloudy	
Lackawanna, Valparaiso, Chili†	30.05	763.3	63	17.2	100	se.			1		0							clear	
Lancaster, Villafranca, France	30.16	766.1	59	15.0	88	se.			0–1		2		n.	0	0	sm'h	s.	fair	
Michigan, Erie, Pa	30.11	764.8	30	— 1.1		ssw.			4		10							cloudy	
Minnesota, Newport, R. I	30.51	774.9	29	— 1.7		e.	2	0.9			10					sm'h		overcast	
Monocacy, Yokohama, Japan	30.24	768.1	38	3.3	100	nnw.			2		10		n.					cloudy	
Nipsic, Naples, Italy	30.15	765.8	63	17.2	78	s.			2		5					sm'h		fair	
Onward, Callao, Peru†	30.09	764.3	67	19.4	100	calm			0		5					long	w.	fair	
Palos, Hong Kong, China	30.03	762.7	64	17.8	94	e.			1		10		n;e.					clear?	
Passaic, Washington, D. C	30.45	773.4	26	— 3.3		nw.			1		10							cloudy	
Pensacola, Callao, Peru	30.00	762.0	68	20.0	90	se.	4	1.8			5		se.	0	0	sm'h		fair	
Powhatan, Boston, Mass	30.55	776.0	21	— 6.1	100	calm			0		10							overcast	
Quinnebaug, N. 40° 38′, E. 10° 02′	30.15	765.8	59	15.0	76	n.			2		2		n.			long	se.	clear	
Ranger, N. 18° 22′, W. 103° 33′*	29.93	760.2	72	22.2	76	se.			1		2		sw.	0	0	sm'h		clear	
Richmond, Apia, Samoa Islands*	29.80	756.9	79	26.1	95	ne.			2		2		n.	0.30	7.6			clear	
Shenandoah, Montevideo, Uruguay*	29.97	761.2	67	19.4	64	n.			5		10					sm'h		cloudy	
St. Louis, League Island, Pa	30.67	779.0	30	— 1.1	100	ne.	1	0.4			10			0	0			cloudy	
Swatara, Yokohama, Japan*	30.03	762.7	41	5.0	82	n.			2		10		nnw.			sm'h		cloudy	
Tennessee, New York, N. Y	30.45	773.4	31	— 0.6		ne.	8	3.6			10			0.07	1.8			snowing	
Vandalia, St. Pierre Martineque, W.I.	30.05	763.3	76	24.4	82	calm			0		2		calm					fair	
Wabash, Boston, Mass	30.57	776.5	20	— 6.7	72	nnw.	1	0.4			10		nw.	0	0			cloudy	
Wachusetts, Sitka, Alaska	29.82	757.4	36	2.2	90	ne.			1		8		s.			sm'h	s.	fair	
Wyoming, Port Royal, S. C	30.40	772.1	48	8.9	92	ne.	6	2.7			8		sw.	0	0			fair	
Yantic, Aux Cayes, Hayti, W.I*	30.06	763.5	71	21.7	95	w.			0–1		2							clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley N. 40° 40′, W. 64° 18′*	30.49	774.4				ene.	1		8			0	0	sm'h		cloudy	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker																	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, N. 33° 10′, W. 74° 15†.	30.50	774.7	64	17.8		sw.	2		4		sw.	2 h'r	light	mod.	nne.	fair	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 22° 34′, W. 74° 22′†	30.24	768.1	76	24.4		nne.	4							mod.	ne.		
S. S. Bothnia, Capt. MacMackan																	E.F.Stembridge,3d off
S. S. City of Alexandria, Capt. L. F. Timmer-																	
S. S. City of Washington, Capt. J. W. Rey- N. 21° 20′, W. 89° 38′*†	30.30	769.6	80	26.7		e.	1							sm'h		fine	
S. S. Maas, Capt. T. N. Bonjer																	
S. S. New York, Capt. R. B. Quick N. 33° 50′, W. 76° 20′*†.	30.52	775.2	62	16.7		calm	0							sm'h		overcast	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier, N. 47° 00′, W. 38° 20′*	30.21	767.3	40	4.4		nw.	6								wnw.	cloudy	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander																	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer, N. 45° 04′, W. 46° 18′	30.45	773 4	32	0.0	69	nnw.	3		2		n.	0	0	long	nw.	clear	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	29.92	760.0	40.0	4.4		sse.	4		8		s.	0	0			cloudy	
S. S. Mosel, Capt. J. Hesse,																	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A, Jaeger																	
S. S. Oder, Capt. C. Undeutsch																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 40° 16′, W. 149° 10′†	30.14	765.5	61	16.1	82	sse.	4		2		s.	0	0	light	s.	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Hong Kong, China*†	30.20	767.1	67	19.4	90	e.	2		8		e.					light rain	
S. S. Oceanic, Capt. J. Metcalf, N. 30° 27′. E. 164° 43 *	30.02	762.5	66	18.9	90	wsw.	4		6		w.			3	sw.	squally	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Ga*†	30.14	765.5				calm	0		8		sw.					clear?	K. S. Nickerson.
S, S. Seminole, Capt. H. K. Hallett Savannah. Ga.†	30.07	763.8	54	12.2	86	calm	0		8		sw.	0	0			cloudy	H. K. Hallett.
OREGON IMROVEMENT CO. *John L Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes																	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otereadorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d officer
S. S. Columbia, Capt. Fred Bolles Mouth of Willamette Piver, Oregon†	29.96	761.0	44.5	6.9	92	sw.	3		10		s.					rainy	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 45° 22′, W. 124° 09′†	30.03	762.7	48	8.9	85	w.	7		10		w.			h'vy	w.	squally	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 35° 37′, W. 121° 15′†	30.19	766.8	55	12.8	87	nw.	3		10?		nw.			mod.	wnw.	clear?	
S. S. Geo. W. Elder, Capt. H. G. Morse, Puget Sound†	30.02	762.5	42	5.6		se.	3		4		se.	12 h'r	12 h'r	sm'h		clear	
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	30.20	767.1	53	11.7	86	sw.	3		10		sw.					cloudy	
S. S. Orizaba, Capt. Chas. B. Johnson,																	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, N. 34° 19′, W. 119° 42′†	30.13	765.3	56	13.3	94	ese.	3		4		ese.	0	0	mod.	sw.	fair	T. Wallace.
S. S. State of California, Capt. G. Debney, San Francisco, Calf	30.19	766.8	52	11.1	93	sw.	4		6		sw.	0	0				
S. S. Victoria, H. M. Hayward, Nanaimo, Vancouver I'd†	29.96	761.0	41	5.0	91	var.	2		0					sm'h		clear	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulloy, Supt. New York.*																	
S. S. Australia, Capt. ——, S. 24° 48′, E. 175° 23′	29.86	758.4	68	20.0	90	w.	4		2		sw.			mod.	sw.	clear	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb. Sydney, N. S. W†	30.17	766.3	70	21.1	90	w.	1		0			0	0			clear	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly. Hong Kong, China†	30.27	768.8	69	20.6	69	ne.	4		5		ne.	0	0			fair	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn,																	E. Le Salk.
S. S. City of Tokio, Com. J. Maury																	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 13° 55′, W. 89° 50′†	29.95	760.7	78	25.6	73	sse.	2		0			0	0	small	sse.	clear	
S. S. Grenada, Capt. M. Connolly, N. 35° 08′, W. 121° 30′†	30.20	767.1	54	12.2	100	wnw.	3		10		wnw.	0	0	mod.	nw.	dense fog	
S. S. South Carolina, Capt. W J. Russell, N. 9° 04′, W. 84° 17′*†	29.87	758.7	81	27.2	87	var.	3		2		wnw.	0	0	sm'h		fair	
S. S. Zelandia, Capt. H. Webber, S. 23° 22′ W. 175° 06′	29.88	758.9	79	26.1	95	wnw.	4		8		nw.			mod.	nw.	cloudy	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon.
S. S. Nova Scotian, Capt. W. Richardson,																	
S. S. Polynesian, Capt. R. Brown, N. 46° 08′, W. 55° 24′*	30.27	768.8	24	—4.4		w.	5		9		w.	0	0	mod.	w.	cloudy	Roberts & Spark
S. S. Prussian, Capt. J. G. Stephens, N. 51° 25′, W. 15° 45′..*	29.83	757.7	47	8.3		w.	6		3		w.			h'vy	w.	fair	J. G. Stephens.
S. S. Waldensian																	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, N. 51° 24′, W. 13° 57′	29.72	754.9	50	10.0	93	w.	6		5?		wsw.			r'gh	w.	clear?	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, Eng*	29.42	747.3	47	8.3	62	wsw.	6		2		w.	0	0			fair	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, N. 49° 30′, W. 36° 34′.*†	30.11	764.8	43	6.1	100	w.	4		5?		w.			h'vy	w.	overcast?	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 41° —′, W. 65° —′†	30.51	774.9	37	2.8	90	e.	3		1		ene.					d. clouds	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown																	J. Brown.
Utopia, Capt. A. McRitchie, N. 40° 24′, W. 64° 50′*†	30.36	771.1	35	1.7	80	ese.	3		10		wnw.	0	0	mod.		cloudy	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. W. Williams, Kingston, Jamaica, W. I.*	30.11	764.8	79	26.1		calm	0		0			0	0			very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin																	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 22° 33′, W. 74° 25′							2					0	0	mod.	ne.		R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse N. 18° —′, W. 74° —′	29.76	755.9				e.	3		1		n.	0	0	mod.	e.	clear	Fisher & Weldon.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S*†	30.45	773.4	52	11.1	71	n.	1		10			0	0			cloudy	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell																	
British Merchant, Capt. E. J. Molony, S. 13° 20′, E. 91° 00′	29.92	760.0	77.2	25.1	95	nw.	3		8							raining	
Bk. Caldew, Capt. W. Peterson																	
S. S. Clipero, Capt. W. N. Lally																	
S. City of Agra, Capt. Thos. Young, S. 26° 29′. W. 17° 56′	30.16	766.1	78.0	25.6		nne.	1		7							d. clouds	
Bk. Glaramara, Capt. R. Morton, N. 3° 56′, W. 30° 31′	29.99	761.7	81.5	27.5	78	nne.	4		6							d. clouds	
Glencairn, Capt. R. S. Tannock, S. 32° 50′. W. 20° 40′	29.91	759.7	68	20.0	90	wnw.	4		10							showery	
S. S. Gordon Castle, Capt. W. Waring, N. 34° 06′, E. 23° 59′	30.24	768.1	63.5	17.5	78	ssw.	2		7							gloomy	
Bq. Hermine, Capt. S. G. Jones																	
S. S. Humboldt, Capt. A. W. Jeffery, N 0° 09′, W. 30° 47′	29.97	761.2	82.2	27.9	78	ene.	2		3							d. clouds	
S. Lochee, Capt. J. Raeburn, N. 4° 22′ E. 86° 33′	29.92	760.0	83.2	28.4	79	ene.	2		3							d. clouds	
May Hulse, Capt. H. Youlden, N. 2° 28′ W. 25° 38′	29.92	760.0	79	26.1	86	n.	1		10							overcast	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson																	
Naiad, Capt. John Smith S 27° 16′, W. 20° 51′	30.13	765.3	75.7	24.3	90	nnw.	4		7							d. clouds	
Pole Star, Capt. F. Norman, S. 36° 03′, W. 52° 53′	30.00	762.0	68	20.0	90	nnw.	4		6							d. clouds	
Queen of Cambria, Capt. M. Parry, S. 39° 56′, W. 30° 31′	29.19	741.4	53.3	11.8	93	wsw.	9		10							raining	
S. S. Strathleven, Capt. C. W. Pearson, N. 39° 50′, W. 73° 30′	30.36	771.1	42.5	5.8	83	ese.	5		10							raining	
S. Superb, Capt. Berridge, S. 1° 54′ W. 24° 31′						ene.	1		3							d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt S. Windham, N. 50° 04′, W. 31° 00′*†	30.00	762.0	42	5.6		w.	6		7		w.	snow	snow	h'vy	w.	fair	Wm. Fitt.
CALIFORNIA, AND MEXICAN S. S. CO.																	
J. Birmingham, Agent San Francisco.																	
S. S. Newbern, Capt. E. Rogers																	
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman																	Crowell & Henry.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains, N. 49° 49′, W. 59° 40′*	30.52	775.2	41	5.0		ne.	4		8		nne.	0	0	sm'h		cloudy	J. H. Mills, 3d Officer
GENERAL TRANS-ATLANTIC CO.																	
Louis de Beblan, Agent, New York.																	
S. S. Canada, Capt. Frangeul, N. 41° 10′, W. 65° 52′	30.53	775.5	23.0	—5.0		n.	2		3		ese.	0	0	sm'h		clear	
S. S. St. Laurent, Capt. A. Servan																	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York																	
S. S. Gellert, Capt. Kuhlewein																	P. Froehlich, 3d Off.
S. S. Silesia, Capt. A. Albers																	
S. S. Wieland, Capt. C. Helbch																	C. Jorgensen.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch,																	Patterson & Thompson.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, N. 40° —′, W. 13° —′*†	30.58	770.7	60	15.6		wnw.	1		5		wnw.	0	0	long	nw.	fair	J. Carroll.

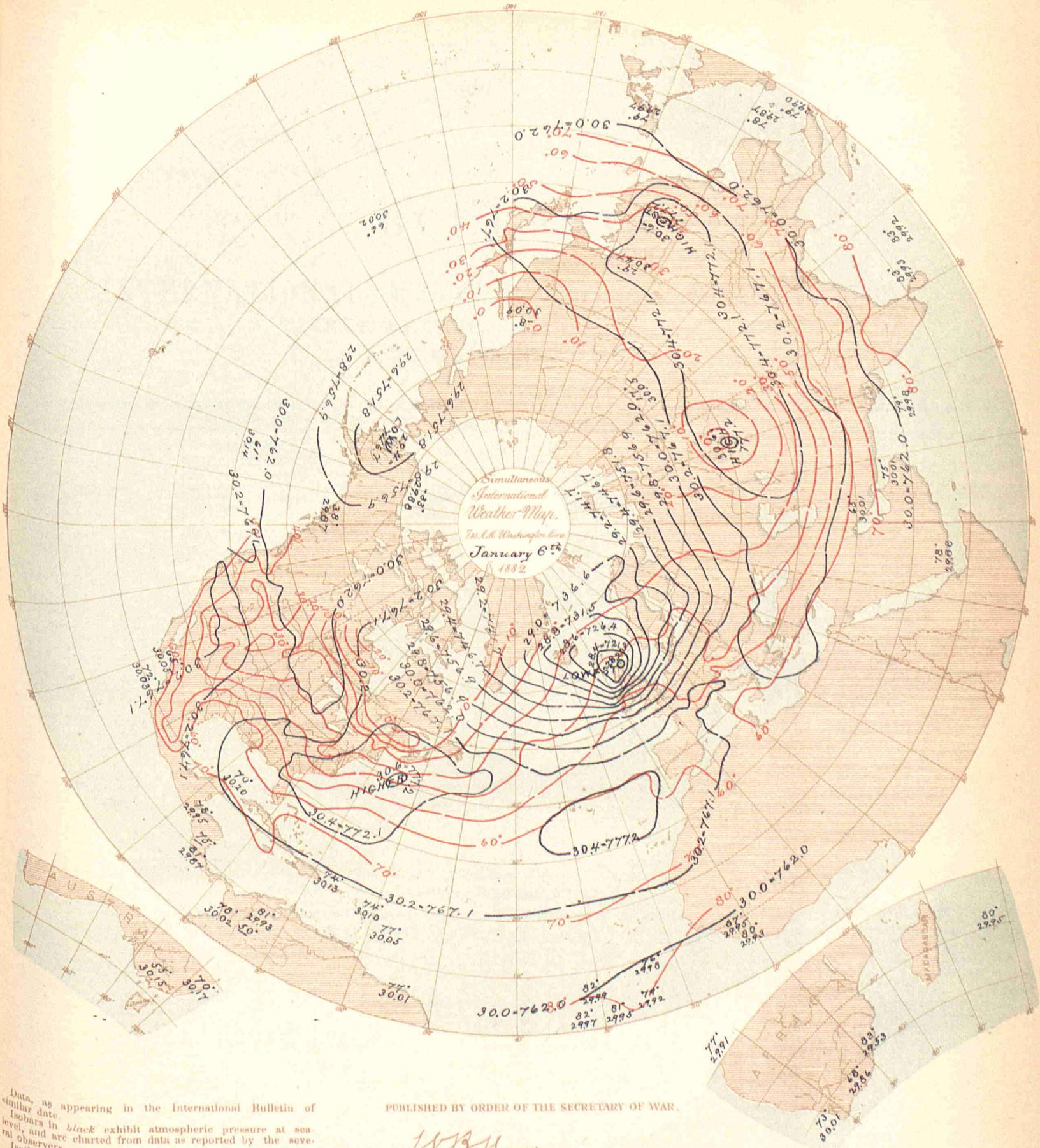
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO. *A. E. Outerbridge & Co., Agents, New York.* S. S. Muriel, Capt. Geo. S. Locke, N. 25° 30′, W. 65° 05′						ne.	3		0			0	0	long	ese.	fair	G. S. Locke
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.* S. S. Belgenland, Capt. J. Stokes																	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, N. 47° 37′, W. 37° 53′*	30.27	768.8	40	4.4	63	w.	5		8		w.	0.1	3.	long	w.	cloudy	O. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A Beynon,																	M. Eymond.
S. S. Waesland, Capt. H. Nickels. Antwerp, Belgium*	29.61	752.1	56	13.3		ssw.	5		10		ssw.	0	0			cloudy	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.* S. S. W. A. Scholten, Capt. G. J. Vis.																	
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.* S. S. Thingvalla, Capt. G. J. H. Laub, N. 45° 49′. W. 43° 20′..†	30.42	772.7	32.9	0.5		nne.	1		8		n.	0	0	long r'gh	wnw.	covered	J. T. Ulberling.
WARREN LINE. *Warren & Co., Agents, Boston.* S. S. Iowa, Capt. S. Walters.																	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.* S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry,																	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 43° 55′ W. 54° 34′*†	30.36	771.1	29	—:.7	78	wnw.	3		10		wnw.	0	0	mod.	wnw.	cloudy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. N. 47° 42′, W. 29° 27′*†	30.27	768.8	55	12.8	80	wnw.	6		2		wnw.	shr's	shr's	r'gh	w.	squally	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE. *Sanderson & Sons, Agents, New York.* S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS. Sch. Addie Fuller, Capt. James Jorgensen, N. 28° 10′. W. 67° 14′†	30.51	774.9	67.5	19.7	69	ne.	3	0	2 k		ne.	0.06	1.5	mod.	ne.	clear	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona N. 35° 46′, W. 25° 21′	30.58	776.6	64.0	17.8		calm	0	0	6 s					large	nw.	cloudy	
Bk. Alpha, Capt. Ole Grönn, Pozzuoli, Italy*†	29.92	760.0	60	15.6													Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis																	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin,																	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	29.48	748.8				wnw.	7		8		wnw.	rain	sq'lls			cloudy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 21° 20′ W. 42° 50′†	30.20	767.1				e.	4		5		ese.	light	shr's	r'gh	ene.		
S. Enoch Train, Capt. H. D. Chapman. N. 44° 00′, W. 30° 58′*	30.23	767.8				w.	4		3		w.	shr's	shr's	light	w.	fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 37° 31′, W. 57° 48′*	30.31	769.9				e.	4-6		8		w.	3 h'r	light	mod	n.	cloudy	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.47	773.9	38	3.3	54	nw.	1		10		nw.			sm'l		raining	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 33° 34′, W. 48° 56′†	29.83	757.7	74	23.3		n.	6		10		n.	0	0	mod.	n.	misty	G. D. Morrison.
Bk. Freya, Capt. Blaouw, Limerick, Ireland			44	6.7		wsw.	9		2		w.	2 h'r	hail			squally	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.68	738.6				calm	0		10			6 h'r	h'vy				
Bk. Geo. Booth, Capt D. Williams,																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 45° 46′, W. 26° 04′*	29.99	761.8	50.2	10.1	80	wsw.	6		7		wsw.	4 h'r	4 h'r	long	w.	squally	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 1° 33′, W. 31° 34′*	29.77	759.7				ese.	4		6		ese.	1 hr	light	mod.	e.	squally	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 32′, W. 27° 55′*†	30.60	777.2				s.	3				sw.	0	0	long	nw.	cloudy	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.04	763.0	53	11.7	73	n.	1		8		w.					cloudy	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly,																	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen. N. 48° 40′, W. 10° 16′†	30.01	762.3	55	12.8		wsw.	5		10		wsw.	4 h'r	light	h'vy	wsw.	clearing	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 33° 50′, W. 38° 00′*	30.36	771.1	63.1	17.3	98	s.	3		2		s.			mod.	s.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.34	770.6	62	16.7	88	e.	1		0			0	0			clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 2° 17′, W. 30° 42′*†	30.00	762.0				se.	5		7		se.			mod.	se.		I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton,																	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,

Brig. & Bvt. Maj. Gen'l,

Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 7, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.38	771.6	59.4	15.2	83	ne.			2		0			0	0	clear	Moroud.
Algiers			30.35	770.9	59.0	15.0	74	n.			4		9			0.094	2.4	covered	Nicolas.
La Calle			30.15	765.7	59.0	15.0	98	e.			4		6			1.398	35.5	cloudy	Fonfréde.
Tunis			30.11	764.8															Jacques.
Sfax																			Gau.
Saida			30.30	769.6	42.1	5.6	88	n.			3		4			0.047	1.2	cloudy	Perès.
Tebessa			30.17	766.3	50.7	10.4	98	n.			2		9			1.260	32.0	covered	Derché.
Geriville					39.6	4.2	87	n.			7		10			0.421	10.7	covered	Lonchamp.
Laghouat			30.28	769.0	50.7	10.4	58	n.			4		4			0.315	8.0	cloudy	Herbin.
Biskra			30.19	766.8	61.2	16.2	58	nw.			1		10			0.378	9.6	covered	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.75	755.6	29.84	757.9	73.4	23.0	43	nne.	6	2.7			3			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.52	749.9	30.08	764.1	48.2	9.0	95	sw.			4		5			0.094	2.4		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.13	740.0	29.91	759.8	45.3	7.4	77	wsw.	7.4	3.3			10			0	0		Dr. Wierzbiski.
Eperies	29.11	739.3	30.02	762.5	35.1	1.7	96	s.			3		10			0	0		Julius Mikolik.
Gratz	28.76	730.4	30.05	763.3	36.7	2.6	81	s.			2		0			0	0		Andreas Rospini.
Hermannstadt	28.66	727.9	30.13	765.3	41.2	5.1	86	sw.			3		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.58	726.0	29.93	760.3	47.7	8.7	77	s.			2		9			0.213	5.4	covered	The Staff.
Lemberg	28.90	734.0	29.91	759.7	41.4	5.2	83	sw.			1		9			0.398	10.1		Dr. T. Stanecki.
Pola	30.02	762.6	30.14	765.5	52.3	11.3	89	sw.			1		10			0	0		I. R. Hydrographic Office
Szathmar	29.59	751.6	30.06	763.4	38.1	3.4	87	e.			1		10			0.130	3.3		Joseph Midlinszky, S. J.
Szegedin	29.80	757.0	30.09	764.3	43.5	6.4	88	s.			1		5			0	0		Karl Stancel.
Trieste	30.08	763.9	30.18	766.5	48.6	9.2	89	calm			0		10			0.177	4.5		Rieder.
Vienna	29.29	743.9	30.03	762.8	37.0	2.8	86	calm			0		3			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	29.26	743.2	29.36	745.7	37.4	3.0	71	sw.	22	9.8			3			0	0	blue sky	W. Boswell.
Armagh, Observatory	29.55	750.6	29.80	756.9	36.7	2.6	90	sw.	18	8.0			5					d. clouds	S. Call.
Bidston, Liverpool Obs'y			29.80	756.9	42.3	5.7	73	wsw.	48	21.5			6					d. clouds	John Hartnup.
Bolton, Sharples	29.25	742.9	29.79	756.7	40.0	4.4	73	wsw.	36	16.1			9					overcast	Thomas Mackereth, A.S.
Bradford, Yorkshire	29.30	744.2	29.70	754.4	40.5	4.7	79	sw.			5		8			0.10	2.5	overcast	J. McLandsborough, F.R.
Bridgetown, Barbadoes	29.97	761.2	30.00	762.0	78.0	25.6	75	ne.			2		3					d. clouds	Pvt. J. Surgenor.
Cardington			29.87	758.7	41.0	5.0	65	w.			4.0		1					blue sky	John McLaren.
Chatham, School M. E.	29.80	756.9	29.94	760.5	44.1	6.7	77	sw.			2		3					d. clouds	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.93	760.2	30.16	766.1	43.6	6.4	74	nw.					9					showery	The Staff.
Fort Napier, Natal	27.44	697.0	29.66	753.4	66.2	19.0	80	ne			1		7						Pvt. E. K. Annias. A. H. C.
Free Town, Sierra Leone	29.75	755.6	29.98	761.5	89.0	31.7	56	nw.			1		4					d. clouds	Sergt. John Robinson.
Galway, Queen's College			29.88	758.9	43	6.1	75	sw.			6		10			0.54	13.7	raining	J. O'Donaghue.
Gibraltar, Mediterranean	30.34	770.6	30.39	771.9	61.6	16.4	75	nw.			3		0					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	29.33	745.0	29.54	750.3	36.2	2.3	79	w.			6		5					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.77	756.1	29.95	760.7	43.3	6.3	58	wsw.			5		1					blue sky	The Staff.
Guernsey	29.88	758.9	30.19	766.8	46.1	7.8	83	nw.			3		4			blank	blank	d. clouds	A. Collenette, F. M. S.
Kew, Observatory	29.93	760.2	29.97	761.2	43.6	6.4	50	w.	22	9.8			1					blue sky	The Staff.
Leicester, Museum	29.60	751.8	29.86	758.4	42.2	5.7	57	sw.			1		0					blue sky	J. C. Smith.
Malta, Mediterranean	29.94	760.5	30.01	762.2	59.0	15.0	87	ne.			3		10					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.22	767.6	30.26	768.6	71.0	21.7	84	ne.			1		5					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.35	745.5	29.89	759.2	41.1	5.1	60	wsw.			4		5					squally	John Mac Email.
Oxford, Radcliffe Obs'y	29.71	754.6	29.94	760.5	42.8	6.0	61	wsw.			5		0					squally	The Staff.
Plymouth	30.03	762.7	30.11	764.8	45.2	7.3	76	wnw.			2		2					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.13	739.9	39.9	4.4	62	w.	45	20.1			3					showery	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.12	765.0	30.18	766.6	51.0	10.6	78	s.			1		0					blue sky	W. H. Lyne
Sheffield	29.55	750.6	29.84	757.9	40.2	4.6	87	wsw.			5		7			0.08	2.0		W. F. Cooper.
Silloth Rectory	29.61	752.1	29.64	752.8	39.9	4.4	76	wnw.			6		10			0.025	0.6	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.78	756.4	40.0	4.4	67	w.	31	13.9			7			blank	blank	squally	Rev. S. J. Perry.
Strathfield Turgiss	29.75	755.6	29.97	761.2	42.7	5.9	61	w.			3		2					squally	Rev. C. H. Griffiths, F.M.S
Truro, Royal Institution	30.17	766.3	30.23	767.8	49	9.4	71	w.			6		5					d. clouds	W. Newcombe.
Valencia, Observatory	30.06	763.5	30.08	764.0	45.6	7.6	55	w.	26	11.6			7			blank	blank	squally	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.02	762.5	30.07	763.8	22	— 5.6	91	e.	1	0.4			10 n			0	0	threatening	H. J. Cundall, C. E.
Chatham, N. B.*	30.00	762.0	30.06	763.5	17	— 8.3	96	calm	0	0			10 n		calm	0.01	0.3	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.92	760.0	29.94	760.5	20	— 6.7	84	e.	10	4.5			10 n		calm	0.05	1.3	heavy snow	J. McWilliams.
Fort Garry, Manitoba*	28.97	735.8	29.83	757.7	24	— 4.4	100	se.	4	1.8			10 n			0.050	1.3	light snow	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.89	759.2	30.03	762.7	28	— 2.2	100	ne.	5	2.2			10 n			0.030	0.8	light snow	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.72	754.9	30.07	763.8	30	— 1.1	80	w.	7	3.1			10 k		w.	0.12	3.0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.70	754.4	29.91	759.7	23	— 5.0	92	w.	24	10.7			10 s			0.51	13.0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.36	745.7	30.10	764.5	19	— 7.2	84	calm	0	0			10 n			0.25	6.3	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.42	747.3	30.14	765.5	33	0.6	89	sw.	8	3.6			10 n			0.07	1.8	threatening	H. Morgan.
Port Stanley, Ontario	29.38	746.2	30.06	763.5	32	0.0	92	w.	12	5.4			10 n		se.	0.08	2.0	cloudy	M. Payne.
Quebec, Quebec*	29.53	750.0	29.87	758.7	23	— 5.0	100	ne.			5		10 n		ne.	0.48	12.2	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.56	750.8	30.06	763.5	12	—11.1	91	nw.	5	2.2			10 s		w.	0.25	6.3	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.35	745.5	30.09	764.3	32	0.0	92	w.	9	4.0			10 s			0.07	1.8	cloudy	K. Stewart.
St. Andrews, N. B.	29.79	756.7	29.85	758.2	31	— 0.6	98	se.	8	3.6			10 n			0.30	7.6	heavy snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	30.10	764.5	30.16	766.1	19	— 7.2	86	calm	0	0		10 cs	0			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.72	754.9	30.12	765.0	31	— 0.6	88	w.	9	4.0			10 ks			0.13	3.3	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	29.75	755.6	29.82	757.4	32	0.0	85	e.	10	4.5			fg.			0.12	3.0	light snow	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.06	763.5	30.33	770.4	23	— 5.0		sw.				0	0			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Cape St. Francis Lt. House	29.95	760.7	29.98	761.5	66.0	18.9	73	w.	30.0	13.4		7 cs	0			0.390	9.9	stormy	John Dutbie.
Cape Town, C. G. H. Obs'y	30.07	763.8	30.11	764.8	77.8	25.4	53	s.	20	8.9		8	6			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Sub-Series.																			
Hankow																0.13	3.3		N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.43	772.9	30.45	773.5	31.3	— 0.4	77	nnw.	6.5	2.9		0	8 k			0.693	17.6	almost cov'd	M. Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Amount and kind. Lo'er 0—10	Direction. Upper. From.	Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.39	746.6	29.44	747.8	41.7	5.4	74	wnw.	25	11			7						Oversergent Fischer.
Fanöe	29.44	747.8	29.46	748.3	38.7	3.7	87	wsw.			6		6						Overloerer Lauridsen.
Godthaab, Greenland	29.47	748.5	29.51	749.6	5.4	—14.8	78	nnw.			2		9						S. Kleinschmidt.
Stykkisholm, Iceland	28.89	733.9	28.94	735 0	26.6	— 3.0		ne.			6		8						A. O. Thorlacius.
Thorshavn	28.84	732.5	28.87	733.4	40.1	4.5	57	wnw.	27	12			7					raining	Overloerer Bergh.
Vestervig	29.20	741.7	29.29	744 0	41.5	5.3	71	w.			7		8					sleeting	Loerarer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.67	753.5	30.33	770.4	49.6	9.8	95	w.			1		10 n		n.	0	0	covered	M. Labroue, Director.
Alençon, Normal School	29.68	753.8	30.23	767.8	45.0	7.2	97	sw.			2		n		sw.	0.142	3.6		M. Nicot, Director.
Arras, Engineer School	29.72	754.9	29.98	761.6	45.3	7.4	97	nw.			4	0	1 k		nw.	0.205	5.2	clear	M. Klein, Commandant.
Avignon, Normal School	30.08	764.0	30.16	766.0	50.0	10	74	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.53	750.0	30.10	764.4	47.7	8.7	83	sw.			2		10			0.256	6.5	raining	M. Saillard, Director.
Beauvais, Normal School	29.77	756.2	30.04	763.1	47.7	8.7	65	w.			2		2		wnw.	0.205	5.2	slightly cl'dy	M. Frère Eugène Marie.
Besançon, Normal School			30.09	764 2	48.0	8.9	92	s.			2		10 n		nw.			light rain	M. Gobin, Director.
Bordeaux, Observatory	30.04	763.1	30.31	769.9	49.5	9.7	95	wsw.			1		10		wsw.	0.157	4.0	covered	M. Rayet, Director.
Bourges, Normal School	29.55	750.6	30.11	764.8	50.0	10	82	w.			1		kn		w.	0.059	1.5		M. Postel, Director.
Brest, Naval Observatory	30.03	762.7	30.27	768.9	48.9	9.4	69	nw.			2		4		nw.	0.165	4.2		M. de Kennaree, Dir.
Caen, Normal School	30.01	762.2	30.09	764.2	47.8	8.8	83	w.			3		2		w.	0.16	4.	slightly cl'dy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.62	752.4	29.94	760.5	48.4	9.1	81	wsw.			2		8	w.	nw.	0.378	9.6	very cloudy.	M. Jadot, Director.
Charleville, Normal School	29.44	747.7	29.95	760.8	44.6	7	71	w.			4		10			0.24	6.	raining	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.79	731.3	30.15	765.7	55.8	13.2	67	wsw.			2		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.29	743.9	30.15	765 8	49.6	9.8	95	s.			2		10		ne.			raining	M. de Villemontée, Dir.
Commercy, Normal School	29.16	740.6	30.03	762.8	45.5	7.5	94	w.			1	0	5 kn	w.	w.	0.098	2.5	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.62	701.5	30.22	767.5	41.9	5.5	91	se.			1					0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.02	737.2	30.17	766.2	52.7	11.5	57	nw.			1		2		sw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.42	747.2	30.21	767.3	44.2	6.8	77	se.			1	cs	0	ne.		0	0		M. Ablard, Director.
Guéret, Normal School	28.60	720.5	30.20	767 1	45.9	7.7	83	w.			2		5		w.	0.102	2.6	cloudy	M. Rivoire, Director.
Lamballe, Normal School	29.97	761.3	30.25	768.5	42.1	5.6	95	nw.			3		5		nw.	0.098	2.5	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.79	756.6	30.30	771.1	56.3	13.5	61	w.			3		10 n			0.031	0.8	covered	M. Chauvin, Director.
Lorient, Naval Observatory					50.0	10.0	86	wnw.			3		5		nw.	0.276	7.0	½ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.12	739.6	30.18	766.6	50.4	10.2	73	s.			1	0	5 n		w.	0	0	cloudy	M. André, Director.
Mans, Normal School	29.87	758.6	30.18	766.6	48.4	9.1	72	nnw.			1		5		nw.	0.165	4.2	cloudy	M. Piboen, Director.
Marseille, Observatory	29.89	759.1	30.16	766.1	53.8	12.1	62	wnw.			1		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.99	634.7	29.83	757.7	42.8	6.0	36	w.	3.8	1.7			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.12	765.1	30.24	768.0	59.4	15.2	64	w.			3		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.20	741.7	30.00	762.0	45.3	7.4	91	wsw.			1	0	5 kn			0.165	4.2	cloudy	M. Hasse, Director
Nantes, Observatory	30.12	765.1	30.28	769.2	52.7	11.5	64	wnw.			2-3	c	5 k		wnw.	0.260	6.6		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.15	765.7	30.26	768.5	56.3	13.5	58	n.	22.4	10.0			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.37	542.8			28.4	—2.0		nw.			1		10		nw.	0.165	4.2	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.08	738.7	30.16	766.1	52.2	11.2	52									0	0		M. Tallieu.
Puy de Dôme Obs'y, Summit	25.17	639.3			30.0	2.2	100	wsw.			8		10			0.201	5.1	foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.20	768.7	30.30	769.5	52.5	11.4	90	w.			1		2		sw.	0.012	0.3	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.06	763.5	30.28	769.0	50.7	10.4	68	nw.			1		5	wsw	sw.	0.181	4.6	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.08	713 3	30.28	769.2	43.7	6.5	97	nw.			2		10			0.12	3.	light rain	M. Colrat, Director.
Rouen, Normal School	30.02	762.5	30.07	763 7	47.1	8.4	72	w.			2		10			0.28	7.	covered	M. Platrier, Director.
Saint Lô, Normal School	30.03	762.7	30.19	766.7	46.4	8	71	w.			1		5		nnw.	0.189	4.8	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.91	759.7	30.08	763.9	48.9	9.4	63	wnw.			3		2		nw.	0.287	7.3		M. Renou, Director.
Toulouse, Observatory	29.62	752.4	30.35	770.9	53.2	11.8	77	sw.			3		5	nw.		0.075	1.9	cloudy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.60	751.7	30.09	764.2	43.9	6.6	77	nw.			3					0.291	7.4		Dr. A. Rérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.04	737.7	29.89	759.3	41.0	5.0	90	s.			1		10 n		ssw.	0.394	10.0	raining	Prof. Dr. Hoh.
Berlin	29.58	751.2	29.76	755.8	44.1	6.7	85	w.			4		5			0.091	2.3		Prof. Dr. Arndt.
Breslau	29.34	745.2	29.87	758.6	45.5	7.5	72	wsw.			2		10					sprinkling	Royal University Obs'y.
Carlsruhe	29.52	749.9	29.97	761.2	47.8	8.8	97	sw.			3		10	sw.		0.752	19.1	heavy rain	Albert Senz.
Cassel	29.07	738.4	29.78	756.5	42.3	5.7	79	sw.			4		10	sw.		0.102	2.6		Dr. H. Mohl.
Frankfort on the Main	29.51	749.5	29.88	759.0	43.3	6.3	93	sw.			1		9			0.244	0.2		Physical Society.
Friedrichshafen	28.56	725.5	30.02	762.4	47.5	8.6	77	ssw.			5		10	sw.		0.398	10.1		Wilhelm, Chief Tel.
Hamburg	29.59	751.5	29.68	753.9	42.1	5.6	79	wsw.			0		1			0.157	4.0		E. Preller.
Kiel	29.55	750.5	29.56	750.9	41.5	5.3	77	sw.			4		9			0.109	4.3		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.40	746.8	29.83	757.6	44.6	7.0	78	wsw.			2		10	sw.		0	0		H. Leppig, Asst.
Magdeburg	29.58	751.2	29.77	756.1	44.8	7.1	74	wsw.			3	0	7 ks		wsw.	0.079	2.0		Dr. Assmann.
Memel	29.39	746.5	29.43	747.6	39.7	4.3	80	wsw.			8	0	3 ks						Issermann.
Munich	28.11	714.1	29.97	761.3	48.7	9.3	64	calm			0		9	sw.		0.008	0.2	raining	Central Station.
Neufahrwasser	29.58	751.4	29.00	751.8	41.9	5.5	62	wsw.			5		4	w.		0.039	1.0		A. Lothes.
Neustadt, Palatinate	29.39	746.4	29.91	759.7	45.0	7.2	94	sw.			2		10			0.374	9.5		Dicknether.
Stuttgart	28.93	734.8	29.83	757.6	49.8	9.9	78	nw.			5		10			0.126	3.2	raining	Prof. Dr. Schoder.
Wustrow	29.58	751.4	29.61	752.0	40.1	4.5	97	sw.			5		10			0.039	1.0		Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.81	757 1	30.21	767 2	57.7	14.3		n.			0 5		2			0	0	misty	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.02	762.5	30.07	763.8	75.7	24.3	27	ne.					2	sse.		0	0	d. clouds	
Deesa	29.54	750.2	30.02	762.4	77.7	25.4	56	nnw.	8.2	3.7			0			0	0	blue sky	
Bombay	29.94	760.6	29.98	761.5	78.9	26.1	68	nnw.	16	7.2			0			0	0	blue sky	
Poona, Yarrowda	28.10	713.8	29.94	760.4	87.0	30.6	28	wnw.	4	1.8			1	wnw.		0	0	d. clouds	
Belgaum	27.41	696.2	29.93	760.3	80.3	26.8	55	ne.	3	1.3			6	s.	nw.	0	0	threatening.	
Lahore	29.31	744.6	30.09	764.3	61.6	16.4	43	calm	1.1	0.5			0			0	0	blue sky	
Roorkee	29.13	739.8	30.06	763.6	63.8	17.7	48	calm	2.2	1.0			1			0	0		
Agra	29.53	750.0	30.12	764.9	67.3	19.6	42	w.	4.8	2.2			0			0	0		
Nagpur	28.99	736.4	30.05	763.3	76.2	24.6	39	se.	3	1.3			0			0	0	blue sky	
Jubbulpore	28.69	728.6	30.09	764.3	64.4	18.0	39	calm	1.3	0.6			0			0	0	blue sky	
Lucknow	29.72	754.8	30.11	764.9	62.3	16.8	50	wsw.	5.9	2.6			0			0	0	blue sky	
Allahabad	29.79	756.7	30.12	765.0	60.8	16.0	59	calm	2.3	1.0			0			0	0	blue sky	
Patna	29.93	760.2	30.12	765.1	62.6	17.0	60	w.	3.9	1.7			0			0	0	blue sky	
Hazaribagh	28.03	711.9	30.11	764.9	62.8	17.1	31	w.	6.5	2.9			0			0	0	blue sky	
Cuttack	29.99	761.8	30.08	764.0	73.2	22.9	57	ne.	1.4	0.6			3			0	0	d. clouds	
Calcutta, Alipore	30.06	763.6	30.09	764.2	65.5	18.6	59						0			0	0	blue sky	
Dhubri	29.97	761.2	30.10	764.5	65.5	18.6	77	calm	3.7	1.6			0			0	0	blue sky	
Chittagong	29.99	761.8	30.09	764.2	67.8	19.9	64	calm	1.7	0.8			1			0	0	blue sky	
Sibsagar	29.78	756.3	30.13	765.3	60.9	16.1	88	se.	1.9	0.8			0			0	0	blue sky	
Jeypore	28.63	727.1	30.12	764.9	68.0	20.0	39	nw.	3.2	1.4			0			0	0	blue sky	
Zanzibar, Africa	29.86	758.4			85.4	29.7	67	ne.	7.3	3.3			4 fk		nne.	0	0	d. clouds	
Trichinopoly	29.72	754.9			82.6	28.1	69	calm	0	0			0			0	0	blue sky	
Bellary	28.48	723.4			85.6	29.8	49	e.	3.1	1.4			4			0	0	d. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.75	755.7	30.17	766.4	45.5	7.5	80	n.	1.3	0.6			10			0	0		Prof. Giovanni Clodig.
Milan	29.66	753.4	30.20	767.1	37.6	3.1	95	nw.	0.7	0.3			6			0	0		Prof. Schiaparelli.
Padua	30.06	763.4	30.17	766.3	43.3	6.3	73	n.	0.7	0.3			8	sw.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.24	742.6	30.19	766.8	36.3	2.4	84	ene.	1.6	0.7			0			0	0		Prof. P. F. Denza.
Genoa	29.97	761.1	30.16	766.1	54.7	12.6	73	calm	0	0			8	se.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.20	716.3	30.19	766.9	40.8	4.9	58	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.10	764.5	30.15	765.8	43.2	6.2	98	w.	4.9	2.2			10			0	0		Prof. Luigi Guidi.
Florence	29.90	759.5	30.17	766.2	50.0	10.0	81	sse.			2		10			0	0		Prof. Costantino Pitter.
Leghorn	30.07	763.8	30.16	766.0	51.6	10.9	90	ne.	2.5	1.1			10			0	0		Prof. P. Monte.
Rome	29.98	761.5	30.16	766.0	55.6	13.1	72	n.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	29.91	759.8	30.17	766.4	57.2	14.0	84	se.	4.9	2.2			8	se.		0	0		Prof. C. de Giorgi.
Cosenza	29.30	744.1	30.21	767.2	51.1	10.6	75	se.	1.8	0.8			10	s.		0.087	2.2		Prof. D. Conti.
Cagliari	29.91	759.7	30.10	764.6	57.9	14.4	72	nw.			2		0			0	0		Prof. A. Pacinotti.
Palermo	29.83	757.7	30.08	764.1	62.6	17.0	86	calm	0	0			10	sw.		0.087	2.2		Prof. G. Ciacciatore.
Syracuse	30.06	763.6	30.11	764.7	58.6	14.8	79	e.	7.4	3.3			10	se.		0.240	6.1		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.60	751.8	30.12	765.1	56.8	13.8	78	n.	1.8	0.8			10	ssw.		0	0		Prof. T. Brioschi.
Stelvio	22.13	562.1			24.4	— 4.2	42	s.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.19	563.6			30.0	— 1.1	60	n.			2		0			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.05	763.3	30.09	764.3	27.9	— 2.3	86	calm					10 s		w.			overcast	
Hakodate	30.06	763.5	30.07	763.8	28.0	— 2.2	70	n.	12.0	5.4			4		wsw.	0	0		
Hiroshima, I. M. Obs'y	29.84	757.9	29.85	758.2	42.1	5.6	95	e.	2.1	0.9			10 n			0.585	14.9	raining	K. Sasaki
Kanazawa	30.17	766.3	30.27	768.8	38.7	3.7	94						10 n					raining	S. Endo.
Kioto	29.70	754.4	29.88	758.9	42.2	5.7	98	nnw.	1.1	0.5			10 n			0.940	23.9	raining	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.74	755.4	29.95	760.7	50.2	10.1	92	nw.	7.8	3.5			10 n			0.790	20.1	light rain	S. Takehayashi.
Niigata	29.97	761.2	30.00	762.0	37.1	2.8	84	ese.	3.3	1.5			10 n			0.450	11.4	light rain	
Nobiru	30.02	762.5	30.04	763.0	33.6	0.9	80	nnw.	9.9	4.4			10 s			0.315	8.0	cloudy	H. Midzushina.
Supporo					18.0	— 7.8	92	calm	0	0			5			0.007	0.2	fair	
Tokei Obs'y, Yeddo	29.92	759.9	29.99	761.7	38.8	3.8	92	n.	4.4	2.0			10 n			0.685	17.4	light rain	The Staff.
Wakayama	29.80	756.9	29.85	758.2	43.7	6.5	94	w.	2.9	1.3			10 n			1.025	26.0	light rain	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.77	756.1	29.96	761.0	79.1	26.2	67	sse.	5.5	2.5		0	9 k;kajn		e.	0	0	cloudy	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.72	602.7	29.95	760.7	47.3	8.5	89	calm	0	0		3 cs	0	w.		0	0	clear	Vicente Fernandez.
Leon	24.49	622.0	30.30	769.6	50.5	10.3	81	n.			1	2 c	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.74	755.5	30.01	762.2	68.0	20.0	79	ene.			1		10 kn		sw.	inap.	inap.	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.4	30.31	769.9	45.0	7.2	72	calm	0	0		1 c	0			0	0	fine	The Staff.
Morelia	24.26	616.3	30.52	775.3	45.0	7.2	76	se.			3	2 c	0	s.		0	0	clear	M. Tena, M. D.
Pabellon, Aguascallentes	23.95	608.4	30.05	763.3	47.5	8.6	67	calm			0	1 c	0			0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.47	596.1	30.46	773.7	40.1	4.5	83	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.22	615.3	30.40	772.3	45.8	7.7	55	e.			1		10		e.	0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.55	572.8	30.27	768.8	49.0	9.8	59	ssw.	9.3	4.1		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.87	758.6	29.87	758.6	45.3	7.4		w.			4					0.008	0.2		
Groningen	29.63	752.5	29.68	753.9	41.9	5.5		w.			5					0.051	1.3		
Helder	29.71	754.5	29.71	754.5	43.5	6.4		w.			5					0	0		
Hellevoetsluis	29.81	757.1	29.81	757.1	43.3	6.3	74	w.			5					0.020	0.5		
Utrecht	29.75	755.6	29.80	756.8	44.2	6.8	87	wsw.			4		8			0.071	1.8	very cloudy.	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0–10	Clouds. Amount and kind. Up'er 0–10	Lo'er 0–10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	28.91	734.2	28.97	735.8	37.4	3.0	87	calm	0	0			8			0.402	10.2	raining	
Brono	28.85	732.7	28.89	733.7	27.0	— 2.8	70	e.	27	12			9			0	0		
Christiania	28.74	730.0	28.89	733.7	40.3	4.6	60	wsw.	18	8			9			0.122	3.1		
Gjæsvær	29.41	746.9	29.43	747.5	14.9	— 9.5		ne.			2		10						
Lodingen	29.13	740.0	29.18	741.2	19.2	— 7.1	62	ene.			7		1			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					58.6	14.8	82	ssw.	9.3	4.4			6			0	0		Dr. J. A. Sampaio.
Campo Major	29.40	746.7	30.43	773.0	48.4	9.1	89	se.	1.8	0.8			3			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.33	770.3	30.41	772.5	66.2	19.0	56	wsw.	1.8	0.8			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.11	764.7	30.47	774.0	56.7	13.7	73	nne.	19.9	8.9			4	wnw.		0	0		The Staff.
Ponta Delgada, Azores	30.44	773.2	30.51	775.0	58.6	14.8	78	s.	18.1	8.1			3			0	0		
Saint Paul de Loando	29.69	754.1	29.89	759.2	77.7	25.4	97	w.	1.3	0.6			9			blank	blank		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.17	741.0	30.41	772.4	— 8.5	—22.5		calm	0	0		1 c	0			0	0		Major K. Lasarew.
Archangel	29.05	737.8	29.07	738.3	29.5	— 1.4	96	se.	4	2			10			0.217	5.5	snowing	Capt. Sseliwerstow.
Astrakhan	30.35	771.0	30.27	768.9	31.8	— 0.1	94	calm	0	0		10 cp	0			blank	blank		Capt. Wisganow.
Barnaul	29.91	759.7	30.47	773.9	3.9	—15.6	63	calm	0	0			0			0	0		Meteorological Obs'y.
Dorpat	28.83	732.2	29.07	738.3	39.2	4.0	80	wsw.	18	8			10 n					light rain	Observatory.
Ekaterinburg	29.03	737.4	30.00	763.6	9.5	—12.5	57	ssw.	2	1			0			0	0		Meteorological Obs'y.
Kasan	29.50	750.9	29.85	758.3	12.9	—10.6	91	sse.	18	8			10			0.024	0.6		Observatory.
Kertch	30.13	765.4	30.15	765.9	44.1	6.7	87	se.	4	2		0	5 ks			0	0		Lagorio & Sastyrez.
Kieff	29.19	741.4	29.84	757.9	39.6	4.2	73	sw.	9	4		c;cs	10 ks			0	0		Observatory.
Lugan	29.88	759.0	30.10	764.4	35.1	1.7	88	ssw.	13	6			10			0.004	0.1		Meteorological Obs'y.
Moscow	28.91	734.4	29.40	746.8	34.5	1.4	91	s.	7.8	3.5		0	8 ks			0.608	0.2		Meteorological Obs'y.
Nikiolaiev	30.10	764.4	30.17	766.2	32.5	0.3	100	s.	4	2			10 n			0	0	heavy fog	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.91	759.6	29.99	761.8	—18.0	—27.8	78	calm	0	0			1			0	0		Lieut. Iwanow.
Pekin, China	30.29	769.4	30.43	773.0	22.3	— 5.4	47	calm	0	0		0	1 k			0	0		Physical Observatory.
St. Petersburg	28.91	734.4	28.93	734.8	37.4	3.0	90	sw.	20	9			10 n			0.169	4.3		Central Physical Obs'y.
Tashkend, Laboratory	28.64	727.4	30.34	770.7	20.1	— 6.6	97	n.	13	6			10			0	0		Teich, A. M.
Tiflis	28.77	730.7	30.22	767.7	45.1	7.3	46	nw.	22	10			0			0	0		Physical Observatory.
Warsaw	29.34	745.4	29.78	756.3	43.7	6.5	77	wsw.	18	8		cs	10 ks						Astronomical Obs'y.
Wilna	29.13	740.0	29.56	750.8	41.0	5.0	64	sw.	4	2			4			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.84	757.9	30.15	765.8	14.9	— 9.5	91	wsw.	22	10			10			0.031	0.8	snowing	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.37	746.0	42	5.6	83	w.			8		10			0.2	5.	heavy cl'ds.	J. Youngclause.
North Unst, Shetland Isl'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.16	766.0	30.26	768.5	53.2	11.8	64	w.	2.7	1.2			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.35	771.0	30.41	772.5	49.5	9.7	98	se.	2.0	0.9			10			0.118	3.0	covered	Prof. Manuel de Naverau.
Burgos, Met. Obs'y	27.43	696.8	30.58	776.8	32.9	0.5	99	n.	3.1	1.4			10			0	0	dense fog	Domingo Martin.
Madrid, Royal Obs'y	28.13	714.5	30.43	773.0	48.0	9.2	69	ne.	2.5	1.1		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.20	767.0	30.35	770.9	60.4	15.8	57	w.	2.9	1.3		0	0			0	0	clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.54	750.4	30.47	773.8	52.3	11.3	84	ne.	8.7	3.9			10			0.213	5.4	covered	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.09	764.3	30.16	766.0	65.6	18.7	87	ese.	2.0	0.9		c	k	w.	e.	0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.90	759.4	29.95	760.8	81.5	27.5	81	ssw.	0	0		2 ck	8 kn	e.	e.	0	0	threatening	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.33	770.4	30.43	773.0	54.0	12.2	74	calm	0	0		0	0			0	0		Capt. O. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.01	762.3	30.10	764.6	73.0	22.8	95	se.	6.7	3.0		6 k	4 kn	se.	se.	0.087	2.2	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Ids	29.85	758.2	29.98	761.5	77.0	25.0	83	nnw.	2.2	1.0		0	1 s		n.	0	0	clear	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.10	739.0	29.13	740.0	13.3	—10.4	86	ne.			4		10			0	0		
Umeå	28.84	732.5	28.89	733.8	25.9	— 3.4	91	ne.			6		10			0.106	2.7		
Hernosand	28.76	730.6	28.82	731.9	32.5	0.3	83	ne.			7		10			0.244	6.2		
Stockholm	28.63	727.1	28.80	731.6	41.9	5.5	65	wsw.			7		10			0.079	2.0		
Wisby	29.01	736.8	29.07	738.3	41.0	5.0	72	wsw.			7		3			0.087	2.2		
Sub-Series.																			
Upsala	28.67	728.2	28.76	730.4	39.9	4.4	70	w.	18.6	8.3			10		w.	0.177	4.5		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.71	729.3	30.16	766.0	47.5	8.6	70	ne.			1					0.008	0.2	covered	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.21	767.4	52.5	11.4	68	s.	7	3.0	1		0			0	0		The Observatory.
Valona			30.20	767.1	59.9	15.5		w.					2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.12	765.1	64.9	18.3	52	w.			1	0	1 ks	sw.		0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	29.95	760.7	30.04	763.0	38.5	3.6	73	nw.	11	4.9			10 s		nw.	0.07	1.8	cloudy	
Alpena, Michigan	29.40	746.7	30.11	764.8	29	— 1.7	88	calm	0	0			10 s			0.43	10.9	cloudy	
Atlanta, Georgia	29.02	737.1	30.25	768.3	56.0	13.3	86	s.	9	4.0			10 s		calm	0.32	8.1	cloudy	
Atlantic City, New Jersey	30.14	765.5	30.15	765.8	31.2	— 0.4	88	nw.	7	3.1		2 cs	0			0	0	clear	
Augusta, Georgia	30.08	764.0	30.28	769.1	52.0	11.1	93	calm	0	0			10s;sk			0.02	0.5	cloudy	
Baltimore, Maryland	30.16	766.1	30.21	767.3	30	— 1.1	78	w.	2	0.9			fg.			0.02	0.5	dense fog	
Barnegat, New Jersey	30.11	764.8	30.13	765.3	31.0	— 0.6	96	w.	10	4.5		0	3 s			0.02	0.5	clear	
Bismarck, Dakota	28.04	712.2	30.04	763.0	27	— 2.8	88	calm	0	0		1 c	0	calm		0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.38	695.4	30.31	769.9	19	— 7.2	91	w.	4	1.8		0	0			0.05	1.3	clear	
Boston, Massachusetts	29.75	755.6	29.92	760.0	33.0	0.6	94	w.	11	4.9		0	3 s			0.21	5.3	clear	
Brownsville, Texas	29.94	760.5	29.99	761.7	71	21.7	84	s.	4	1.8			10 n		s.	0.05	1.3	light rain	
Buffalo, New York	29.38	746.2	30.18	766.6	33.5	0.8	92	sw.	13	5.8			10 s			0.26	6.6	cloudy	
Burlington, Vermont	29.63	752.6	29.94	760.5	35.0	1.7	75	w.	10	4.5			10 n		w.	0.03	0.8	light snow	
Cairo, Illinois	29.62	752.3	30.04	763.0	54.6	12.0	99	s.	6	2.7			fg.			0.03	0.8	dense fog	
Campo, California	27.41	696.2	30.04	763.0	43.5	6.4	93	w.	1	0.4			10 s		w.	0.04	1.0	cloudy	
Camp Thomas, Arizona	27.22	691.4	30.04	763.0	36	2.2	89	calm			0	0	4 s			0	0	fair	
Cape Henry, Virginia	30.19	766.8	30.21	767.3	42	5.6	100	w.	7	3.1			fg.			0.10	2.5	dense fog	
Cape May, New Jersey	30.15	765.8	30.18	766.6	33	0.6	100	w.	12	5.4			fg.			0.01	0.3	dense fog	
Castroville, Texas	29.13	739.9	29.98	761.5	66	18.9	93	s.	3	1.3			10 s			0.10	2.5	threatening.	
Cedar Keys Florida	30.22	767.6	30.24	768.1	58	14.4	81	e.	4	1.8		2 cs	0			0	0	clear	
Champaign, Illinois	29.16	740.7	30.03	762.7	36.5	2.5	87	se.	9	4.0			10 n		se.	0.08	2.0	light rain	
Charleston, S. Carolina	30.20	767.1	30.26	768.6	57	13.9	93	sw.	3	1.3			10s;fg		sw.	0	0	dense fog	
Charlotte, N. Carolina	29.31	744.5	30.20	767.1	50.0	10.0	100	sw.	2	0.9			fg.			0	0	dense fog	
Chattanooga, Tennessee	29.33	745.0	30.19	766.8	55.0	12.8	100	s.	2	0.9			10n;fg		calm	0.95	24.1	light rain	
Cheyenne, Wyoming	23.79	604.3	30.04	763.0	23.2	— 4.9	75	n.	12	5.4			10 s			0	0	cloudy	
Chicago, Illinois	29.32	744.7	30.07	763.8	34.8	1.6	97	se.	6	2.7			10 s			Inap.	Inap.	cloudy	
Chincoteague, Virginia	30.18	766.6	30.20	767.1	35	1.7	100	nw.	4	1.8			fg.			0.04	1.0	dense fog	
Cincinnati, Ohio	29.48	748.8	30.17	766.3	39.9	4.4	89	e.	2	0.9			10 s			0.17	4.3	cloudy	
Cleveland, Ohio	29.42	747.3	30.20	767.1	35	1.7	89	sw.	6	2.7			10 s			0.12	3.0	cloudy	
Coleman City, Texas	28.10	713.7			52	11.1	93	sw.	4	1.8		0	3 ks		sw.	0	0	clear	
Columbus, Ohio	29.30	744.2	30.20	767.1	37	2.8	82	sw.	2	0.9			10 s			0.14	3.6	cloudy	
Concho, Texas	27.96	710.2	29.98	761.5	55	12.8	93	sw.	16	7.2		0	0			0	0	clear	
Davenport, Iowa	29.24	742.7	29.95	760.7	37	2.8	82	se.	8	3.6			10 s		calm	0	0	cloudy	
Dayton, Washington T'y	28.58	725.9	30.38	771.6	31	— 0.6	92	sw.	2	0.9		0	0			0.46	11.7	clear	
Deadwood, Dakota	25.20	640.1	30.15	765.8	27	— 2.8	80	nw.	4	1.8			8 ks		s.	0.01	0.3	cloudy	
Decatur, Texas					60	15.6	87	s.	10	4.5		0	0			0	0	clear	
Delaware Breakwater, Del.	30.17	766.3	30.19	766.8	33	0.6	100	w.	4	1.8			fg.			0.13	3.3	dense fog	
Denison, Texas	29.07	738.4	29.91	759.7	63.4	17.4	93	s.	13	5.8			10 s		s.	0.02	0.5	cloudy	
Denver, Colorado	24.54	623.3	30.06	763.5	29.0	— 1.7	80	n.	16	7.2			10 s		n.	0	0	cloudy	
Des Moines, Iowa	28.86	733.0	29.83	757.7	38	3.3	89	se.	6	2.7			10 n		se.	inap.	inap.	light rain	
Detroit, Michigan	29.42	747.3	30.18	766.6	40.0	4.4	73	sw.	4	1.8			10 s		calm	0.01	0.3	cloudy	
Dodge City, Kansas	27.05	687.1	29.80	756.9	33.5	0.8	76	se.	2	0.9			10 s			0	0	cloudy	
Dubuque, Iowa	29.22	742.2	29.99	761.7	32.5	0.3	78	se.	5	2.2			10 s		calm	0	0	threatening.	
Duluth, Minnesota	29.22	742.2	29.98	761.5	30	— 1.1	88	ne.	7	3.1			10 s		ne.	0.02	0.5	cloudy	
Eagle Pass, Texas	29.15	740.4	29.99	761.7	60.2	15.7	93	s.	4	1.8		5 ck	0	s.		0.01	0.3	fair	
Eagle Rock, Idaho	25.27	641.8	30.23	767.8	20	— 6.7	76	sw.	7	3.1			10 s			0.56	14.2	cloudy	
Eastport, Maine	29.80	756.9	29.87	758.7	32	0.0	100	e.	10	4.5			10 n			0.17	4.3	heavy snow	
El Paso, Texas	26.16	664.5	30.04	763.0	50.3	10.2	40	nw.	7	3.1		1 c	2 s	w.	w.	0	0	clear	
Erie, Pennsylvania	29.42	747.3	30.19	766.8	36	2.2	89	sw.	4	1.8			10 s			0.08	2.0	cloudy	
Escanaba, Michigan	29.36	745.7	30.08	764.0	25	— 3.9	88	w.	4	1.8			10 s			0.25	6.3	cloudy	
Florence, Arizona																			
Fort Apache, Arizona	24.96	634.0	30.08	764.0	30	— 1.1	71	e.	2	0.9			10 s		calm	0	0	cloudy	
Fort Assinnaboine, Montana	27.18	690.4	30.22	767.6	27	— 2.8	67	w.	1	0.4			10 s		calm	0.05	1.3	cloudy	
Fort Bennett, Dakota	28.18	715.8	29.92	760.0	32	0.0	74	n.	12	5.4		2 k	0	w.		0.01	0.3	clear	
Fort Benton, Montana	27.23	691.6	30.21	767.3	28	— 2.2	100	ne.	2	0.9			10 n		ne.	0.02	0.5	light snow	
Fort Buford, Dakota	27.92	709.2	30.12	765.0	18	— 7.8	70	w.	11	4.9			10 s		calm	0.03	0.8	cloudy	
Fort Custer, Montana	26.77	679.9	30.15	765.8	25	— 3.9	82	s.	8	3.6			10 s		calm	0.34	8.6	cloudy	
Fort Davis, Texas	25.07	636.8	30.05	763.3	51	10.6	86	sw.	6	2.7		0	0			0	0	clear	
Fort Elliott, Texas	26.99	685.5	29.92	760.0	41	5.0	43	sw.	12	5.4		6 k	0	sw.		0	0	fair	
Fort Gibson, Indian T'y	29.24	742.7	29.84	757.9	62.0	16.7	87	s.	12	5.4			10 s		s.	0	0	cloudy	
Fort Grant, Arizona	25.16	639.1	30.00	763.5	41	5.0	42	ne.	4	1.8		5 cs	0			0	0	fair	
Fort Griffin, Texas	28.55	725.2	29.93	760.2	56	13.3	93	s.	11	4.9		0	0			0	0	clear	
Fort Keogh, Montana	27.40	695.9	30.10	764.5	26	— 3.3	76	w.	4	1.8		10 cs	0			0.07	1.8	cloudy	
Fort Macon, North Carolina	30.23	767.8	30.24	768.1	53	11.7	100	sw.	5	2.2			10 ks		sw.	0.02	0.5	cloudy	
Fort McKavett, Texas	27.66	702.6	30.05	763.3	56	13.3	80	sw.	3	1.3		0	0			0	0	clear	
Fort Missoula, Montana	26.78	680.2	30.24	768.1	29	— 1.7	88	se.	2	0.9			10 ks			0.04	1.0	cloudy	
Fort St. Michaels, Alaska	29.38	746.2	29.41	747.0	3	—16.1	100	ne.	4	1.8		0	8 s			0	0	fair	
Fort Shaw, Montana	26.40	670.5	30.26	768.6	25	— 3.9	88	w.	2	0.9			10 n			0.02	0.5	light snow	
Fort Sill, Indian Territory	28.56	725.4	29.89	759.2	46	7.8	96	s.	5	2.2			fg.			0	0	dense fog	
Fort Stevenson, Dakota	27.92	709.2	29.98	761.5	22	— 5.6	73	nw.	6	2.7			10 s		calm	0	0	cloudy	
Fort Verde, Arizona					39.1	3.9	82	w.			2		10 s		w.	0	0	cloudy	
Fredericksburg, Texas	28.15	715.0	29.97	761.2	63	17.2	93	sw.	6	2.7			10 ks		sw.	0.05	1.3	cloudy	
Galveston, Texas	30.00	762.0	30.04	763.0	64	17.8	100	s.	12	5.4			fg.			0	0	dense fog	
Grand Haven, Michigan	29.40	746.7	30.11	764.8	38.0	3.3	86	s.	4	1.8			10 s		calm	0.03	0.8	cloudy	
Hatteras, North Carolina	30.20	767.1	30.22	767.6	52	11.1	93	sw.	6	2.7			10 s		sw.	0	0	cloudy	
Helena, Montana	25.77	654.5	30.20	767.1	36	2.2	49	w.	1	0.4			10 s		sw.	0	0	cloudy	
Henrietta, Texas	28.86	733.0	29.93	760.2	54	12.2	93	s.	6	2.7		0	0			0	0	clear	
Huron, Dakota	28.30	718.8	29.84	757.9	32	0.0	78	w.	11	4.9		0	6 k		w.	0	0	fair	
Indianapolis, Indiana	29.25	742.9	30.09	764.3	35.5	1.9	83	e.	3	1.3			10s;fg		e;calm	inap.	inap.	cloudy	
Indianola, Texas	29.96	761.0	29.99	761.7	68.7	20.4	93	s.	10	4.5			10 s		s.	0.03	0.8	cloudy	
Jacksboro, Texas	28.70	729.0	29.94	760.5	56	13.3	86	sw.	8	3.6		0	0			0	0	clear	
Jacksonville, Florida	30.22	767.6	30.27	768.8	50	10.0	93	se.	1	0.4		3 cs	fg.			0	0	fair	
Keokuk, Iowa	29.18	741.2	29.88	758.9	35.0	1.7	100	se.	10	4.5			fg.			0	0	dense fog	
Key West, Florida	30.15	765.8	30.18	766.6	66.5	19.2	90	e.	4	1.8		0	2 k;fg		e.	0	0	clear	
Kittyhawk, North Carolina	30.20	767.1	30.22	767.6	46	7.8	100	w.	19	8.5			fg.			0.13	3.3	dense fog	
Knoxville, Tennessee	29.14	740.1	30.22	767.6	52.9	11.6	99	calm	0	0			10 n		calm	0.87	22.1	light rain	
La Crosse, Wisconsin	29.08	738.6	29.92	760.0	35	1.7	69	e.	1	0.4			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.03	661.2	30.06	763.5	35.8	2.1	66	calm	0	0		0	1 s			0	0	clear	
Leavenworth, Kansas	28.85	732.8	29.81	757.2	46	7.8	93	calm	0	0			fg.			0	0	dense fog	
Lewiston, Idaho	29.44	747.8	30.32	770.1	38	3.3	62	w.	5	2.2		0	0			0.10	2.5	clear	
Little Rock, Arkansas	29.65	753.1	29.98	761.5	56	13.3	100	s.	4	1.8			fg.			0.02	0.5	dense fog	
Los Angeles, California	29.70	754.4	30.10	764.5	50.0	10.0	86	se.	5	2.2			10 s		calm	0	0	cloudy	
Louisville, Kentucky	29.51	749.5	30.10	764.5	40.0	4.4	89	n.	3	1.3			fg.		calm	0.01	0.3	dense fog	
Lynchburg, Virginia	29.49	749.0	30.21	767.3	37.6	3.1	82	calm	0	0			10 s		w.	0.14	3.6	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	28.95	735.3	30.04	763.0	32	0.0	88	se.	10	4.5			fg.		calm	0	0	dense fog	
Marquette, Michigan	29.28	743.7	30.06	763.5	31	— 0.6	88	w.	1	0.4			10 s		calm	0.22	5.6	cloudy	
Mason, Texas	28.26	717.8	30.00	762.0	62	16.7	90	sw.	5	2.2			10 ks		sw.	0	0	cloudy	
Memphis, Tennessee	29.69	754.1	30.05	763.3	59	15.0	100	se.	2	0.9			10 n		se.	0.35	8.9	light rain	
Milwaukee, Wisconsin	29.28	743.7	30.08	764.0	36	2.2	89	se.	5	2.2			10s;fg			0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.10	764.5	30.14	765.5	59.0	15.0	100	se.	3	1.3	.....	.....	10 ks	.....	s.	inap.	inap.	cloudy	
Montgomery, Alabama	29.96	761.0	30.20	767.1	58	14.4	90	s.	3	1.3	.....	2 ck	4 ks	w.	s.	0	0	fair	
Moorhead, Minnesota	28.75	730.2	29.86	758.4	28	-- 2.2	100	calm	0	0	.....	.....	10 n	.....	.....	0.03	0.8	light snow	
Morgantown, W. Virginia	29.19	741.4	30.25	768.3	40.5	4.7	82	sw.	4	1.8	.....	.....	10 s	.....	sw.	0.55	14.0	cloudy	
Mt. Washington, N. H.	23.38	593.8	30.01	762.2	10.0	—12.2	94	nw.	52	23.2	.....	.....	10n;fg	.....	nw.	0.40	10.2	light snow.	
Nashville, Tennessee	29.55	750.6	30.11	764.8	57.2	14.0	97	s.	2	0.9	.....	.....	10ks;fg	.....	s.	0.59	15.0	cloudy	
New Haven, Connecticut	29.88	758.9	30.00	762.0	35	1.7	89	sw.	2	0.9	.....	0	9 s;fg	.....	sw.	0.41	10.4	cloudy	
New London, Connecticut.	29.96	761.0	30.01	762.2	36	2.2	69	w.	4	1.8	.....	3 k	0	calm	.....	0.61	15.5	fair	
New Orleans, Louisiana	30.04	763.0	30.10	764.5	62.5	16.9	89	se.	4	1.8	.....	10 c	fg	sw.	.....	0	0	cloudy	
Newport, Rhode Island	29.92	760.0	29.97	761.2	39.0	3.9	82	w.	11	4.9	.....	0	1 s	.....	w.	0.32	8.1	clear	
New River, N. Carolina	.....	.....	.....	.....	52	11.1	93	w.	.....	.....	1	4 ck	5 s	w.	sw.	0	0	cloudy	
New Shoreham, Rhode I'd.	29.96	761.0	29.98	761.5	39.2	4.0	82	nw.	24	10.7	.....	3 cs	6 k	w.	nw.	0.37	9.4	cloudy	
New York, New York	29.91	759.7	30.10	764.5	35.5	1.9	87	sw.	11	4.9	.....	.....	10 s	.....	w.	0.14	3.6	cloudy	
Norfolk, Virginia	30.16	766.1	30.19	766.8	44	6.7	93	w.	4	1.8	.....	.....	fg	.....	.....	0.08	2.0	dense fog	
North Platte, Nebraska	26.82	681.2	29.94	760.5	30.2	— 1.0	80	nw.	4	1.8	.....	0	7 s	.....	.....	0	0	fair	
Olympia, Washington T'y	30.40	772.1	30.44	773.2	36.0	2.2	89	calm	0	0	.....	10 k	0	s.	.....	0.01	0.3	cloudy	
Omaha, Nebraska	28.56	725.4	29.83	757.7	39.8	4.3	82	se.	1	0.4	.....	.....	fg	.....	.....	inap.	inap.	dense fog	
Ooglaamie, Pt. Barrow, Alas-	29.89	759.2	29.91	759.7	—30.2	—34.6	64	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	29.73	755.1	30.08	764.0	36.0	2.2	75	nw.	16	7.2	.....	.....	10 s	.....	nw.	0.44	11.2	cloudy	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.18	4.6	.....	
Pensacola, Florida	30.14	765.5	30.17	766.3	60.9	16.1	100	se.	3	1.3	.....	.....	10 s	.....	se.	0.02	0.5	cloudy	
Philadelphia, Pa	30.11	764.8	30.17	766.3	30	— 1.1	100	sw.	12	5.4	.....	.....	fg	.....	.....	0.03	0.8	dense fog	
Pike's Peak, Colorado	17.36	440.9	30.06	763.5	5.5	—14.7	83	sw.	40	17.9	.....	0	0	.....	.....	0	0	clear	
Ploche, Nevada	24.04	610.6	30.24	768.1	19	— 7.2	73	n.	9	4.0	.....	0	0	.....	.....	0.03	0.8	clear	
Pittsburg, Pennsylvania	29.37	746.0	30.22	767.6	38.0	3.3	82	sw.	6	2.7	.....	.....	10 s	.....	sw.	0.06	1.5	cloudy	
Port Eads, Louisiana	30.12	765.0	30.13	765.3	60.0	15.6	100	se.	8	3.6	.....	0	5 s;hz	.....	.....	0	0	fair	
Port Huron, Michigan	29.44	747.8	30.17	766.3	32.0	0.0	100	sw.	9	4.0	.....	.....	10 n	.....	calm	inap.	inap.	light rain	
Portland, Maine	29.79	756.7	29.84	757.9	30.5	— 0.8	88	nw.	7	3.1	.....	.....	10 s	.....	nw.	0.52	13.2	cloudy	
Portland, Oregon	30.43	772.9	30.50	774.7	43.0	6.1	89	s.	3	1.3	.....	.....	10 ks	.....	w.	0.21	5.3	cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	54	12.2	86	sw.	9	4.0	.....	.....	10 s	.....	s.	0.02	0.5	cloudy	
Prescott, Arizona	24.63	625.6	30.01	762.2	38	3.3	59	sw.	4	1.8	.....	.....	10 s	.....	sw.	0	0	cloudy	
Punta Rassa, Florida	30.19	766.8	30.20	767.1	61	16.1	84	ne.	7	3.1	.....	10c;ck	0	c; se.	.....	0	0	cloudy	
Red Bluff, California	29.95	760.7	30.33	770.4	40.5	4.7	69	nw.	14	6.3	.....	0	0	.....	.....	0	0	clear	
Rio Grande City, Texas	29.60	751.8	29.86	758.4	66	18.9	93	calm	0	0	.....	10 cs	0	calm	.....	0.04	1.0	cloudy	
Rochester, New York	29.41	747.0	30.12	765.0	32	0.0	78	w.	17	7.6	.....	.....	10 s	.....	w.	0.14	3.6	cloudy	
Roseburg, Oregon	29.93	760.2	30.50	774.7	39	3.9	89	calm	0	0	.....	5 k	0	n.	.....	0.10	2.5	fair	
Sacramento, California	30.13	765.3	30.21	767.3	43.8	6.6	60	n.	19	8.5	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.34	745.2	29.98	761.5	43.0	6.1	100	s.	13	5.8	.....	.....	fg	.....	.....	0.22	5.6	dense fog	
St. Paul, Minnesota	28.92	734.6	29.87	758.7	33.0	0.6	88	e.	12	5.4	.....	.....	10 s	.....	e.	0	0	cloudy	
St. Vincent, Minnesota	28.91	734.3	29.89	759.2	23	— 5.0	100	se.	8	3.6	.....	.....	10 n	.....	calm	0.02	0.5	light snow	
Salt Lake City, Utah	25.67	652.0	30.24	768.1	30	— 1.1	70	calm	0	0	.....	.....	10 n	.....	.....	0.13	3.3	light snow	
San Antonio, Texas	29.21	741.9	29.94	760.5	65.1	18.4	93	se.	4	1.8	.....	.....	10 s	.....	.....	0.15	3.8	cloudy	
San Diego, California	29.92	760.0	29.99	761.7	55.0	12.8	86	se.	2	0.9	.....	.....	10 n	.....	.....	0.03	0.8	light rain	
Sandusky, Ohio	29.47	748.5	30.19	766.8	36	2.2	89	sw.	6	2.7	.....	.....	10 s	.....	.....	0.08	2.0	cloudy	
Sandy Hook, New Jersey	30.08	764.0	30.12	765.0	37.0	2.8	82	w.	13	5.8	.....	0	9 k	.....	w.	0.09	2.3	cloudy	
San Francisco, California	30.16	766.1	30.23	767.8	50	10.0	48	nw.	15	6.7	.....	0	0	.....	.....	0	0	clear	
Santa Fé, New Mexico	23.11	587.0	30.12	765.0	29	— 1.7	80	calm	0	0	.....	0	5 s	.....	calm	0	0	fair	
Savannah, Georgia	30.17	766.3	30.27	768.8	55	12.8	86	s.	4	1.8	.....	2 ck	5 s;fg	.....	.....	0	0	fair	
Shreveport, Louisiana	29.77	756.1	30.02	762.5	63	17.2	100	s.	10	4.5	.....	.....	10 n	.....	calm	0.78	19.8	light rain	
Silver City, New Mexico	24.13	612.9	29.99	761.7	43	6.1	76	nw.	8	3.6	.....	6 ck	0	nw.	.....	0	0	fair	
Sitka, Alaska	29.74	755.4	29.82	757.4	40.2	4.6	68	e.	20	8.9	.....	.....	10 ks	.....	e.	0.52	13.2	cloudy	
Smithville, North Carolina	30.21	767.3	30.25	768.3	54	12.2	93	w.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	
Spokane Falls, Wash. Ter.	28.19	716.0	30.33	770.4	22	— 5.6	73	w.	3	1.3	.....	0	0	.....	.....	0.08	2.0	clear	
Springfield, Illinois	29.27	743.4	30.00	762.0	38.5	3.6	89	se.	11	4.9	.....	.....	10 s	.....	.....	0.30	7.6	cloudy	
Springfield, Massachusetts	29.88	758.9	30.02	762.5	37.0	2.8	75	nw.	4	1.8	.....	.....	10 s	.....	nw.	0.50	12.7	cloudy	
Springfield, Mo	28.42	721.9	30.00	762.0	54	12.2	90	se.	12	5.4	.....	3 cs	0	.....	.....	inap.	inap.	clear	
Stockton, Texas	26.88	682.7	30.02	762.5	48.7	9.3	80	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Thatcher's Island, Mass.	29.86	758.4	29.92	760.0	33.3	0.7	68	sw.	15	6.7	.....	.....	10 s	.....	sw.	0.39	9.9	cloudy	
Toledo, Ohio	29.43	747.5	30.17	766.3	37	2.8	82	s.	4	1.8	.....	.....	10s;fg	.....	.....	0.04	1.0	cloudy	
Tucson, Arizona	27.48	698.0	29.98	761.5	46	7.8	77	s.	2	0.9	.....	.....	10 ks	.....	w.	0	0	cloudy	
Umatilla, Oregon	30.05	763.3	30.44	773.2	29.7	— 1.3	92	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Uvalde, Texas	28.96	735.6	29.96	761.0	60	15.6	100	e.	2	0.9	.....	.....	10 s	.....	e.	0.02	0.5	cloudy	
Vicksburg, Mississippi	29.82	757.4	30.09	764.3	63	17.2	93	s.	3	1.3	.....	.....	10 s	.....	calm	0.28	7.1	cloudy	
Visalia, California	29.77	756.1	30.16	766.1	33	0.6	83	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Washington, D. C.	30.09	764.3	30.21	767.3	28.0	— 2.2	100	calm	0	0	.....	8 cs	fg	.....	.....	0.05	1.3	cloudy	
West Los Animas, Colorado	25.81	655.6	29.95	760.7	27	— 2.8	88	n.	2	0.9	.....	.....	10 s	.....	sw.	0	0	cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	36	3.3	89	calm	.....	.....	0	.....	10 ks	.....	.....	0	0	cloudy	
Williamsport, Pa	29.43	747.5	30.06	763.5	39	3.9	73	nw.	8	3.6	.....	.....	10 ks	.....	nw.	0.10	2.5	cloudy	
Wilmington, N. Carolina	30.17	766.3	30.23	767.8	57	13.9	86	w.	1	0.4	.....	.....	10 s	.....	w.	0.02	0.5	cloudy	
Winnemucca, Nevada	25.77	654.5	30.31	769.9	29	— 1.7	80	sw.	8	3.6	.....	.....	10 ks	.....	sw.	0.09	2.3	cloudy	
Wood's Holl, Mass	29.91	759.7	29.95	760.7	38	3.3	72	nw.	18	8.0	.....	2 k	0	nw.	.....	0.23	5.8	clear	
Yankton, Dakota	28.40	721.3	29.82	757.4	38	3.3	73	s.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	
Yuma, Arizona	29.79	756.7	29.94	760.5	46.6	8.1	72	sw.	2	0.9	.....	.....	10 k	.....	nw.	0	0	cloudy	
Sub-Stations.																			
Bogota, U. S. Columbia	21.99	558.5	.....	.....	52.0	11.1	76	ne.	1	0.4	.....	3 cs; k	3 ks;s	w.	.....	0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.03	762.7	30.04	763.0	76	24.4	85	e.	.....	.....	.....	5 k	5 ks	e.	e.	0.70	17.8	fair	J. A. Racker.
Buenaventura, U. S. C.	29.93	760.2	29.95	760.7	75	23.9	90	sw.	4	1.8	.....	.....	10 n	.....	s.	0.25	6.3	raining	J. I. Plume.
Guadeloupe, W. I.	29.95	760.7	29.97	761.2	80	26.7	90	e.	.....	.....	.....	2 k	3 ks	.....	.....	0.1	3.	.....	B. Bigar.
Havana, Cuba, W. I.	30.15	765.8	30.20	767.1	68	20.0	93	sse.	1.2	0.5	.....	0	1 ks	.....	calm	0	0	clear	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.05	763.3	30.06	763.5	67.0	19.4	94	n.	1	0.4	.....	0	0	.....	.....	0.01	0.3	.....	Robert Johnstone.
Navassa, W. I.	29.97	761.2	30.05	763.3	77	25.0	65	ne.	18	8.0	.....	5 ck	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	76	24.4	91	e.	.....	.....	2	7 ps	4 s	e.	.....	1.00	25.4	½ cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.37	746.0	29.92	760.0	80	26.7	85	calm	.....	.....	0	1 ck	2 s	calm	calm	0	0	clear	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	73.7	23.2	92	ne.	.....	.....	3	0	0	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.09	764.3	30.12	765.0	73	22.8	76	ne.	12	5.4	.....	0	0	.....	.....	0	0	clear	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.95	760.7	30.01	762.2	—32.0	—35.6	.....	nw.	4	1.8	.....	1 c	2 s	sw.	nw.	0.03	0.8	fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore, India	29.91	759.7	79	26.1	82	nw.			1		7							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.03	762.7	59	15.0	?	e.			4-6		10	ese.						raining	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 5° 00′, E. 106° 00′	29.90	759.4	78	25.6	95	n.			3-4		9					2	n.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.06	763.5	67	19.4	66	sw.			1		2	s.						d. clouds	Com. Sir F. W. Richards.
H. M S. Champion, Callao, Peru	29.87	758.7	68	20.0	94	calm			0		10	calm						overcast	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.26	768.6	50	10.0	86	ssw.			1		6	sse.						misty	Capt. F. W. Egerton.
H. M. S. Coquette																			Lieut. J. L. Burr
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.36	771.1	34.5	1.4	80	nw.			2-5		5	se.						squally	Capt. S. Long.
H. M. S. Diamond, S. 14° 25′, W. 30° 12′	30.00	762.0	80	26.7	74	ese.			5		5					3	ese.	d. clouds	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	30.27	768.8	64.5	18.1	73	ssw.			1-2		4	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 18° 05′, W. 78° 37′	30.11	764.8	78	25.6	99	ene.			3-4		0					1	ene.	blue sky	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 52° 07′, W. 60° 49′	29.28	743.7	43.5	6.4	91	s.			3		10					2	s.		Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.94	760.5	84	28.9		ne.			1-2		5							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. G. Robinson.
H. M. S. Espiegle, N. 6° 15′, W. 24° 40′	29.93	760.2	79	26.1	79	ne.			4		4	ene.				2	e.	d. clouds	Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′ E. 43° 12′	29.88	758.9	78.5	25.8	69	s.			4		1					3	s.	blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	29.81	757.2	47	8.3	92	calm			0		10					1	e.	heavy rain	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 30° 15′, W. 71° 45′	29.98	761.5	58.5	14.7	90	ssw.			3		10					2	ssw.	drizzling	Comm. E. G. Bourke.
H. M. S. Garnet, S. 38° 40′, W. 56° 41′	29.65	753.1	67	19.4	84	calm			0		6							misty	Capt. L. Jones.
H. M. S. Iris, Off Jaffa, Palestine	30.16	766.1	64	17.8	78	sw.			1-2		3					3	sw.	d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.23	767.8	60	15.6	76	ne.			1-2		6	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	30.24	768.1	59.7	15.4	70	n.			4		10					3	n.	misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 18° 55′, E. 72° 12′	29.99	761.7	76	24.4	95	nne.			1		3	nne.				2	nne.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S Northampton, St. Christopher, W. I.	30.04	763.0	75	23.9	81	ene.			3-4		5	ne.						d. clouds	Capt. E. Drummond
H. M. S. Orontes, S. 27° 54′, E. 35° 30′	29.70	754.4	79	26.1	82	s.			5		7					4	ssw.	d. clouds	Capt. R. J. Kinahan.
H. M. S Pelican, S. 37° 20′, W. 20° 09′	29.92	760.0	59.5	15.3	97	wsw.			5		5	sw.				6	w.	d. clouds	Capt. F. R. Dicken
H. M. S. Phœnix, N. 20° 00′, W. 75° 54′	30.07	763.8	70	21.1	95	calm			0		0					sm'h		blue sky	Capt. H. H. Grenfell.
H. M. S. Ready, Muscat, Arabia	30.02	762.5	78.1	25.6		ese.			1									d. clouds	Capt. W. H. Edwards.
H. M. S Rocket, N. 48° 27′, W. 123° 27′	30.41	772.4	37	2.8	90	calm			0		8							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, Ind	29.97	761.2	81.5	27.5	74	ne.			2		5	ne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 37° 00′, E 11° 30′	30.07	763.8	63	17.2	83	e.			6		9	e.				6	e.	d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 18° 11′, W. 76° 27′	30.05	763.3	75	23.9	85	s.			1		2							d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, Payta Bay, Peru	29.92	760.0	70	21.1	79	se.			2		5	calm						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 33° 33′, E. 23° 40′	30.20	767.1	66	18.9	94	ese.			1		9	calm						d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.09	764.3	74	23.3		n.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.06	763.5	64.5	18.1		w.			3		6	wsw.						d. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	30.05	763.2	72.5	22.5	78	ene.			4		6		sw.			2	ne.	d. clouds	C. da Silva Costa.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.15	765.8	62	16.7	88	se.	3	1.3	.....	.....	8	.....	se.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	29.87	758.7	30	— 1.1	.....	nw.	8	3.6	.....	.....	5	.....	nw.	0.5	13.	.....	.....	fair	
Naval Hospital Yokohama, Japan	29.92	760.0	39	3.9	91	n.	.....	.....	1	.....	10	.....	n.	0.06	1.5	.....	.....	raining	
Adams, Mollendo, Peru	29.69	754.1	67	19.4	100	wsw.	.....	.....	3	.....	10	.....	.....	.....	.....	light	s.	cloudy	
Alaska, Callao, Peru	29.84	757.9	66	18.9	94	calm	.....	.....	0	.....	10	.....	.....	0	0	sm'h	.....	cloudy	
Alert, Hong Kong, China*	30.06	763.5	58	14.4	76	nne.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alliance, Boston, Mass	29.86	758.4	37	2.8	90	nw.	.....	.....	1	.....	8	.....	.....	light	light	.....	.....	cloudy	
Ashuelot, Tientsin, China	30.36	771.1	16	— 8.9	100	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, S. 0° 25′, W. 29° 41′	29.91	759.7	80	26.7	91	se.	12	5.4	.....	.....	2	.....	se.	0.13	3.3	long mod.	se.	fair	
Colorado, New York, N. Y	30.08	764.0	37	2.8	94	sw.	4	1.8	.....	.....	10	.....	ne.	0.15	3.8	.....	.....	misty	
Essex, Norfolk, Va	30.19	766.8	45	7.2	84	wsw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	foggy	
Franklin, Norfolk, Va	30.18	766.6	44	6.7	92	wsw.	7.1	3.2	.....	.....	10	.....	.....	0.20	5.1	.....	.....	foggy	
Galena, N. 6° 10′, W. 10° 41′	29.96	761.0	77	25.0	95	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	sm'h	.....	drizzling	
Independence, N. Yard, Mare I'd, Cal	30.10	764.5	48	8.9	78	nw.	1.2	0.5	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La	30.09	764.3	63	17.2	94	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	dense fog	
Lackawanna, Valparaiso, Chili†	30.04	763.0	62	16.7	100	n.	.....	.....	1	.....	2	.....	n.	.....	.....	.....	.....	clear	
Lancaster, Villafranca, France	30.16	766.1	60	15.6	71	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Michigan, Erie, Pa	30.03	762.7	35	1.7	.....	w.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I	29.98	761.5	39	3.9	100	wnw.	4	1.8	.....	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Monocacy, Yokohama, Japan	.....	.....	38	3.3	100	nnw.	.....	.....	2	.....	10	.....	n.	.....	.....	.....	.....	overcast	
Nipsic, Naples, Italy	30.15	765.8	60	15.6	76	nnw.	.....	.....	2	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy	
Onward, Callao, Peru†	30.05	763.3	65	18.3	100	se.	.....	.....	1	.....	17	.....	nw.	.....	.....	long	w.	cloudy?	
Palos, Hong Kong, China	30.22	767.6	56	13.3	63	nne.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C	30.18	766.6	30	— 1.1	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Pensacola, Callao, Peru	29.95	760.7	67	19.4	95	se.	1	0.4	.....	.....	10	.....	se.	0	0	sm'h	.....	cloudy	
Powhatan, Boston, Mass	29.91	759.7	35	1.7	90	wsw.	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	fair	
Ranger, N. 18° 15′, W. 103° 20′*	29.87	758.7	74	23.3	63	nw.	.....	.....	2	.....	2	.....	ne.	0	0	light	sw.	fair	
Richmond, Apia, Samoa Islands*	29.76	755.9	78	25.6	86	calm	.....	.....	0	.....	2	.....	nw.	0	0	.....	.....	clear	
Shenandoah, Montevideo, Uruguay*	29.76	755.9	72	22.2	76	calm	.....	.....	0	.....	5	.....	.....	.....	.....	sm'h	.....	fair	
St. Louis, League Island, Pa	30.35	770.9	31	— 0.6	100	sw.	8	3.6	.....	.....	10	.....	.....	0.02	0.5	.....	.....	foggy	
Swatara, Yokohama, Japan*	29.87	758.7	41	5.0	91	nnw.	.....	.....	2	.....	10	.....	n.	.....	.....	sm'h	.....	light rain	
Tennessee, New York, N. Y	30.05	763.3	37	2.8	81	w.	8	3.6	.....	.....	10	.....	wnw.	0.08	2.0	.....	.....	overcast	
Vandalia, St. Pierre Martineque, W.I.	30.01	762.2	80	26.7	74	ene.	.....	.....	1	.....	5	.....	e.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass	29.92	760.0	33	0.6	100	wsw.	3	1.3	.....	.....	2	.....	w.	0.29	7.4	.....	.....	clearing	
Wachusetts, Sitka, Alaska	29.80	756.9	39	3.9	91	ese.	.....	.....	3	.....	10	.....	nw.	.....	.....	sm'h	sw.	cloudy	
Wyoming, Port Royal, S. C	30.25	768.3	52	11.1	86	calm	0	0	.....	.....	8	.....	w.	0	0	.....	.....	fair	
Yantic, Aux Cayes, Hayti, W.I*	30.01	762.2	74	23.3	90	nw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon.
S. S. Nova Scotian, Capt. W. Richardson,																	
S. S. Polynesian, Capt. Robt. Brown, N. 44° 47′, W. 62° 08′*	29.86	758.4	30	—1.1		se.	3		10		sse.	0	0	sm'h	se.	threatening	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, N. 51° 34′, W. 19° 00′*	30.24	768.1	49	9.4		w.	6		4		w.			h'vy	wnw.	showery	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore																	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, N. 50° 48′, W. 18° 40′	30.16	766.1	53	11.7	93	w.	7		8		w.			r'gh	w.	overcast	Chauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	29.73	755.1	42	5.6	58	wnw.	4		2		w.	light	light			clear	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, N. 51° 00′ W. 28° 42′*†	30.16	766.1	50	10.0	93	wsw.	2		10		wsw.			r'gh	nw	squally	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 42° —′, W. 59° —′†	30.05	763.3	45	7.2	?	ese.	5				ene.					drizzling	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown																	J. Brown.
Utopia, Capt. A. McRitchie, N. 41° 28′, W. 59° 51′*†	29.98	761.5	59	15.0	94	ssw.	5		10		wsw.	1 h'r	h'vy	mod.		raining	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 30° 12′, W. 74° 12′†*	30.42	772.7	69	20.6	56	sse.	2		5		sse.	0	0	sm'h	n:sw.	fine	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Kingston, Jamaica, W. I.*	30.06	763 5	74	23.3		calm	0		0			0	0			very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin																	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta N. 25° 00′, W. 74° 43′							2					sq'lls	sq'lls	mod.	ne.		R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse, N. 18° —′, W. 74° —′	29.71	754.6				ene.	2		1		n.	0	0	mod.	e.	clear.	Fisher & Welden.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,																	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
Baroda, Capt. C. J. Russell																	
British Merchant, Capt. E. J. Molony, S. 12° 44′, E. 91° 32′	29.89	759.2	80.8	27.1	87	nw.	1–2		3							d. clouds	
Bk. Caldew, Capt. W. Peterson																	
S. S. Cipero, Capt. W. N. Lailey																	
S. City of Agra, Capt. Thos. Young, S. 26° 03′, W. 17° 20′	30.16	766.1	80.0	26.7		ne.	1		5							d. clouds	
Bk. Glaramara, Capt. R. Morton, N. 6° 23′, W. 31° 57′	29.94	760.5	78.5	25.8	86	nne.	5		7							d. clouds	
Glencairn, Capt. R. S. Tannock, S. 35° 00′, W. 17° 00′	30.01	762.2	66	18.9	68	w.	6		6							d. clouds	
S. S. Gordon Castle, Capt. W. Waring, N. 35° 21′, E. 18° 37′	30.14	765.5	60.5	15.8	100	ese.	3		10							drizzling	
Hermine, Capt. S. G. Jones, S. 25° 37′, W. 71° 18′	29.99	761.7	65.6	18.7	78	sse.	3		10							overcast	
S. S. Humboldt, Capt. A. W. Jeffery, S. 3° 40′, W. 31° 26′	29.96	761.0	80.7	27.1	82	se.	5		9							squally	
S. Lochee, Capt. J. Raeburn, R. N. R., N. 2° 20′, E. 86° 55′	29.92	760.0	82	27.8	78	nne.	4		4							d. clouds	
May Hulse, Capt. H. Youlden, R. N. R., N. 1° 18′, W. 25° 52′	29.90	759.4	81.7	27.6	87	se.	1		10							overcast	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson																	
Naiad, Capt. J. Smith,																	
Pole Star, Capt. F. Norman, S. 37° 33′. W. 55° 01′	29.68	753.9	67	19.4	90	nne.	3		5							foggy	
Queen of Cambria, Capt. M. Parry, S. 39° 08′, W. 26° 36′	30.01	762.2	58	14.4	72	wsw.	6		5							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson,																	
S. Superb, Capt. Berridge, S. 0° 57′, W. 24° 57′	29.94	760.5	80	26.7	95	se.	2		7							d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham N. 50° 51′, W. 26° 08′*†	30.20	767.1	45	7.2		wsw.	5		8		wsw.	0	0	long	w.	dull	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO.																	
J. Birmingham, Agent, San Francisco.																	
S. S. Newbern, Capt. E. Y. Rogers, N. 35° 35′. W. 121° 54′†	30.20	767.1	55	12.8	73	nw.	5		0			0	0	large	nw.	clear	
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman																	Crowell & Henry.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains, N. 41° 48′, W. 52° 08′*	30.46	773.7	37	2.8		e.	3		2		nne.	0	0	sm'h		clear	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul, N. 43° 25′, W. 59° 08′	30.11	764.8	37.4	3.0		se.	4		8		se.	0	0	sm'h		covered	
S. S. St. Laurent, Capt. A. Servan																	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, N. Y.																	
S. S. Gellert, Capt. Kuhlewein																	P. Froehlich, 3d Off.
S. S. Silesia, Capt. A. Albers																	
S. S. Wieland, Capt. C. Hebich																	C. Jorgensen.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch																	Patterson & Thompson.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, N. 37° —′, W. 14° —′*†	30.57	776.5	62	16.7		ese.	1		8		ese.	0	0	long	nw.		J. Carroll.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE.																	
Thayer & Lincoln, Agents, Boston.																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE.																	
F. W. J. Hurst, Manager, New York.																	
S. S. England, Capt. T. P. Heeley N. 41° 15′, W. 58° 36′*	29.98	761.5				s.	4		10		s; sw.	1 h'r	1h'r	mod.	s.	cloudy	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO.																	
Jas. E. Ward & Co., Agents, New York.																	
S. S. Niagara, Capt. J. B. Baker																	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips, N. 28° 32′, W. 74° 15′†	30.36	771.1	68	20.0		se.	3		3		se.	0	0	mod.	se.	fair	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 26° 29′, W. 74° 05′†	30.26	768.6	76	24.4		ene.	3								ne.	showery	E. Stembridge, 3d Off.
S. S. Bothnia, Capt. W. McMickan																	
S. S. City of Alexandria, Capt. L. F. Timmerman																	
S. S. City of Washington, Capt. J. W. Reynolds N. 19° 53′, W. 90° 46′*†	30.20	767.1	76	24.4		e.	1							sm'h		fine	
S. S. Maas, Capt. T. H. Bonjer																	
S. S. New York, Capt. R. B. Quick, N. 37° 36′, W. 74° 40′†*	30.28	769.1	40	4.4		nnw.	4							sm'h			
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier, N. 48° 07′, W. 33° 15′*	30.03	762.7	45	7.2		var.	2								nw.	raining	
NORTH GERMAN LLOYD.																	
A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander.																	
S. S. Leipzic, Capt. F. Pfeiffer, N. 46° 39′, W. 40° 49′	30.23	767.8	39	3.9	71	nnw.	4		8		nnw.	0	0	long	nnw.	fair	G. H. Lose, 3d Off. Cuppers & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	29.98	761.5	45.5	7.5		n.	6		4†		n.	0	0			cloudy†	
S. S. Mosel, Capt. J. Hesse.																	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. Undeutsch																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO.																	
Leland Stanford, President, San Francisco.																	
S. S. Belgic, Capt. H. Davison, N. 40° 21′, W. 143° 00′†	30.28	769.1	58	14.4	76	nnw.	2		5		n.	0	0	light	e.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Hong Kong, China*†	30.36	771.1	64	17.8	67	ne.	3		3		ne.					clear	
S. S. Oceanic, Capt. J. Metcalf, N. 30° 27′, E. 160° 04′*	29.94	760.5	68	20.0	90	wnw.	4		7		wnw.			2	w.	showery	
OCEAN S. S. CO.																	
George Young, Agent, New York.																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.96	761.0				calm	0									foggy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, N. 33° 45′, W. 77° 20′†	29.97	761.2	65	18.3	90	w.	1		10		w.	0	0	sm'h	ssw.	cloudy	H. K. Hallett.
OREGON IMPROVEMENT CO.																	
John L. Howard, Agent, San Francisco.																	
S. S. Mississippi, Capt. E. W. Holmes,																	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer, N. 39° 40′, W. 124° 00′*	30.25	768.3	49	9.4	77	nw.	5		0			0	0	high	nw.	clear	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO.																	
K. Van Otterendorp, Agent, San Francisco.																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d Off.
S. S. Columbia, Capt. F. Bolles, Astoria, Oregon†	30.45	773.4	45	7.2	92	nw.	2		0		wnw.					hazy	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 46° 36′, W. 124° 56′†	30.33	770.4	50	10.0	86	nnw.	3		8		nnw.			mod.	wnw.	clear	G. Boese.
PACIFIC COAST S. S. CO.																	
Goodall, Perkins & Co., Agents, San Francisco.																	
S. S. Ancon, Capt. J. W. Ingalls, N. 33° 56′, W. 118° 52′†	30.03	762.7	55	12.8	38	ene.	3		0					sm'h		clear	
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†	30.18	766.6	40	4.4		e.	5		4		s.	10h'r	10h'r	sm'h		clear	
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	30.18	766.6	53	11.7	53	nw.	4		0							clear	
S. S. Orizaba, Capt. Chas. B. Johnson,																	G. H. Harsson.
S. S. Senator, Capt. Thos. Wallace, N. 35° 05′, W. 120° 53′†	30.21	767.3	52	11.1	54	nnw.	3		0			0	0	cross		clear	T. Wallace.
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.18	766.6	42	5.6	100	n.	4		0			0	0			clear	
S. S. Victoria, Capt. H. M. Hayward, N. 48° 13′, W. 124° 37′†	30.54	775.8	44	6.7	84	wsw.	5		8					mod.	sw.	cloudy	
PACIFIC MAIL S. S. CO.																	
Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.																	
S. S. Australia, Capt. ——, S. 20° 16′, W. 172° 58′	29.93	760.2	73	22.8	85	ese.	3		5		e.			sm'h	se.	fine	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.93	760.2	74	23.3	81	calm.	0		0			0	0			clear	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, Hong Kong, China†	30.30	769.6	68	20.0	74	w.	3		0			0	0			clear	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. O. Dearborn,																	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 36° 07′, W. 125° 21′†	30.34	770.6	55	12.8	87	ne.	7		8		sse.	0	0	mod.	ene.	fair	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 10° 58′, W. 87° 15′†	29.90	759.4	78	25.6	82	ne.	0		0			0	0	r'gh	ne.	clear	
S. S. Grenada, Capt. M. Connolly, N. 31° 10′, W. 119° 56′†	30.08	764.0	57	13.9	81	nw.	6		10		nw.	0	0	hy'y	nw.	cloudy	
S. S. South Carolina, Capt. W. J. Russell, N. 11° 22′, W. 87° 12′*†	29.80	756.9	79	26.1	86	ne.	6		0			0	0	light	wnw.	clear	
S. S. Zelandia, Capt. H. Webber, S. 27° 26′, W. 177° 40′	29.90	759.4	74	23.3	90	var.	2		0					mod.	s.	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co.																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke N. 22° 04′, W. 64° 10′	.....	.....	.....	.....	.....	ene.	3	.....	0	.....	.....	0	0	mod.	ene.	clear	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, N. 48° 20′, W. 30° 18′*	30.28	769.1	46	7.8	76	sw.	2	.....	10	.....	sw.	0	0	long	nw.	cloudy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Eymond.
S. S. Waesland, Capt. H. Nickels, Antwerp, Belgium*	29.81	757.2	48	8.9	.....	w.	5	.....	8	.....	wnw.	1 h'r	hail	.....	.....	fair	.....
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
THINGVALLA LINE																	
Funch, Edye & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub N. 48° 23′, W. 38° 52′†	30.21	767.3	42.1	5.6	.....	wsw.	1	.....	7	.....	wsw.	0	0	long r'gh	nw.	covered	J. T. Uiberling
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent.																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 51° 24′, W. 12° 50′*†	30.05	763.3	46	7.8	.....	w.	6	.....	2	.....	wnw.	sh'rs	shr's	h'vy	wnw.	showery	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 42° 24′, W. 61° 02′*†	29.85	758.2	44	6.7	?	s.	4	.....	10	.....	s.	0	0	sm'h	.....	cloudy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 49° 33′, W. 20° 26′*†	30.48	774.2	52	11.1	93	wsw.	4	.....	5	.....	w.	shr's	shr's	mod.	w.	d. clouds	W. A. Ward. H. Goulden, 4th Officer
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 26° 35′, W. 69° 30′†	30.41	772.4	72	22.2	71	ene.	3	0	2 k	.....	ne.	0.08	2.0	mod	ne.	fair	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona, N. 36° 09′, W. 19° 55′	30.57	776.4	64.0	17.8	.....	ene.	1	.....	10 8	.....	.....	.....	.....	large	nw.	cloudy	.....
Bk. Alpha, Capt. Ole Grönn, Pozzuola, Italy *†	30.12	765.0	66	18.9	.....	ne.	2	.....	5	.....	n.	0	0	.....	.....	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	29.82	757.4	.....	.....	.....	nw.	7	.....	5	.....	nnw.	rain	sq'lls	.....	.....	fair	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill, N. 20° 35′, W. 42° 03′†	30.20	767.1	.....	.....	.....	e.	3	.....	2	.....	e.	0	0	sm'h	e.	.....	.....
S. Enoch Train, Capt. H. D. Chapman. N. 44° 30′, W. 29° 00′*	29.92	760.0	.....	.....	.....	ese.	7	.....	10	.....	sw.	12 h'r	12 h'r	h'vy	nw.	heavy rain	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 37° 31′, W. 57° 07′*	30.28	769.1	.....	.....	.....	se.	5	.....	10	.....	nw.	6 h'r	light	mod.	n.	drizzling	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.24	768.1	37	2.8	62	ne.	1	.....	10	.....	ne.	.....	.....	sm'h	.....	foggy	C. H. Cleaveland.
Frank N. Thayer, Capt. G. D. Morrison, S. 35° 12′, W. 51° 09′†	29.66	753.4	77	25.0	.....	w.	2	.....	5	.....	w.	0	0	sm'h	.....	hazy	G. D. Morrison.
Freya, Capt. Blaauw, Limerick, Ireland	.....	.....	44	6.7	.....	wsw.	6	.....	5	.....	w.	2 h'r	hail	.....	.....	squally	.....
Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.08	738.6	.....	.....	.....	sse.	3	.....	0	.....	.....	0	0	.....	.....	.....	D. Williams.
Geo. Booth, Capt. D. Williams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. Minssen.
Hedwig, Capt. T. Minssen. N. 46° 42′, W. 23° 03′*	30.07	763.7	50.5	10.3	91	wnw. sw.	5	.....	10	.....	sw.	0	0	long	wnw.	overcast	G. Kaswurm.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 2° 58′, W. 31° 46′*	29.75	755.6	.....	.....	.....	ese.	3	.....	57	.....	sse.	sh's	sh's	mod.	ese.	cloudy†	Sorensen & Arvesen.
Bk. New York, Capt. J. E. Sorensen. N. 36° 48′, W. 25° 50′*†	30.60	777.2	.....	.....	.....	var.	3	.....	.....	.....	s.	0	0	long	nw.	cloudy	G. S. d'Anconaz.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.10	764.5	52	11.1	93	calm	0	.....	8	.....	w.	.....	.....	.....	.....	cloudy	J. Connolly.
Bk Pilgrim, Capt. J. Connolly	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Prinsessen, Capt. J. Andersen. N. 49° 40′, W. 5° 23′†	30.21	767.3	51	10.6	.....	w.	6	.....	5	.....	w.	1 h'r	light	h'vy	w.	squally	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 33° 20′, W. 36° 00′*	30.27	768.8	66.7	19.3	97	s.	5	.....	6	.....	s.	.....	.....	mod.	s.	.....	.....
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.46	773.7	60	15.6	88	e.	4	.....	2	.....	e.	0	0	.....	.....	clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 4° 45′, W. 32° 25′*†	30.00	762.0	.....	.....	.....	se.	7	.....	9	.....	se.	.....	.....	mod	se.	.....	I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. P. Dutton.

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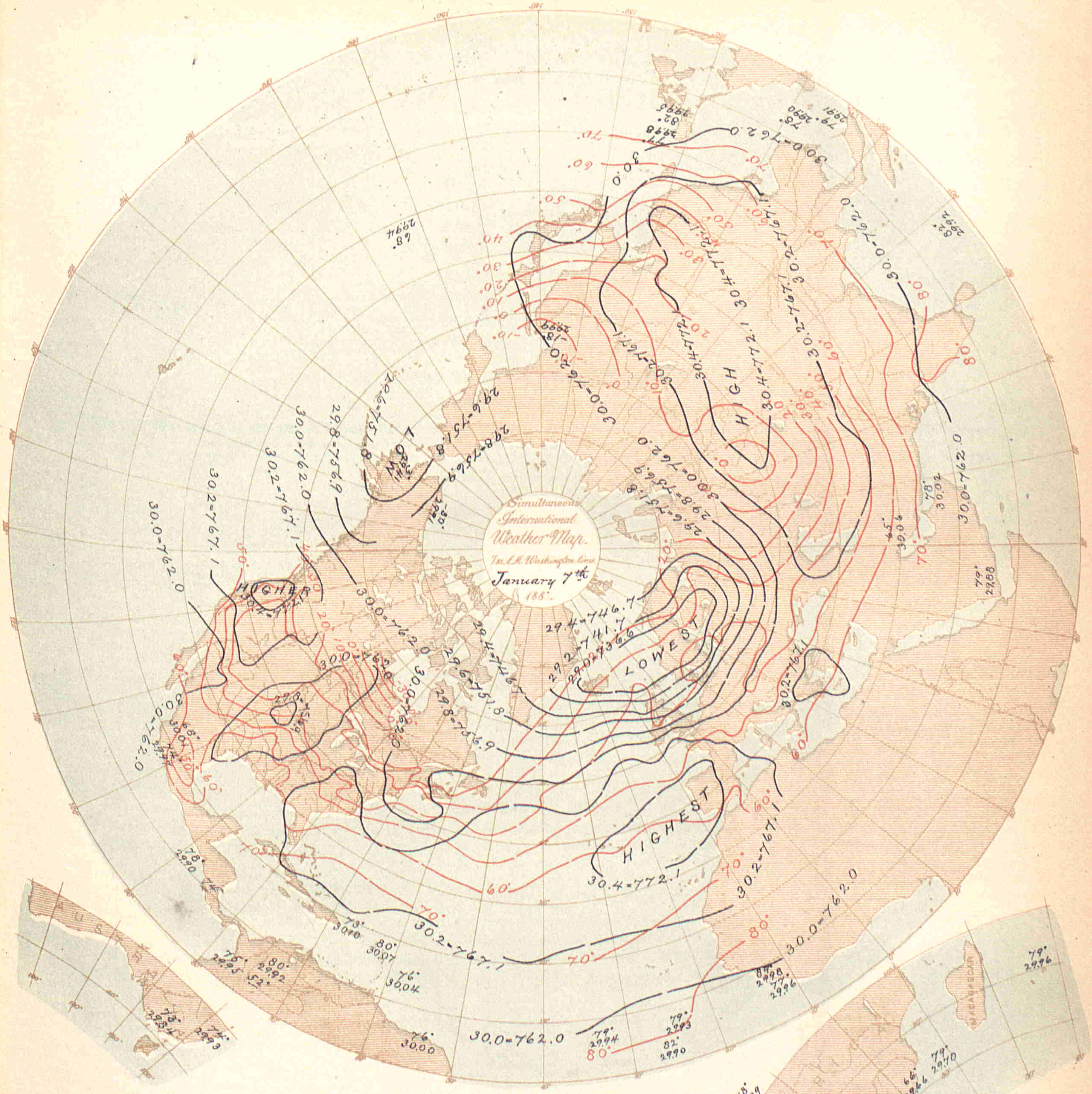
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 8. 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.47	773.7	59.4	15.2	85	ne.			2		0			0	0	clear	Moiroud.
Algiers			30.48	774.2	57.9	14.4	83	ne.			2		10			0.177	4.5	covered	Nicolas.
La Calle			30.30	769.7	57.2	14.0	61	wnw.			6		6			0.118	3.0	cloudy	Fonfrède.
Tunis			30.21	767.2															Jacques.
Sfax																			Gau.
Saida			30.41	772.4	53.6	12.0	79	nne.			2		0			0	0	clear	Perès.
Tebessa			30.12	765.0	46.4	8.0	67	nw.			7		5			0.217	5.5	cloudy	Derché.
Geriville					42.4	5.8	70	nw.			2		3			0.063	1.6	pretty fair	Lonchamp.
Laghount			30.51	774.9	51.8	11.0	52	n.			2		1			0	0	fair	Herbin.
Biskra			30.33	770.4	63.3	17.4	47	nw.			6		3			0	0	pretty fair	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.96	761.0	30.05	763.3	55.8	13.2	76	se.	4	1.8			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.80	757.0	30.37	771.5	43.5	6.4	68	e.			1		4			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.43	747.6	30.23	767.9	36.9	2.7	77	sw.	8.7	3.9			10			0.110	2.8		Dr. Wierzbiski.
Eperies	29.26	743.1	30.17	766.3	38.5	3.6	73	n.			5	cs	4 8		s.	0	0		Julius Mikolik.
Gratz	29.07	738.4	30.37	771.5	41.4	5.2	40	nw.			3		2			0	0		Andreas Rospini.
Hermannstadt	28.65	727.6	30.12	765.2	39.2	4.0	97	nw.			4		10			0.051	1.3		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.03	737.4	30.45	773.2	36.7	2.6	75	w.			4		8			0	0	almostcov.	The Staff.
Lemberg	29.08	738.5	30.09	764.3	40.5	4.7	86	sw.			1		10			0	0		Dr. T. Stanecki.
Pola	30.16	766.0	30.27	768.9	49.3	9.6	43	ne			2		0			0.307	7.8		I. R. Hydrographic Office
Szathmar	29.65	753.0	30.12	765.0	38.8	3.8	73	nw.			3		10			0	0		Joseph Midlinszky, S. J.
Szegedin	29.94	760 5	30.23	767.9	40.0	4.8	74	nw.			3		10			0	0		Karl Stancel.
Trieste	30.21	767.3	30.31	769.9	49.6	9.8	41	e.			2		0			0	0		Rieder.
Vienna	29.62	752.4	30.37	771.3	41.0	5.0	60	w.			4		2			0.024	0.6		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	29.51	749.5	29.61	752.1	41.0	5.0	69	sw.	23	10.3			6			0	0	d. clouds	W. Boswell.
Armagh, Observatory	29.47	748.5	29.72	754.9	40.0	4.4	93	ssw.	2	0.9									S. Cull.
Bidston, Liverpool Obs'y			29.83	757.7	42.4	5.8	90	sse.	18	8.0			10					overcast	John Hartnup
Bolton, Sharples	29.33	745.0	29.87	758.7	45.8	7.7	92	s.					10					raining	Thomas Mackereth, A.S.
Bradford, Yorkshire																0.37	9.4		J. McLandsborough, F.R.
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	84.0	28.9	67	ne.			3		2					d. clouds	Pvt. J. Surgenor.
Cardington			30.05	763.3	45.0	7.2	84	sw.			3.0		10					overcast	John McLaren.
Chatham, School M. E.	30.07	763.8	30.20	767.1	47.1	8.4	81	sw.			1		8					gloomy	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	29.91	759.7	30.14	765.5	49.3	9.6	85	sw.					10					foggy	The Staff.
Fort Napier, Natal	27.66	702.6	29.88	758.9	75.4	24.1	55	ne.			1		2					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.75	755.6	29.99	761.7	88.0	31.1	55	nw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.117	764.87	44	6.7	100	w.			4		8			0.02	0.5	overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.38	771.6	30.44	773.2	63.4	17.4	80	ne.			4		0					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	29.42	747.3	29.62	752.3	41.7	5.4	87	sw.			5		10					raining	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.99	761.7	30.17	766.3	46.4	8.0	76	ssw.			2		10					overcast	The Staff.
Guernsey	29.98	761.5	30.29	769.4	48.3	9.1	83	sw.			3		10			blank	blank	overcast	A. Collenette, F. M. S.
Kew, Observatory	30.13	765.3	30.16	766.1	46.4	8.0	74	sw.	17	7.6			10					threatening	The Staff.
Leicester, Museum	29.74	755.4	30.01	762.2	43.9	6.6	77	sw.			4		10					overcast	J. C. Smith.
Malta, Mediterranean	29.77	756.1	29.84	757.9	58.0	14.4	81	nw.			2		10			blank	blank	overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.21	767.3	30.26	768.6	72.0	22.2	82	ne.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.45	748.0	29.99	761.7	42.1	5.6	90	s.			3		10					raining	John Mac Email.
Oxford, Radcliffe Obs'y	29.87	758.7	30.10	764.5	45.3	7.4	80	ssw.			3		10					showery	The Staff.
Plymouth	30.07	763.8	30.14	765.5	48.8	9.3	79	wsw.			5		10					drizzling	John Merrifield.
Sandwick Manse, Orkneys			29.47	748.5	38	3.3	90	sw.	27	12.1			10					showery	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.00	762.0	30.06	763.5	50.0	10.0	82	w.			1		9					gloomy	W. H. Lyne.
Sheffield	29.63	752.6	29.92	760.0	42.5	5.8	98	sw.			2		10			0.14	3.6	raining	W. F. Cooper.
Stiloth Rectory	29.73	755.1	29.76	755.9	42.4	5.8	94	sw.			4		10			0.325	8.3	raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.87	758.7	40.6	4.8	87	s.	18	8.0			10					raining	Rev. S. J. Perry.
Stratfield Turgiss	29.89	759.2	30.11	764.8	47.2	8.4	73	sw.			3		10					raining	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.03	762.7	30.09	764.3	52	11.1	79	sw.			7		10					raining	W. Newcombe.
Valencia, Observatory	29.84	757.9	29.87	758.7	47.0	8.3	88	wnw.	14	6.3			10					raining	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.05	763.3	30.10	764.5	27	— 2.8	76	nw.	9	4.0			10 n			0.025	0.6	threatening	H. J. Cundall, C. E.
Chatham, N. B*	30.10	764.5	30.17	766.3	10	—12.2	91	calm	0	0		0	0			0.02	0.5	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.15	765.8	30.18	766.6	9	—12.8	91	calm	0	0			10 n			0.06	1.5	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.06	738.1	29.95	760.7	14	—10.0	96	nw.	8	3.6		5 k	5 ks	nw.	nw.	0.042	1.1	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.01	762.2	30.14	765.5	25	— 3.9	88	w.	8	3.6			10 k		n.	1.040	26.4	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.61	752.1	29.95	760.7	31	— 0.6	96	w.	6	2.7			10 n			0.42	10.7	light rain	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.88	758.9	30.09	764.3	24	— 4.4	92	s.	9	4.0			10 s			0	0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.05	737.9	29.77	756.1	33	0.6	88	e.	25	11.2			10 n		e.	0.01	0.3	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.13	739.9	29.85	758.2	40	4.4	100	s.	4	1.8			fg.			0.21	5.3	foggy	H. Morgan.
Port Stanley, Ontario	29.16	740.7	29.81	757.2	39	3.9	96	e.	12	5.4			fg			0.28	7.1	light rain	M. Payne.
Quebec, Quebec*	29.82	757.4	30.17	766.3	17	— 8.3	96	sw.			1		fg.			0.12	3.0	foggy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.41	747.0	29.89	759.2	23	— 5.0	76	se.	8	3.6			10 s		se.	0.10	2.5	cloudy	W. H. McIntyre.
Saugeen, Ontario*	28.99	736.3	29.72	754.9	37	2.8	92	s.	15	6.7			10 s			0.10	2.5	light rain	K. Stewart.
St. Andrews, N. B.	30.13	765.3	30.18	766.6	24	— 4.4	88	n.	3	1.3			10 k			0.30	7.6	cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.91	759.7	29.97	761.2	28	— 2.2	92	n.	17	7.6			10 n			0.70	17.8	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.46	748.3	29.86	758.4	36	2.2	96	e.	6	2.7			fg.			0.17	4.3	light rain	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.13	765.3	30.20	767.1	28	— 2.2	92	e.	1	0.4		10 k	0	e.		0.33	8.4	cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.93	760.2	30.19	766.8	29	— 1.7	100	ne.	4	1.8			10 n					snowy	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Cape St. Francis Lt. House	29.94	760.5	29.97	761.2	72.8	22.7	76	s.	16.0	7.2		0	2 s			0.110	2.8	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.84	757.9	29.87	758.7	86.3	30.2	45	sse.	17	7.6		0	0			0	0		The Staff, for D. Gill.
Worcester*																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Sub-Series.																			
Hankow																			N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.37	771.5	30.40	772.2	28.9	— 1.7	92	se.	0.7	0.3		0	0			0	0	clear	M. Marc Dechevrens, S.J

JANUARY 8, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.82	757.3	29.86	758.5	40.6	4.8	78	wnw.	20	9			1						Oversergent Fischer.
Fanöe	29.89	759.3	29.91	759.8	41.5	5.3	89	w.			4		9						Overloerer Lauridsen.
Godthaab, Greenland	29.67	753.7	29.72	754.8	3.4	—15.9	95	nne.			2		10						S. Kleinschmidt.
Stykkisholm, Iceland	28.96	735.5	29.00	736.6	19.0	— 7.2		ne.			7		8						A. O. Thorlacius.
Thorshavn	29.08	738.7	29.12	739.6	38.1	3.4	75	w.	22	10			7					sleeting	Overloerer Bergh.
Vestervig	29.69	754.1	29.78	756.4	42.3	5.7	83	wsw.			4		9						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.88	758.9	30.56	776.2	41.7	5.4	97	se.				0	0			0	0	light fog	M. Labroue, Director.
Alençon, Normal School	29.84	757.9	30.39	771.9	45.0	7.2	97	sw.			2		k	s.	s.	0.04	1.		M. Nicot, Director.
Arras, Engineer School	30.04	763.1	30.31	769.9	44.1	6.7	83	w.			3	ck	0			0	0		M. Klein, Commandant.
Avignon, Normal School	30.29	769.3	30.37	771.3	48.2	9	48	n.			3		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.93	760.2	30.51	775.0	40.6	4.8	79	w.			1		6			0.051	1.3	cloudy	M. Salliard, Director.
Beauvais, Normal School	30.13	765.4	30.41	772.4	42.3	5.7	81	sw.			1		0			0.008	0.2	clear	M. Frère Eugène Marié.
Besançon, Normal School			30.50	774.7	32.5	0.3	92	sse.			1		cn			0	0		M. Gobin, Director.
Bordeaux, Observatory	30.39	771.8	30.66	778.8	42.1	5.6	91	se.			1		0			0.071	1.8	clear	M. Rayet, Director.
Bourges, Normal School	30.03	762.8	30.60	777.1	50.0	10	82	w.			1		1		w.	0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.09	764.2	30.33	770.4	50.7	10.4	79	sw.			3		10		sw.	0.047	1.2		M. de Kennaree, Dir.
Caen, Normal School	30.27	768.9	30.35	770.9	46.8	8.2	86	s.			2		8		nw.	0	0	very cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.10	764.5	30.43	773.0	39.7	4.3	90	calm			0		2			0.012	0.3	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.87	758.8	30.41	772.3	38.5	3.6	73	s.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.17	740.8	30.57	776.5	46.8	8.2	46	e.			1		0			0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.70	754.4	30.57	776.5	38.8	3.8	87	s.			2		8		ne.			covered	M. de Villemontée, Dir.
Commercy, Normal School	29.61	752.0	30.51	774.9	37.4	3	91	w.			1	2 ck	0	w.		0.12	3.	slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.75	704.9	30.37	771.4	42.8	6	39	s.			1					0	0		M. Jeangirard, Director.
Grénasque, du. Rhone	29.18	741.1	30.34	770.6	46.6	8.1	55	nw.			2		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.69	754.2	30.49	774.5	43.9	6.6	54	wnw.			2		0			0.083	2.1	clear	M. Ablard, Director.
Guéret, Normal School	28.91	734.2	30.56	776.2	41.9	5.5	84	sw.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.11	764.8	30.39	771.8	50.0	10	74	s.			3		5		s.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.96	761.0	30.54	775.8	50.0	10	74	w.			1	2 c	0			0.028	0.7	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	30.33	770.4	30.43	773.0	51.8	11.0	86	sw.			3		10		sw.	0.039	1.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.44	747.8	30.54	775.8	43.0	6.1	82	nw.			2		0			0.035	0.9	clear	M. André, Director.
Mans, Normal School	30.16	766.1	30.48	774.3	42.6	5.9	86	ssw.			3		5		sw.	0	0	cloudy	M. Piboen, Director.
Marseille, Observatory	30.04	762.9	30.31	769.9	49.6	9.8	41	nw.			3		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.13	638.2	29.97	761.2	39.2	4.0	25	e.	9.4	4.2			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.31	769.8	30.42	772.6	53.6	12	36	nw.			3		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.67	753.7	30.49	774.4	41.4	5.2	69	s.			2	5 ck	0	sw.		0.08	2.	cloudy	M. Hasse, Director
Nantes, Observatory	30.32	770.1	30.48	774.2	52.9	11.6	73	ssw.			1–3	0	9k; kn	wnw.	wsw.	0.020	0.5		M. Lavocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.39	771.9	30.50	774.8	52.9	11.6	37	n.	15	6.7			1	nnw.		0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.44	544.5			24.6	—4.1		wsw.			1		1		wsw.	0.047	1.2	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.36	745.7	30.46	773.7	45.7	7.6	53	n.			1			n.	n.	0	0		M. Tallien.
Puy de Dôme Obs'y, Summit	25.45	646.5			26.2	—3.2	96	se.			1		0			0.244	6.2	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.50	774.8	30.54	775.6	46.8	8.2	75	s.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.26	768.7	30.49	774.4	38.8	3.8	80	w.			1		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.32	719.4	30.58	776.8	34.9	1.6	67	w.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.34	770.7	30.39	771.9	43.2	6.2	91	wsw.			1		0			0.020	0.5	clear	M. Platrier, Director.
Saint Lô, Normal School	30.21	767.3	30.37	771.3	46.6	8.1	71	w.			1		2		ne.	0	0	slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.28	769.0	30.44	773.2	41.9	5.5	82	s.			2		3		wnw.	0	0		M. Renou, Director.
Toulouse, Observatory	29.87	758.7	30.61	777.4	37.9	3.3	100	w.			1		10			0	0	covered	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.93	760.1	30.42	772.6	41.7	5.4	84	w.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.48	748.8	30.34	770.7	37.9	3.3	73	wsw.			2	0	8k; s		sw.	0.043	1.1		Prof. Dr. Holt.
Berlin	29.97	761.2	30.15	765.8	40.3	4.6	72	sw.			3		6			0.220	5.6		Prof. Dr. Arndt.
Breslau	29.67	753.6	30.21	767.2	40.1	4.5	63	w.			4		9			0.012	0.3		Royal University Obs'y.
Carlsruhe	30.02	762.4	30.48	774.1	40.6	4.8	75	w.			3		10	w.		0	0		Albert Senz.
Cassel	29.48	748.9	30.20	767.1	38.3	3.5	85	w.			6		8	sw.		0.173	4.4		Dr. H. Möhl.
Frankfort on the Main	30.00	762.1	30.39	771.8	40.3	4.6	78	sw.			2		7			0.004	0.1		Physical Society.
Friedrichshafen	29.02	737.2	30.52	775.3	40.3	4.6	66	w.			3		0			0	0		Wilhelm, Chief Tel.
Hamburg	30.01	762.2	30.10	764.6	40.5	4.7	89	wsw.			6		10			0.098	2.5		E. Preller,
Kiel	29.96	761.0	29.98	761.4	41.7	5.4	86	wsw.			6		9			0.079	2.0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.83	757.6	30.26	768.7	39.9	4.4	71	wsw.			4		9	w.		0.024	0.6		H. Leppig, Asst.
Magdeburg	29.99	761.8	30.19	766.8	41.7	5.4	78	w.			5		10 ks		w.	0.138	3.5		Dr. Assmann.
Memel	29.70	754.4	29.75	755.6	40.1	4.5	81	w.			7	0	8 ks						Issermann.
Munich	28.59	726.1	30.48	774.1	37.6	3.1	62	w.			3		3	sw.		0.276	7.0		Central Station.
Neufahrwasser	29.90	759.4	29.91	759.8	39.2	4.0	90	w.			4		10			0.021	0.6	light rain	A. Lothes.
Neustadt, Palatinate	29.86	758.5	30.40	772.1	42.3	5.7	73	w.			3		4	wnw.		0	0		Dicknether.
Stuttgart	29.44	747.7	30.37	771.4	40.1	4.5	73	sw.			2		6	n.		0	0		Prof. Dr. Schoder.
Wustrow	30.00	762.0	30.02	762.6	38.5	3.6	98	sw.			5		10 s			0.028	0.7		Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.69	754.0	30.08	764.1	53.1	11.7		n.			1.0		10			0.819	20.8	raining	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.04	763.0	30.09	764.3	73.8	23.2	55	sw.					2			0	0	blue sky	
Deesa	29.54	750.3	30.01	762.3	85.6	29.8	55	nw.	7.7	3.4			6	nnw.	nnw.	0	0	d. clouds	
Bombay	29.95	760.8	29.99	761.7	80.3	26.8	78	nw.	14	6.3			0			0	0	blue sky	
Poona, Yarrowda.	28.13	714.4	29.96	761.0	87.4	30.8	22	ne.	7	3.1			4	wnw.		0	0	d. clouds	
Belgaum	27.45	697.1	29.97	761.2	81.4	27.4	39	ene.	5	2.2			3	ne.		0	0	d. clouds	
Lahore	29.36	745.6	30.13	765.4	61.6	16.4	41	calm	0.7	0.3			4			0	0	d. clouds	
Roorkee	29.18	741.2	30.12	765.1	62.8	17.1	47	sw.	1.4	0.6			4			0	0		
Agra	29.54	750.3	30.13	765.3	64.3	17.9	49	n.	2.9	1.3			0			0	0		
Nagpur	29.00	736.6	30.05	763.3	80.2	26.8	27	calm	2.3	1.0			2	w.		0	0	blue sky	
Jubbulpore	28.72	729.5	30.13	765.2	64.8	18.2	25	calm	1.2	0.5			0			0	0	blue sky	
Lucknow	29.73	755.2	30.13	762.2	64.3	17.9	37	calm	1.2	0.5			0			0	0	blue sky	
Allahabad	29.79	756.6	30.12	764.9	60.6	15.9	61	calm	0.5	0.2			0			0	0	blue sky	
Patna	29.91	759.8	30.11	764.7	64.8	18.2	46	ssw.	2.9	1.3			0			0	0	blue sky	
Hazaribagh	28.02	711.6	30.11	764.7	61.8	16.6	34	nnw.	4.0	1.8			0			0	0	blue sky	
Cuttack	29.99	761.7	30.07	763.8	71.8	22.1	61	ne.	0.4	0.2			0			0	0	blue sky	
Calcutta, Alipore	30.04	762.9	30.06	763.5	64.5	18.1	63						0			0	0	blue sky	
Dhubri	29.94	760.5	30.07	763.7	68.0	20.0	67	calm	4.6	2.1			0			0	0	blue sky	
Chittagong	29.94	760.5	30.04	762.9	64.1	17.8	65	w.	2.1	0.9			0			0	0	blue sky	
Sibsagar	29.75	755.7	30.10	764.7	61.0	16.1	87	ne.	1.7	1.8			0			0	0	blue sky	
Jeypore	28.64	727.4	30.12	765.0	70.6	21.4	40	ssw.	3.1	1.4			4	s.		0	0	d. clouds	
Zanzibar, Africa	29.89	759.2			88.0	31.1	56	ne.	6.8	3.0			4			0	0	d. clouds	
Trichinopoly	29.76	755.9			81.8	27.7	58	e.	1	0.4			0			0	0	blue sky	
Bellary	28.53	724.6			85.0	29.4	28	ene.	3.2	1.4			2			0	0	d. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.86	758.5	30.28	769.2	50.9	10.5	24	ne.	0.7	0.3			0			0.106	2.7		Prof. Giovanni Clodig.
Milan	29.80	757.0	30.35	770.9	51.8	11.0	21	n.	4.9	2.2			0			0	0		Prof. Schiaparelli.
Padua	30.22	767.6	30.34	770.5	48.6	9.2	66	se.	4.9	2.2			0			0.102	2.6		Prof. Dott. Lorenzoni.
Moncalieri	29.22?	742.2?	30.17?	766.4?	43.5	6.4	44	s.	3.8	1.7			0			0	0		Prof. P. F. Denza.
Genoa	30.09	764.2	30.28	769.2	52.9	11.6	19	n.	4.2	1.9			0			0.102	2.6		Prof. G. M. Garibaldi.
Mondovi	28.39	721.2	30.39	771.8	43.0	6.1	24	w.			2		2			0	0		Prof. D. C. Bruno.
Pesaro	30.22	767.7	30.28	769.0	48.7	9.3	67	ne.	22.8	10.2			10			0.532	13.5		Prof. Luigi Guidi.
Florence	29.97	761.2	30.23	767.9	49.3	9.6	59	nne.			6		6	ne.		0.016	0.4		Prof. Costantino Pitter.
Leghorn	30.13	765.2	30.21	767.4	52.2	11.2	49	ene.	4.2	1.9			0			0.260	6.6		Prof. P. Monte.
Rome	29.78	756.5	29.96	761.0	55.4	13.0	59	n.	12.5	5.6			2			0.031	0.8		Prof. P. S. Ferrari.
Lecce	29.64	752.9	29.90	759.5	55.0	12.8	95	ene.	2.5	1.1			10			0.559	14.2		Prof. C. de Giorgi.
Cosenza	29.03	737.4	29.94	760.5	47.5	8.6	73	wnw.	3.8	1.7			10	nw.		0.382	9.7		Prof. D. Conti.
Cagliari	29.83	757.7	30.02	762.6	57.9	14.4	39	nw.			6		2	n.		0	0		Prof. A. Pacinotti.
Palermo	29.60	751.8	29.85	758.2	58.6	14.8	67	w.	2.5	1.1			10	sw.		0	0		Prof. G. Ciacciatore.
Syracuse	29.81	757.1	29.85	758.2	58.3	14.6	84	ese.	4.2	1.9			10	ese.		0.472	12.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.36	745.8	29.89	759.2	55.9	13.3	65	ne.	3.8	1.7			10	n.		0	0		Prof. T. Brioschi.
Stelvio	22.28	565.9			12.9	—10.6	46	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.30	566.4			18.3	— 7.6	55	se.			6		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.69	754.1	29.73	755.1	32.7	0.4	92	e.					10 n					light snow.	
Hakodate	29.79	756.6	29.80	756.9	27.5	— 2.5	62	ene.	9.0	4.0			10			0	0	overcast	
Hiroshima, I. M. Obs'y †	29.93	760.2	29.94	760.5	38.4	3.6	63	wnw.	7.5	3.3		3 ck	0			0.005	0.1	clear.	K. Sasaki.
Kanazawa					41.9	5.5	91						10 n					raining.	S. Endo.
Kioto	29.58	751.3	29.76	755.9	43.3	6.3	69	sw.	8.0	3.6		0	4 k;ks			0.120	3.0	fair	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.95	760.7	30.16	766.0	36.8	2.7	72	nw.	9.7	4.3		0	2 s			0.060	1.5	cloudy	S. Takehayashi.
Niigata	29.51	749.3	29.55	750.6	38.9	3.8	94	se.	15.6	7.0			10 n			0.600	15.2	raining	
Nobiru	29.63	752.0	29.65	753.1	33.1	0.6	69	nnw.	8.6	3.8			10 n			0.390	9.9	snowy	H. Midzushina.
Supporo					17.2	— 8.2	80	calm	0	0			10			0.140	3.6	covered	
Tokei Obs'y, Yeddo	29.59	751.6	29.66	753.3	39.2	4.0	98	n.	2.0	0.9			10 n			0.022	0.6	light rain	The Staff.
Wakayama	29.78	756.4	29.84	757.9	43.4	6.3	63	w.	15.4	6.9		ck	6 ks	wsw.	wnw.	0.003	0.1	fair	Y. Kuwamuen.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.79	756.7	29.98	761.5	80.6	27.0	65	nw	10.5	4.7		0	8 k;n			0.04	1.0	fair	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.70	602.0	29.92	760.0	46.4	8.0	91	calm	0	0		1	0			0	0	fair	Vicente Fernandez.
Leon	24.45	621.0	30.24	768.0	51.6	10.9	75	n.			1	1 c	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.67	753.8	29.93	760.4	69.5	20.8	63	n.			2	10 ck	0	sw.		0.197	5.0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.09	586.4	30.24	768.3	46.6	8.1	76	calm	0	0		0	0			0	0		The Staff.
Morelia	24.27	616.5	30.53	775.6	45.1	7.3	72	se.			2	0	0			0	0		M. Tena, M. D.
Pabellon, Aguascalientes	23.94	608.0	30.04	762.9	52.2	11.2	76	calm			0	0	6 ks		sw.	0	0	½ cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.37	771.4	41.0	5.0	60	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.16	613.7	30.14	765.6	54.8	12.5	60	wsw.			1	1	5	w.	w.	0	0	½ cloudy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.52	572.0	30.23	767.9	50.0	10.0	70					10 c	0	sw.		0	0	covered	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.24	768.2	30.24	768.2	45.3	7.4		sw.			5					0.016	0.4		
Groningen	30.06	763.5	30.11	764.9	42.3	5.7		sw.			4					0.024	0.6		
Helder	30.12	765.0	30.12	765.0	44.6	7.0		sw.			4					0.441	11.2		
Hellevoetsluis	30.20	767.0	30.20	767.0	43.5	6.4	88	sw.			4					0.012	0.3		
Utrecht	30.17	766.2	30.21	767.4	42.6	5.9	87	sw.			4		5			0.252	6.4	cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.43	747.4	29.49	749.0	36.7	2.6	96	sw.	9	4			10			0.551	14.0	raining	
Brono	29.20	741.6	29.24	742.6	27.0	-2.8	70	se.	27	12			10			0.031	0.8		
Christiania	29.36	745.8	29.51	749.6	35.4	1.9	65	nw.	0	0			2			0	0		
Gjæsvær	29.53	750.0	29.55	750.6	9.5	—12.5		s.			6		0						
Lodingen	29.33	745.0	29.38	746.2	18.3	— 7.6	47	e.			6		9			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					61.2	16.2	89	sw.	12.5	5.6			8			0	0		Dr. J. A. Sampaio.
Campo Major	29.43	747.5	30.45	773.5	53.8	12.1	62	e.	7.4	3.3			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.29	769.4	30.38	771.7	63.5	17.5	63	ene.	1.8	0.8			9			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.12	765.0	30.49	774.5	49.8	9.9	86	ne.	14.3	6.4			3			0.008	0.2		The Staff.
Ponta Delgada, Azores	30.30	769.6	30.37	771.4	62.6	17.0	80	s.	10.5	4.7			3	ese.		0	0		
Saint Paul de Loando	29.67	753.7	29.87	758.7	82.0	27.8	92	wsw.	2.5	1.1			7	e.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.97	735.7	30.16	766.0	2.7	—16.3		sw.	18	8			10 n			0	0		Major K. Lasarew.
Archangel	29.54	750.4	29.56	750.9	1.9	—16.7	68	n.	9	4		2 cs	0			0	0		Capt. Sselliwerstow.
Astrakhan	30.38	771.6	30.30	769.5	36.7	2.6	79	sw.	4	2		ck	9 s			0	0		Capt. Wisganow.
Barnaul	29.71	754.5	30.27	768.8	— 0.2	—17.9	78	calm	0	0			10			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.22	742.2	29.47	748.5	35.2	1.8	96	wsw.	8	4			10 s			0.039	1.0		Observatory.
Ekaterinburg	28.51	724.2	29.50	749.4	19.9	— 6.7	81	wsw.	27	12			10			0	0		Meteorological Obs'y.
Kasan	29.32	744.6	29.59	751.6	34.0	1.1	85	sw.	18	8			10			0	0		Observatory.
Kertch	30.08	764.0	30.10	764.5	48.0	8.9	80	s.	11	5		3 ck	0			0	0		Lagorio & Sastyrea.
Kieff	29.28	743.8	29.94	760.5	35.6	2.0	98	nw.	2	1			10 n			0.201	5.1	rain & fog	Observatory.
Lugan	29.87	758.8	30.08	764.1	37.9	3.3	87	wsw.	9	4			10			0	0		Meteorological Obs'y.
Moscow	29.15	740.3	29.63	752.7	34.5	1.4	71	s	7.8	3.5		0	7 ks			0	0		Meteorological Obs'y.
Nikolaiev	29.94	760.4	30.01	762.2	41.0	5.0	100	s.	9	4			10			0	0	heavy fog	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.98	761.4	30.06	763.6	—20.6	—29.2	84	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	29.98	761.4	30.12	765.0	24.1	— 4.4	50	calm	0	0		0	1 k			0	0		Physical Observatory.
St. Petersburg	29.35	745.4	29.36	745.8	33.3	0.7	90	wnw.	11	5			10 n			0.028	0.7	light snow	Central Physical Obs'y.
Tashkend, Laboratory	28.78	731.0	30.47	774.0	25.7	— 3.5	98	calm	0	0			10			0	0		Teich, A. M.
Tiflis	29.04	737.5	30.44	773.2	41.5	5.3	53	sw.	2	1			0			0	0		Physical Observatory.
Warsaw	29.63	752.6	30.07	763.7	37.6	3.1	76	wsw.	18	8			10 ks						Astronomical Obs'y.
Wilna	29.40	746.8	29.84	757.8	36.7	2.6	77	sw.	7	3			10			0.031	0.8		Berg, Assistant.
Yeniseisk	30.06	763.6	30.39	771.8	2.1	—16.6	84	calm	0	0			0			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park											6	5	5	w.		0.1	3.	d. clouds	Andrew Gibb.
Monach Lt. House, Hebrides			29.57	751.1	43	6.1	83	w.											J. Youngclause.
North Unst, Shetland Isl'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.30	769.6	30.40	772.1	54.3	12.4	51	nw.	1.6	0.7			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.41	772.5	30.47	774.0	52.9	11.6	78	se.	2.2	1.0		0	0			0.291	.7.4	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.50	698.5	30.65	778.6	33.4	0.8	94	sw.	4.7	2.1			10			0	0	foggy	Domingo Martin.
Madrid, Royal Obs'y	28.23	717.0	30.54	775.8	47.5	8.6	64	ne.	1.6	0.7		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.34	770.5	30.49	774.4	59.2	15.1	70	e.	2.5	1.1		2	4	wsw.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.52	749.7	30.44	773.1	52.0	11.1	74	calm	0	0		0	1			0	0	almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.04	763.1	30.11	764.8	69.6	20.9	90	calm	0	0		3 ck	0	ese.		0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.91	759.8	29.97	761.3	79.3	26.3	78	n.	0	0		0	9 n		e.	0.142	3.6	misty	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.33	770.5	30.43	773.0	61.7	16.5	61	nw.	3.7	1.7		0	2		ese.	0	0		Capt. O. Pujazon, R. N.
San Juan de Porto Rico, W. I.	30.02	762.4	30.11	764.7	74.8	23.8	87	se.	10.1	4.5		4 s	3 k	se.	se.	0.047	1.2		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.95	760.7	30.08	764.0	71.0	21.7	84	nnw.	5.6	2.5			10 ks		n.	inap.	inap.	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.63	752.7	29.67	753.7	—11.6	—24.2	64	ne.			2		0			0	0		
Umea	29.50	749.2	29.55	750.5	7.5	—13.6	92	ne.			4		10			0.028	0.7		
Hernosand	29.51	749.6	29.59	750.9	13.8	—10.1	83	n.			2		10			0.039	1.0		
Stockholm	29.32	744.8	29.59	749.3	29.8	— 1.2	88	ne.			4		10			0.047	1.2		
Wisby	29.50	749.2	29.55	750.7	39.6	4.2	80	wsw.			6		7			0	0		
Sub-Series.																			
Upsala	29.43	747.6	29.52	749.8	27.5	— 2.5	89	n.	7.4	3.3			10			0.028	0.7	snowing	S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.06	738.0	30.52	775.2	40.3	4.6	48	n.			1					0	0	clear	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.11	764.7	51.3	10.7	64	e.	7	3.0			10		sw.	0.346	8.8		The Observatory.
Valona			29.97	761.1	55.0	12.8		e.			1		10			0.24	6.	raining	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.20	767.1	64.0	17.8	63	n.			1	0	0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind.		Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.10	764.5	30.18	766.6	37.2	2.9	82	s.	3	1.3			10 n		w.	0.01	0.3	sleeting	
Alpena, Michigan	28.99	736.3	29.70	754.4	32	0.0	100	se.	2	0.9			10 n			0.43	10.9	heavy rain	
Atlanta, Georgia	28.91	734.3	30.14	765.5	58.0	14.4	86	s.	7	3.1			10 s		s.	0.11	2.8	cloudy	
Atlantic City, New Jersey	30.20	767.1	30.21	767.3	40.2	4.6	89	w.	6	2.7			10 s			0	0	cloudy	
Augusta, Georgia	29.99	761.7	30.19	766.8	58.4	14.7	93	calm	0	0			10 s			0.02	0.5	cloudy	
Baltimore, Maryland	30.13	765.3	30.18	766.6	38	3.3	89	e.	2	0.9			10n;fog			0.02	0.5	light rain	
Barnegat, New Jersey	30.19	766.8	30.21	767.3	38.0	3.3	96	e.	6	2.7			10 s		sw.	0	0	cloudy	
Bismarck, Dakota	28.15	715.0	30.15	765.8	21	— 6.1	87	nw.	12	5.4			10 s		calm	inap.	inap.	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.53	699.2	30.46	773.7	28	— 2.2	88	s.	2	0.9			10 s		calm	0	0	cloudy	
Boston, Massachusetts	30.09	764.3	30.26	768.6	26.0	— 3.3	88	w.	3	1.3		4 ck	0			0	0	fair	
Brownsville, Texas	29.85	758.2	29.90	759.4	72	22.2	90	se	8	3.6		10 ck	0			0.07	1.8	cloudy	
Buffalo, New York	29.10	739.1	29.90	759.4	43	6.1	96	s.	10	4.5			10 s			0.11	2.8	cloudy	
Burlington, Vermont	29.79	756.7	30.10	764.5	27.5	— 2.5	79	se.	11	4.9			10 s		w.	inap.	inap.	cloudy	
Cairo, Illinois	29.53	750.0	29.95	760.7	59.1	15.1	95	sw.	4	1.8			10 s		calm	0.06	1.5	cloudy	
Campo, California	27.48	698.0	30.11	764.8	27	— 2.8	56	ne.	5	2.2		0	0			0	0	clear	
Camp Thomas, Arizona	27.27	692.6	30.10	764.5	37.5	3.1	91	calm			0	3 cs	5 ks			0	0	cloudy	
Cape Henry, Virginia	30.16	766.1	30.18	766.6	49	9.4	93	se.	9	4.0			fg.			0	0	dense fog	
Cape May, New Jersey	30.15	765.8	30.18	766.6	44	6.7	93	se.	12	5.4			fg.			0	0	dense fog	
Castroville, Texas	29.10	739.1	29.95	760.7	63	17.2	93	calm	0	0			10 n			0.04	1.0	light rain	
Cedar Keys Florida	30.14	765.5	30.16	766.1	60	15.6	87	e.	4	1.8		5 cs	0			0	0	fair	
Champaign, Illinois	28.91	734.3	29.78	756.4	50.3	10.2	93	sw.	20	8.9			10 s		sw.	0.09	2.3	cloudy	
Charleston, S. Carolina	30.12	765.0	30.18	766.6	58	14.4	93	e.	1	0.4			fg.			0	0	dense fog	
Charlotte, N. Carolina	29.27	743.4	30.16	766.1	53.0	11.7	100	sw.	6	2.7			10 n		sw.	0.05	1.3	light rain	
Chattanooga, Tennessee	29.22	742.2	30.08	764.0	57.0	13.9	100	s.	3	1.3			10 ks		s.	0.66	16.8	cloudy	
Cheyenne, Wyoming	24.02	610.1	30.27	768.8	11.1	—11.6	83	nw.	6	2.7		0	0			0.02	0.5	clear	
Chicago, Illinois	28.94	735.1	29.68	753.9	47.7	8.7	100	sw.	11	4.9			fg.			0.49	12.4	dense fog	
Chincoteague, Virginia	30.16	766.1	30.18	766.6	48	8.9	93	se.	9	4.0			10 s;ks		s.	0.01	0.3	cloudy	
Cincinnati, Ohio	29.25	742.9	29.94	760.5	50.1	10.1	77	e.	3	1.3			10s;fg			0.55	14.0	cloudy	
Cleveland, Ohio	29.09	738.9	29.87	758.7	52	11.1	93	s.	15	6.7		0	9 s		w.	0.04	1.0	cloudy	
Coleman City, Texas	28.19	716.0			38	3.3	82	n.	20	8.9		0	0			0	0	clear	
Columbus, Ohio	29.04	737.6	29.94	760.5	44	6.7	100	se.	8	3.6			10n;fog			0.10	2.5	light rain	
Concho, Texas	28.07	713.0	30.09	764.3	40	4.4	92	ne.	4	1.8		0	0			0	0	clear	
Davenport, Iowa	29.17	740.9	29.88	758.9	37	2.8	82	nw.	8	3.6			10 s		calm	0.25	6.3	cloudy	
Dayton, Washington T'y	28.61	726.7	30.41	772.4	28.2	— 2.1	84	s.	5	2.2		2 k	0	calm		0	0	clear	
Deadwood, Dakota	25.31	642.9	30.26	768.6	23	— 5.0	56	sw.	4	1.8		0	0			0.02	0.5	clear	
Decatur, Texas					40	4.4	65	n.	14	6.3		0	0			0	0	clear	
Delaware Breakwater, Del.	30.16	766.1	30.18	766.6	42	5.6	100	se.	10	4.5			10 s		s.	0	0	cloudy	
Denison, Texas	29.17	740.9	30.01	762.2	46.3	7.9	68	n.	11	4.9			10 s			0	0	cloudy	
Denver, Colorado	24.82	630.4	30.34	770.6	13.5	—10.3	76	s.	7	3.1		0	0			0.39	9.9	clear	
Des Moines, Iowa	29.04	737.6	30.01	762.2	30	— 1.1	78	n.	18	8.0			10 s		n.	0.02	0.5	cloudy	
Detroit, Michigan	29.03	737.3	29.79	756.7	48.2	9.0	93	s.	15	6.7			fg.			0.24	6.1	dense fog	
Dodge City, Kansas	27.41	696.2	30.16	766.1	26.5	— 3.1	82	n.	12	5.4		0	2 s			0	0	clear	
Dubuque, Iowa	29.06	738.1	29.83	757.7	36.5	2.5	89	w.	8	3.6			10 s		calm	0.08	2.0	cloudy	
Duluth, Minnesota	29.05	737.9	29.81	757.2	30	— 1.1	88	w.	25	11.2			10 s		w.	0.04	1.0	cloudy	
Eagle Pass, Texas	29.11	739.4	29.95	760.7	50.1	10.1	93	se.	1	0.4			fg.			0	0	dense fog	
Eagle Rock, Idaho	25.47	646.9	30.43	772.9	2	—16.7	76	calm	0	0		0	0			0	0	clear	
Eastport, Maine	30.14	765.5	30.21	767.3	26	— 3.3	82	n.	8	3.6		2 c	5 s		n.	0.33	8.4	fair	
El Paso, Texas	26.25	666.7	30.13	765.3	35.2	1.8	56	n.	3	1.3		0	2 s			0	0	clear	
Erie, Pennsylvania	29.11	739.4	29.88	758.9	50	10.0	86	s.	12	5.4			10 k		sw.	0.24	6.1	cloudy	
Escanaba, Michigan	28.95	735.3	29.67	753.6	33	0.6	100	n.	3	1.3			10 n			0.81	20.6	light rain	
Florence, Arizona																			
Fort Apache, Arizona	25.01	635.2	30.13	765.3	21	— 6.1	64	e.	1	0.4		0	4 s		calm	0	0	fair	
Fort Assinnaboine, Montana	27.20	690.9	30.24	768.1	21	— 6.1	48	sw.	13	5.8		3 c	0	w.		0	0	clear	
Fort Bennett, Dakota	28.42	721.9	30.16	766.1	30	— 1.1	70	nw.	6	2.7			10 s			0	0	clo dy	
Fort Benton, Montana	27.27	692.6	30.25	768.3	24	— 4.4	64	w.	16	7.2		5 c	0	calm		0.09	2.3	fair	
Fort Buford, Dakota	28.01	711.4	30.21	767.3	15	— 9.4	67	w.	5	2.2		10 k	0	calm		0	0	cloudy	
Fort Custer, Montana	26.92	683.8	30.30	769.6	18	— 7.8	91	se.	6	2.7		0	0			0.05	1.3	clear	
Fort Davis, Texas	25.14	638.5	30.12	765.0	38	3.3	75	calm	0	0		0	0			0	0	clear	
Fort Elliott, Texas	27.28	692.9	30.21	767.3	31	— 0.6	71	n.	16	7.2			10 n		n.	inap.	inap.	light snow	
Fort Gibson, Indian T'y	29.44	747.8	30.04	763.0	41.0	5.0	82	n.	16	7.2			10 s		n.	inap.	inap.	cloudy	
Fort Grant, Arizona	25.18	639.6	30.08	764.0	32	0.0	47	calm	0	0		7 cs	0			0	0	fair	
Fort Griffin, Texas	28.75	730.2	30.13	765.3	41	5.0	73	n.	10	4.5		0	0			0	0	clear	
Fort Keogh, Montana	27.55	699.8	30.24	768.1	21	— 6.1	73	sw.	12	5.4		7 cs	0	w.		0	0	fair	
Fort Macon, North Carolina	30.18	766.6	30.19	766.8	53	11.7	100	se.	3	1.3			10 n		s.	0.15	3.8	light rain	
Fort McKavett, Texas	27.74	704.6	30.13	765.3	43.2	6.2	76	ne.	10	4.5		8 k	0			0	0	cloudy	
Fort Missoula, Montana	27.00	685.8	30.46	773.7	19	— 7.2	100	se.	2	0.9			10 s			0.02	0.5	cloudy	
Fort St. Michaels, Alaska	29.53	750.0	29.56	750.8	0	—17.8	100	n.	2	0.9		0	8 ks		nw.	0	0	fair	
Fort Shaw, Montana	26.43	671.3	30.29	769.4	27	— 2.8	67	w.	18	8.0		0	0			0.08	2.0	clear	
Fort Sill, Indian Territory	28.81	731.8	30.14	765.5	38	3.3	69	n.	24	10.7		0	0			0	0	clear	
Fort Stevenson, Dakota	28.13	714.5	30.19	766.8	18	— 7.8	87	nw.	18	8.0			10 s		calm	inap.	inap.	cloudy	
Fort Verde, Arizona					35.8	2.1	64	w.			2		10 s		w.	0	0	cloudy	
Fredericksburg, Texas	28.16	715.3	29.98	761.5	62	16.7	93	calm	0	0		8 k	0	sw.		0	0	cloudy	
Galveston, Texas	29.92	760.0	29.96	761.0	65	18.3	100	s.	8	3.6			fg.			0.51	13.0	dense fog	
Grand Haven, Michigan	28.96	735.6	29.67	753.6	44.0	6.7	96	s.	10	4.5			10 n		calm	0.31	7.9	heavy rain	
Hatteras, North Carolina	30.17	766.3	30.19	766.8	51	10.6	100	calm	0	0			fg.			0.04	1.0	dense fog	
Helena, Montana	25.92	658.4	30.35	770.9	21	— 6.1	48	n.	20	8.9		0	0			0	0	clear	
Henrietta, Texas	29.08	738.6	30.15	765.8	39	3.9	65	n.	19	8.5		0	0			0	0	clear	
Huron, Dakota	28.60	726.4	30.14	765.5	28	— 2.2	64	nw.	24	10.7			10 ks		nw.	0	0	cloudy	
Indianapolis, Indiana	29.00	736.6	29.84	757.9	50.5	10.3	90	s.	5	2.2			10n;fog		calm	0.09	2.3	light rain	
Indianola, Texas	29.91	759.7	29.94	760.5	69.0	20.6	100	s.	11	4.9		2 k	4 s	s.	s.	0.02	0.5	fair	
Jacksboro, Texas	28.86	733.0	30.10	764.5	40	4.4	82	n.	7	3.1		0	0			0	0	clear	
Jacksonville, Florida	30.13	765.3	30.18	766.6	55	12.8	93	e.	2	0.9			fg			0	0	dense fog	
Keokuk, Iowa	29.19	741.4	29.87	758.7	36.5	2.5	89	w.	8	3.6			10 s		w.	0.30	7.6	cloudy	
Key West, Florida	30.11	764.8	30.14	765.5	72.0	22.2	84	se.	12	5.4		0	2 ks		calm	0.05	1.3	clear	
Kittyhawk, North Carolina	30.20	767.1	30.22	767.6	51	10.6	100	w.	4	1.8			10n;fg			0.02	0.5	light rain	
Knoxville, Tennessee	29.02	737.1	30.10	764.5	53	11.7	100	e.	1	0.4			10 n		calm	1.02	25.9	light rain	
La Crosse, Wisconsin	28.99	736.3	29.83	757.7	34	1.1	78	w.	1	0.4			10 s			0.05	1.3	cloudy	
La Mesilla, New Mexico	26.04	661.4	30.06	763.5	32.5	0.3	76	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.16	740.7	30.12	765.0	32	0.0	68	nw.	12	5.4			10 s		nw.	0	0	cloudy	
Lewiston, Idaho	29.60	751.8	30.48	774.2	27	— 2.8	64	e.	1	0.4		0	0			0	0	clear	
Little Rock, Arkansas	29.57	751.1	29.90	759.4	61	16.1	100	s.	11	4.9			10 s		s.	0	0	cloudy	
Los Angeles, California	29.72	754.9	30.12	765.0	43.2	6.2	83	ne.	4	1.8		0	0			0	0	clear	
Louisville, Kentucky	29.31	744.5	29.90	759.4	57.5	14.2	86	s.	8	3.6			10 s		s.	0.10	2.5	cloudy	
Lynchburg, Virginia	29.42	747.3	30.14	765.5	40.0	4.4	89	calm	0	0			10n;fog			0.06	1.5	light rain	
Mackinac City, Michigan																			
Madison, Wisconsin	28.67	728.2	29.76	755.9	34	1.1	89	w.	10	4.5			10 s		calm	0.08	2.0	cloudy	
Marquette, Michigan	28.89	733.8	29.67	753.6	36	2.2	79	w.	1	0.4			10 s		calm	0.24	6.1	cloudy	
Mason, Texas	28.32	719.3	30.06	763.5	47	8.3	71	nw.	16	7.2			10 s		sw.	0	0	cloudy	
Memphis, Tennessee	29.62	752.3	29.98	761.5	62	16.7	93	s.	8	3.6			10 s			0.31	7.9	cloudy	
Milwaukee, Wisconsin	28.91	734.3	29.71	754.6	37	2.8	89	w.	10	4.5			10 n			0.44	11.2	light rain	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.04	763.0	30.08	764.0	64.0	17.8	100	nw.	1	0.4			10 n		nw.	0.87	22.1	heavy rain	
Montgomery, Alabama	29.83	757.7	30.07	763.8	62.6	17.0	94	s.	2	0.9			10 s			0.03	0.8	threatening.	
Moorhead, Minnesota	28.92	734.6	30.03	762.7	15	—9.4	83	nw.	5	2.2			10 s			0.16	4.1	cloudy	
Morgantown, W. Virginia	28.99	736.3	30.05	763.3	52.0	11.1	90	calm	0	0			10 n			0.53	13.5	light rain	
Mt. Washington, N. H.	23.70	602.0	30.34	770.6	21.0	—6.1	82	w.	28	12.5		7 c	0	w.		0.03	0.8	fair	
Nashville, Tennessee	29.43	747.5	29.99	761.7	61.0	16.1	89	s.	1	0.4			10 ks		sw.	0.15	3.8	cloudy	
New Haven, Connecticut	30.11	764.8	30.23	767.8	32	0.0	88	calm	0	0		10 cs	fg	sw.		inap.	inap.	cloudy	
New London, Connecticut	30.22	767.6	30.27	768.8	32	0.0	78	w.	3	1.3			10 s		w.	0	0	cloudy	
New Orleans, Louisiana	29.98	761.5	30.04	763.0	64.5	18.1	90	n.	3	1.3			10 s			0.03	0.8	threatening.	
Newport, Rhode Island	30.20	767.1	30.25	768.3	32.3	0.2	77	ne.	7	3.1		7 k	2ks;sk	w.	s.	0	0	cloudy	
New River, N. Carolina					56	13.3	100	ne.			1		10 n		se.	0.04	1.0	light rain	
New Shoreham, Rhode I'd.	30.23	767.8	30.26	768.6	34.8	1.6	99	calm	0	0		0	8 ks		nw.	0	0	cloudy	
New York, New York	30.05	763.3	30.24	768.1	37	2.8	82	sw.	3	1.3			10 s		sw.	0	0	cloudy	
Norfolk, Virginia	30.16	766.1	30.19	766.8	49	9.4	100	s.	5	2.2			10 n			inap.	inap.	light rain	
North Platte, Nebraska	27.19	690.6	30.31	769.9	16.6	—8.6	74	nw.	8	3.6		0	0			inap.	inap.	clear	
Olympia, Washington T'y	30.36	771.1	30.40	772.1	39.5	4.2	80	s.	6	2.7		10 cs	0	calm		inap.	inap.	cloudy	
Omaha, Nebraska	28.88	733.5	30.15	765.8	25.3	—3.7	76	nw.	19	8.5		1 ck	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	30.03	762.7	30.05	763.3	—32.8	—36.0	89	ne.	5	2.2		0	1 s			0	0	clear	
Oswego, New York	29.60	751.8	29.95	760.7	37.0	2.8	85	se.	14	6.3			10 n		sw.	0.06	1.5	light rain	
Palestine, Texas	29.36	745.7	29.92	760.0	66	18.9	93	s.	12	5.4		0	8 ks			0.89	22.6	cloudy	
Pensacola, Florida	30.06	763.5	30.09	764.3	64.1	17.8	100	se.	3	1.3			10 s		sw.	0.31	7.9	cloudy	
Philadelphia, Pa.	30.15	765.8	30.21	767.3	34	1.1	88	ne.	4	1.8			10 s			0	0	threatening.	
Pike's Peak, Colorado	17.36	440.9	30.06	763.5	—6	—21.1	87	sw.	8	3.6			fg.			0.30	7.6	light fog	
Pioche, Nevada	24.15	613.4	30.35	770.9	17	—8.3	73	n.	11	4.9		2 k	0	calm		0	0	clear	
Pittsburg, Pennsylvania	29.14	740.1	29.99	761.7	46.3	7.9	89	calm	0	0			10n;fg			0.04	1.0	light rain	
Port Eads, Louisiana	30.06	763.5	30.06	763.5	60.0	15.6	100	se.	3	1.3			fg			0	0	dense fog	
Port Huron, Michigan	29.02	737.1	29.75	755.6	43.0	6.1	100	s.	12	5.4			fg		calm	0.19	4.8	dense fog	
Portland, Maine	30.19	766.8	30.24	768.1	24.5	—4.2	73	calm	0	0		2 cs	0	calm		0	0	clear	
Portland, Oregon	30.43	772.9	30.50	774.7	34.0	1.1	79	se.	6	2.7		0	1 s		calm	0.02	0.5	clear	
Portsmouth, N. Carolina					62	16.7	100	se.	5	2.2			10n;fg		calm	0.24	6.1	light rain	
Prescott, Arizona	24.68	626.9	30.06	763.5	17	—8.3	58	ne.	1	0.4		0	0			0	0	clear	
Punta Rassa, Florida	30.14	765.5	30.15	765.8	63.5	17.5	92	e.	7	3.1		0	2 s		calm	inap.	inap.	clear	
Red Bluff, California	30.04	763.0	30.42	772.7	41.5	5.3	56	nw.	6	2.7		0	0			0	0	clear	
Rio Grande City, Texas	29.72	754.9	29.97	761.2	68	20.0	84	se.	2	0.9		5 cs	0	se.		0	0	fair	
Rochester, New York	29.21	741.9	29.92	760.0	40	4.4	89	s.	12	5.4			10 n		sw.	0.03	0.8	light rain	
Roseburg, Oregon	29.94	760.5	30.52	775.2	30.6	—0.8	90	calm	0	0		0	fg.			0	0	clear	
Sacramento, California	30.25	768.3	30.33	770.4	41.4	5.2	57	n.	15	6.7		0	0			0	0	clear	
St. Louis, Missouri	29.25	742.9	29.89	759.2	47.6	8.7	100	nw.	20	8.9			10 s			0.05	1.3	cloudy	
St. Paul, Minnesota	28.95	735.3	29.90	759.4	29.6	—1.3	77	nw.	14	6.3			10 s		nw.	0.08	2.0	cloudy	
St. Vincent, Minnesota	29.03	737.3	30.01	762.2	14	—10.0	100	nw.	13	5.8			10 s		calm	0.03	0.8	cloudy	
Salt Lake City, Utah	25.81	655.6	30.38	771.6	22	—5.6	48	calm	0	0		0	0			0.09	2.3	clear	
San Antonio, Texas	29.19	741.4	29.92	760.0	66.6	19.2	93	se.	1	0.4			fg			0	0	dense fog.	
San Diego, California	29.98	761.5	30.05	763.3	45.0	7.2	95	ne.	8	3.6		0	0			0.01	0.3	clear	
Sandusky, Ohio	29.12	739.6	29.84	757.9	50	10.0	93	s.	20	8.9			10 n		sw.	0.14	3.6	light rain	
Sandy Hook, New Jersey	30.21	767.3	30.25	768.3	36.0	2.2	79	sw.	2	0.9		10 k	0	sw.		0	0	cloudy	
San Francisco, California	30.24	768.1	30.31	769.9	53	11.7	31	n.	14	6.3		0	0			0	0	clear	
Santa Fé, New Mexico	23.22	589.8	30.23	767.8	25	—3.9	88	calm	0	0			10 s		calm	0	0	cloudy	
Savannah, Georgia	30.09	764.3	30.19	766.8	58	14.4	86	s.	1	0.4			fg			0	0	dense fog	
Shreveport, Louisiana	29.69	754.1	29.94	760.5	63	17.2	100	s.	1	0.4			10 s		s.	0.06	1.5	cloudy	
Silver City, New Mexico	24.13	612.9	29.99	761.7	31	—0.6	65	calm	0	0		0	0			0	0	clear	
Sitka, Alaska	29.45	748.0	29.52	749.8	38.6	3.7	80	s.	28	12.5			10 n		s.	0.61	15.5	light rain	
Smithville, North Carolina	30.14	765.5	30.18	766.6	56	13.3	93	w.	3	1.3			10 s			0	0	cloudy	
Spokane Falls, Wash. Ter.	28.31	719.1	30.45	773.4	22	—5.6	73	w.	2	0.9			10 s		calm	0	0	cloudy	
Springfield, Illinois	29.15	740.4	29.88	758.9	41.5	5.3	92	w.	13	5.8			10s;fg		w.	0.06	1.6	cloudy	
Springfield, Massachusetts	30.11	764.8	30.25	768.3	27.8	—2.3	88	calm	0	0		10 cs	fg	nw.		0	0	cloudy	
Springfield, Mo.	28.48	723.4	30.06	763.5	42	5.6	92	nw.	12	5.4			fg			0.04	1.0	dense fog	
Stockton, Texas	26.94	684.3	30.08	764.0	37.2	2.9	82	n.	4	1.8		0	0			0	0	clear	
Thatcher's Island, Mass.	30.21	767.3	30.27	768.8	34.5	1.4	89	nw.	1	0.4			10 s		nw.	0	0	cloudy	
Toledo, Ohio	29.07	738.4	29.81	757.2	51	10.6	93	s.	12	5.4			10 s		sw.	0.19	4.8	cloudy	
Tucson, Arizona	27.53	699.2	30.03	762.7	39	3.9	65	se.	5	2.2		10 ck	0	w.		0	0	cloudy	
Umatilla, Oregon	30.07	763.8	30.40	773.7	29.6	—1.3	90	e.	7	3.1		6 cs	0	w.		0	0	fair	
Uvalde, Texas																			
Vicksburg, Mississippi	29.74	755.4	30.01	762.2	64	17.8	93	s.	3	1.3			10 s		calm	0.16	4.1	cloudy	
Visalia, California	29.84	757.9	30.23	767.8	30	—1.1	85	s.	2	0.9		0	0			0	0	clear	
Washington, D. C.	30.04	763.0	30.16	766.1	35.0	1.7	100	ne.	2	0.9			10n;fg			0.02	0.5	light rain	
West Los Animas, Colorado	26.10	662.9	30.24	768.1	9	—12.8	89	w.	6	2.7		0	0			0.08	2.0	clear	
Wickenburg, Arizona					32	0.0	74	calm			0	0	0			0	0	clear	
Williamsport, Pa.	29.41	747.0	30.04	763.0	40.5	4.7	69	e.	5	2.2			10 s			0	0	cloudy	
Wilmington, N. Carolina	30.12	765.0	30.18	766.6	58	14.4	93	se.	4	1.8			10 n		calm	0.17	4.3	light rain	
Winnemucca, Nevada	25.91	658.1	30.45	773.4	12	—11.1	64	ne.	1	0.4		0	0			0	0	clear	
Wood's Holl, Mass.	30.29	769.4	30.33	770.4	35	1.7	79	nw.	6	2.7			10 s		calm	0	0	cloudy	
Yankton, Dakota	28.74	730.0	30.16	766.1	26	—3.3	77	nw.	8	3.6		0	0			0	0	clear	
Yuma, Arizona	29.92	760.0	30.07	763.8	46.2	7.9	34	n.	6	2.7		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.00	558.8			52.0	11.1	76	ne.	1	0.4		1 k	1 s			0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.03	762.7	30.04	763.0	77	25.0	86	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.89	759.2	29.91	759.7	78	25.6	86	se.	2	0.9		4 ck	5 s	sw.	s.	1.15	29.2	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.98	761.5	30.00	762.0	78	25.6	90	e.				0	2 ks		e.	0	0	clear	B. Bigar.
Havana, Cuba, W. I.	30.11	764.8	30.16	766.1	72	22.2	97	se.	1.2	0.5		0	2 ks		calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	67.3	19.6	87	calm	0	0		3 ck	5 s	e.	e.	0	0	cloudy	Robert Johnstone
Navassa, W. I.	29.97	761.2	30.05	763.3	76	24.4	65	e.	8	3.6		2 ck	5 s	e.	e.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.06	763.5	30.06	763.5	76	24.4	91	ne.			2		10 n	ne.	ne.	0.330	8.4	rainy	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.93	760.2	80	26.7	85	calm			0	0	7 ks		calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua					74	23.3	92	ne.			3	0	4 ks		ne.	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.06	763.5	30.08	764.0	75	23.9	72	n.	6	2.7		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.86	758.4	29.92	760.0	—24.0	—31.1		sw.	9	4.0		6 k	4 s	sw.	sw.	0.01	0.3	snowing	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India.	29.95	760.7	79.5	26.4	89	ne.			0-1		8							showery	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 36° 57′, E. 16° 33′	29.87	758.7	62	16.7	83	ese.			3-4		9	ese.				4	ese.	d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 3° 10′, E. 105° 00′	29.95	760.7	78	25.6	95	nw.			1-3		5	nw.				2	nw.	drizzling	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.88	758.9	74	23.3	63	ese.			3-4		0							blue sky	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.85	758.2	66	18.9	94	se.			2-3		10					2	sw.	misty	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey.	30.14	765.5	50	10.0	78	ese.			1		5							d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette																			Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.24	768.1	39.5	4.2	82	nnw.			2-3		0							squally	Capt. S. Long.
H. M. S. Diamond, S. 17° 24′, W. 30° 33′	30.04	763.0	80	26.7	74	ene.			4-5		2					4	e.	d. clouds	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.20	767.1	67	19.4	84	wnw.			1-2		6	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 18° 52′, W. 80° 42′	30.15	765.8	78	25.6	98	ene.			4		6					1	ne.	d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 52° 07′, W. 60° 49′	29.38	746.2	45	7.2	84	wsw.			3-4		7					3	wsw.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.88	758.9	85	29.4		nne.			1		4	nnw.						d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. G. Robinson.
H. M. S. Espiegle, N. 4° 20′, W. 23° 55′	29.91	759.7	80	26.7	95	e.			1		6	ese.				2	ene.	d. clouds	Capt. C. A. P Bridge.
H. M. S. Euryalus.																			Capt. R. D. King.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	29.80	756.9	45	7.2	76	wnw.			5-6		7	w.				3	w.	misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.93	760.2	64	17.8	83	n.			1-2		1							d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 39° 19′, W. 57° 33′	29.84	757.9	61	16.1	77	ssw.			5		3							d. clouds	Capt. L. Jones.
H. M. S. Iris, Off Jaffa, Palestine	30.16	766.1	68	20.0	50	ne.			1-2		1					1	ne.	blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.33	770 4	60	15.6	88	n.			1		6	n.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. O. F. Oldham
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	30.32	770.1	56.7	13.7	55	nne.			1-2		0					2	n.	misty	Capt. A. Carpenter.
H. M. S. Malabar, Bombay, India	29.98	761.5	77	25.0	90	nw.			2-3		3	nw.						d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, St. Christopher, W. I.	30.03	762.7	76	24.4	78	ene.			4-5		7	ne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 26° 24′, E. 39° 57′	30.00	762.0	75	23.9	72	sse.			5		0					4	s.	blue sky	Capt. R. Kinahan.
H. M. S. Pelican, S. 35° 26′, W. 18° 03′	30.21	767.3	65	18.3	100	sw.			1		5					3	sw.	d. clouds	Capt. F. R. Dickens.
H. M. S. Phœnix, N. 18° 00′, W. 76° 05′	30.03	762.7	78	25.6	86	e.			1		3					4	ene.	showery	Capt. H. H. Grenfel.
H. M. S. Ready, Muscat, Arabia	30.10	764.5	75.1	23.9		nw.			2									d. clouds	Capt. W. H Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.26	768.6	41	5.0	91	calm			0		5							raining	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	29.99	761.7	80.5	26.9	78	nne.			1		6	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis																			Capt. G. O. Twiss.
H. M. S. Tenedos, N. 18° 11′, W. 76° 27′	30.05	763.3	73	22.8	85	s.			1		8							d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, S. 4° 18′, W. 81° 26′	29.92	760.0	71	21.7	90	s.			4		2	calm				4	s.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamacia, W I.	30.01	762.2	74	23.3		calm			0		0							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.21	767.3	63.5	17.5		nw.			2		4	wsw.						d. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	30.04	763.0	75.2	24.0	77	ene.			3		6		sw.			2	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 14° 45′, W. 61° 11′	30.02	762.6	76.5	24.7	85	nne.			2		7							misty	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
UNITED STATES NAVAL SERIES. By authority of the Secretary of the Navy. Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla.	30.07	763.8	66	18.9	94	se.	5	2.2	.....	.....	10	.....	se	0	0	.....	.....	cloudy	
N. Yard, Portsmouth, N. H.	30.22	767.6	21	— 6.1	.....	nw.	2	0.9	.....	.....	5?	.....	.....	0	0	.....	.....	clear?	
Naval Hospital Yokohama, Japan	29.55	750.6	40.5	4.7	96	calm	.....	.....	0	.....	10	.....	n.	0.71	18.0	.....	.....	gloomy	
Adams, Mollendo, Peru	29.71	754.6	70	21.1	85	se.	.....	.....	1	.....	10	.....	.....	.....	.....	light	sse.	cloudy	
Alaska, Callao, Peru	29.89	759.2	65	18.3	94	sse.	.....	.....	1	.....	5	.....	.....	0	0	sm'h	.....	fair	
Alert, Hong Kong, China*	30.18	766.6	55	12.8	50	ne.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alliance, Boston, Mass.	30.22	767.6	32	0.0	89	calm	.....	.....	0	.....	2	.....	.....	0	0	.....	.....	clear	
Ashuelot, Tientsin, China	30.15	765.8	25	— 3.9	100	sw	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, S. 2° 28′, W. 30° 38′	29.90	759.4	78	25.6	95	se.	12	5.4	.....	.....	10	.....	sse.	0.2	5.	mod.	sse.	cloudy	
Colorado, New York, N. Y.	30.21	767.3	37	2.8	94	calm	0	0	.....	.....	10	.....	calm	0	0	.....	.....	misty	
Essex, Norfolk, Va.	30.18	766.6	48	8.9	100	s.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	misty	
Franklin, Norfolk, Va.	30.18	766.6	51	10.6	86	s.	6	2.7	.....	.....	10	.....	wsw.	0	0	.....	.....	foggy	
Galena, N. 4° 19′, W. 7° 59′	29.91	759.7	81	27.2	96	ene.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	fair	
Independence, N. Yard, Mare I'd, Cal.	30.15	765.8	48	8.9	49	nnw.	4.8	2.1	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La.	30.05	763.3	65	18.3	94	ene.	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	foggy	
Lackawanna, Valparaiso, Chili†	30.02	762.5	61	16.1	100	sw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Lancaster, Villafranca, France	30.23	767.8	62	16.7	45	sw.	.....	.....	0-1	.....	0	.....	.....	0	0	sm'h	.....	clear	
Michigan, Erie, Pa.	29.79	756.7	49	9.4	.....	ssw.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I.	30.26	768.8	33	0.6	100	e.	1	0.4	.....	.....	5?	.....	w.	.....	.....	sm'h	.....	clear.?	
Monocacy, Yokohama, Japan	29.69	754.1	42	5.6	91	nw.	.....	.....	1	.....	10	.....	calm	.....	.....	.....	.....	cloudy	
Nipsic, Naples, Italy	29.91	759.7	59	15.0	65	ne.	.....	.....	4	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy	
Onward, Callao, Peru†	30.05	763.3	65	18.3	100	sse.	.....	.....	2	.....	10	.....	nnw.	.....	.....	long	w.	foggy	
Palos, Hong Kong, China	30.31	769.9	54	12.2	30	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C.	30.22	767.6	34	1.1	90	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	raining	
Pensacola, Callao, Peru	29.94	760.5	65	18.3	94	se.	7	3.1	.....	.....	10	.....	se.	0	0	sm'h	.....	foggy	
Powhatan, Boston, Mass.	30.24	768.1	26	— 3.3	100	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Quinnebaug, Villafranca, France	30.25	768.3	62	16.7	46	wsw.	.....	.....	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Ranger, N. 18° 07′, W. 103° 06′*	29.83	757.7	74	23.3	76	n.	.....	.....	2	.....	2	.....	calm	0	0	sm'h	.....	fair	
Richmond, Apia, Samoa Islands*	29.76	755.9	79	26.1	91	nnw.	.....	.....	1	.....	2	.....	.....	0.60	15.2	.....	.....	clear	
Shenandoah, Montevideo, Uruguay*	29.82	757.4	71	21.7	75	s.	.....	.....	3	.....	2	.....	.....	.....	.....	sm'h	.....	fair	
St. Louis, League Island, Pa.	30.40	772.1	34	1.1	79	ne.	2	0.9	.....	.....	10	.....	.....	0	0	.....	.....	cloudy	
Swatara, Yokohama, Japan*	29.48	748.8	45	7.2	84	nnw.	.....	.....	1	.....	10	.....	.....	.....	.....	sm'h	.....	light rain	
Tennessee, New York, N. Y.	30.21	767.3	37	2.8	90	ese.	1.5	0.7	.....	.....	10	.....	.....	0.06	1.5	.....	.....	overcast	
Vandalia, St. Pierre Martineque, W.I.	30.03	762.7	81	27.2	70	ene.	.....	.....	2	.....	5	.....	ne.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass.	30.25	768.3	25	— 3.9	88	nw.	1	0.4	.....	.....	2	.....	nw.	0	0	.....	.....	fair	
Wachusetts, Sitka, Alaska	29.54	750.3	37	2.8	90	ssw.	.....	.....	2	.....	10	.....	.....	.....	.....	long	w.	rainy	
Wyoming, Port Royal, S. C.	30.15	765.8	52	11.1	100	calm	0	0	.....	.....	10	.....	calm	0	0	.....	.....	foggy	
Yantic, Aux Cayes, Hayti, W.I*	30.00	762.0	71	21.7	90	nw.	.....	.....	0-1	.....	2	.....	.....	.....	.....	.....	.....	clear	

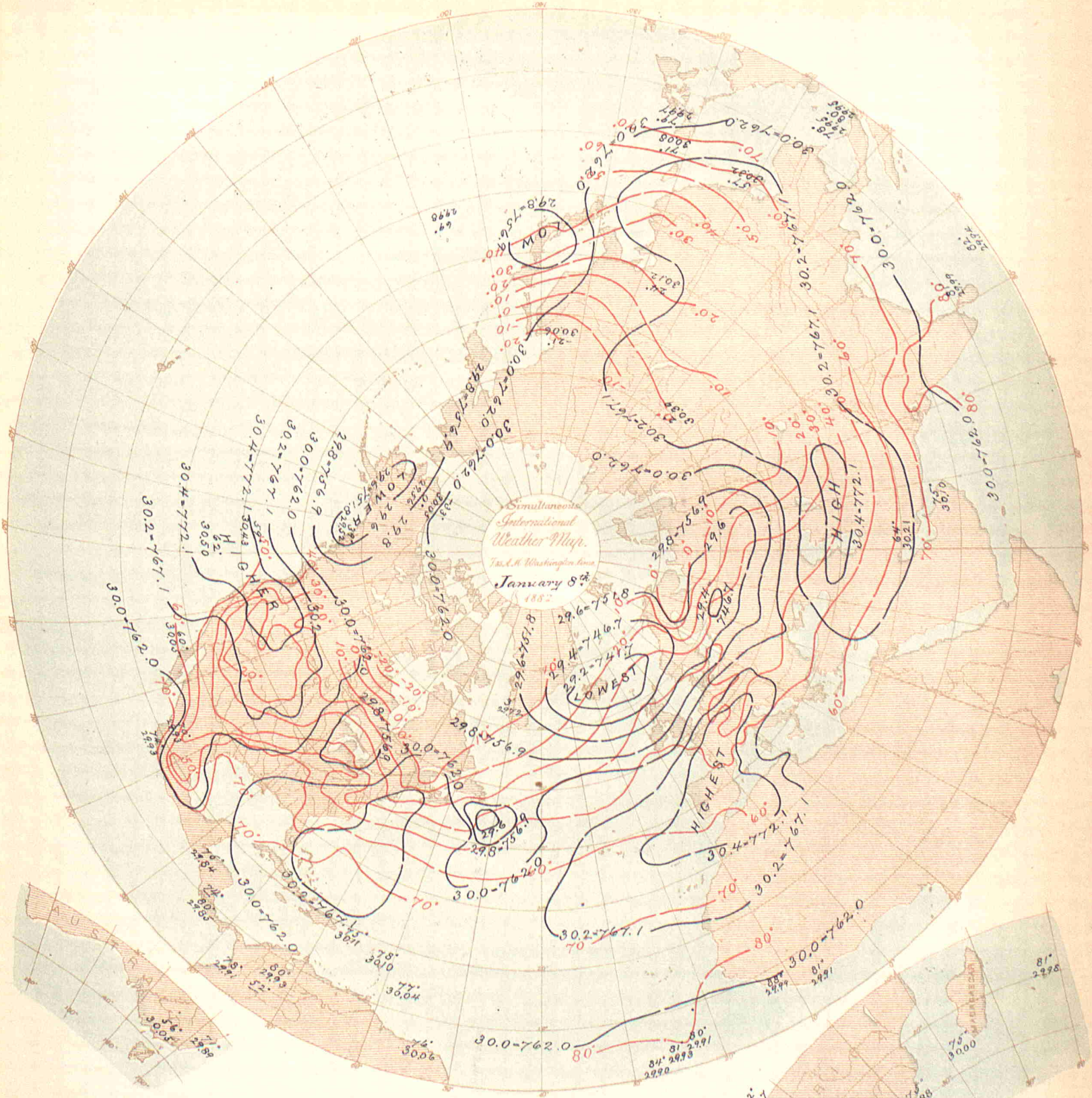
Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind. Up'er	Amount and kind. Lo'er	Direction. Upper.	Direction. Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Nova Scotian, Capt. W. M. Richardson,																	
S. S. Polynesian, Capt. Robt. Brown, Halifax, N. S*	29.79	756.7	25	— 3.9		nnw.	2		2		nw.	6 h'r	snow	sm'h		clear	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. N. 51° 46′, W. 24° 12′*	30.07	763.8	40	4.4		w.	5		4		w.			h'vy	wnw.	showery	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore																	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, N. 50° 00′, W. 25° 13′	30.03	762.7	48	8.9	92	wsw.	6		2		wnw.			mod.	nw.	clear	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	29.71	754.6	45	7.2	76	w.	5		2		w.	0	0			clear	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, N. 51° 38′, W. 19° 24′*†	30.04	763.0	47	8.3	100	w.	4		4		sw.			h'vy	w.	fair	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 44° —′, W. 53° —′†	29.44	747.8	42	5.6	91	wsw.	5		1		ene.				se.	foggy	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Assyria, Capt. J. Brown																	J. Brown.
Utopia, Capt. A. McRitchie, N. 41° 58′, W. 54° 55′*†	29.80	756.9	48	8.9	92	nnw.	7		9		nw.	sh'rs	sh'rs	h'vy		squally	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 26° 14′, W. 74° 16*†	30.32	770.1	73	22.8	81	sse.	4		4		se.	5 h'r	light	long	ese.	fine	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Kingston, Jamaica*	30.07	763.8	75	23.9		calm	0		0			0	0			very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladiom																	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 28° 00′, W. 75° 30′						calm	0					0	0				R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse, N. 18° —′, W. 74° —′	29.70	754.4				ene.	1		1		n.	0	0	mod.	e.	clear	Fisher & Welden.
BOSTON & HALIFAX. *E. W Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright																	
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russel																	S. E. Wright.
British Merchant, Capt. E. J. Molony S. 12° 03′, E. 91° 51′	29.91	759.7	77.7	25.4	90	se.	2–3		7							gloomy	
Caldew, Capt. W. Peterson																	
S. S. Cipero, Capt. W. N. Lailey																	
S. City of Agra, Capt. Thos. Young, S. 25° 00′, W. 17° 40′	30.19	766.8	78.5	25.8		e.	2		6							d. clouds	
Bk. Glaramara, Capt. R. Morton, N. 9° 04′, W. 33° 28′	30.00	762.0	77.5	25.3	77	ne.	4		5							d. clouds	
Glencairn, Capt. R. S. Tannock, S. 36° 54′, W. 12° 00′	30.18	766.6	61	16.1	66	sw.	5		6							d. clouds	
S. S. Gordon Castle, Capt. W. Waring, N. 36° 49′, E. 13° 16′	29.88	758.9	59.7	15.4	88	wnw.	6		10							raining	
Bg. Hermine, Capt. G. G. Jones, S. 26° 04′, W. 73° 00′	30.01	762.2	62.7	17.1	78	s.	4		10							overcast	
S. S. Humboldt, Capt. A. W. Jeffery, S. 7° 28, W. 32° 56′	29.98	761.5	81.2	27.3	74	ese.	5		4							d. clouds	
S. Lochee, Capt. J. Raeburn, R. N. R., N. 0° 10′, E. 87° 07′	29.94	760.5	82	27.8	83	nne.	2		6							d. clouds	
May Hulse, Capt. H. Youlden, N. 0° 18′, W. 27° 34′	29.90	759.4	83.5	28.6	83	se.	3		4							d. clouds	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson																	
Naiad, Capt. John Smith. S. 25° 26′, W. 20° 12	30.20	767.1	76.8	24.9	77	ne.	3		4							d. clouds	
Pole Star, Capt. F. Norman, S. 38° 12′, W. 56° 52′	29.79	756.7				sse.	4		1							blue sky	
Queen of Cambria, Capt. M. Parry. S. 39° 05′, W. 23° 35′	30.11	764.8	62.2	16.8	77	nnw.	5		3							d. clouds	
S. S. Strathleven, Capt. J. W. Pearson																	
S. Superb, Capt. Berridge N. 0° 26′, W. 25° 24′	29.93	760.2	81.2	27.3	95	e.	3		8							d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents. New York.*																	
S. S. Brooklyn City, Capt. S. Windham, N. 51° 08′, W. 20° 25′*†	30.20	767.1	54	12.2		n.	4		8		w.	0	0	mod.	cl'd	cloudy	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent, San Francisco.*																	
S. S. Newbern, Capt. E. Y. Rogers, N. 32° 09′, W. 119° 50′†	30.12	765.0	58	14.4	69	nw.	4		0			0	0	small	nw.	clear	
CROMWELL LINE. *Clark & Seaman, Agents, New York*																	
S. S. Hudson, Capt. H. R. Freeman																	Crowell & Henry.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains, N. 44° 10′, W. 44° 57′*	29.82	757.4	50	10.0		s.	7		10			rain	rain			raining	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, N. 45° 25′, W. 52° 57′	29.40	746.7	35.6	2.0		sw.	3		7		sw.	6 h'r	hail	large	sw.	showery	
S. S. St. Laurent, Capt. A. Servan,																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. Kuhlewein, N. 49° 48′, W. 4° 00′*	30.15	765.8	50	10.0	?	nnw.	6		5		wnw.	2 h'r	2 h'r	short	nnw.		P. Froehlich, 3d Off.
S. S. Wieland, Capt. C. Hebich,																	C. Jorgensen.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch																	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, N. 33° —′, W. 16° —′*†	30.52	775.2	67	19.4		ese.	2		5		ese.	0	0	long	nw.	fair	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Swanwell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley N. 42° 12′, W. 53° 00′*	29.61	752.1				w.	4		5		w.	6 h'r	6 h'r	h'vy	w.	showery	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker N. 37° 37′, W. 74° 31′*†	30.30	769.6	53	11.7		se.	3		5?		s.	0	0	sm'h		cloudy.?	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, N. 23° 55′, W. 74° 15′†	30.26	768.6	72	22.2		ese.	4		3		ese.	1 h'r	shr's	long	ene.	fair	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 30° 44′, W. 74° 20′†	30.27	768.8	70	21.1		se.	3							light	se.	overcast	E.F.Stembridge,3d off
S. S. Bothnia, Capt. MacMackan																	
S. S. City of Alexandria, Capt. L. F. Timmerman																	
S. S. City of Washington, Capt. J. W Reynolds	30.39	771.9	73	22.8		sse.	3								e.	rain & mist	
S. S. Maas, Capt. T. N. Bonjer	30.00	762.0	80	26.7		e.	1							sm'h		clear	
S. S. New York, Capt. R. B. Quick																	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt E. M. Chevalier, N. 48° 29′, W. 27° 06′*	30.11	764.8	46	7.8		n.	4								nw.	clear	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander																	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer, N. 48° 03′, W. 34° 06′	30.23	767.8	45	7.2	76	sw.	4		8		w.	o	o	long	nnw.	fair	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	30.07	763.8	45.0	7.2		n.	5-6		5?		n.	o	o			cloudy?	
S. S. Mosel, Capt. J. Hesse, N. 40° 32′, W. 69° 58′	30.34	770.6	39.9	4.4		wnw.	2		5		nnw.	o	o	sm'h		fine	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. C. Undeutsch																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 40° 03′, W. 137° 14′†	30.53	775.4	59	15.0	81	var.	1		5		n.	o	o	light	e.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Hong Kong, China*†	30.50	774.7	68	20.0	64	ne.	2		2		ne.					clear	
S. S. Oceanic, Capt. J. Metcalf, N. 30° 27′, E. 155° 18′*	29.98	761.5	69	20.6	84	wsw.	3		3		wsw.			3	con.	fine	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 32° 58′, W. 79° 00′*	29.90	759.4				calm	0		4					sm'h		clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 36° 36′, W. 74′ 46′†	29.87	758.7	58	14.4	70	ese.	1		10		s.	o	o	small	ne.	cloudy	H. K. Hallett.
OREGON IMROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes																	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer N. 42° 32′, W. 124° 34*	30.42	772.7	47	8.3	09	nw.	2		0			o	o	sm'h		clear	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d officer
S. S. Columbia, Capt. Fred Bolles N. 43° 04′, W. 124° 38′†	30.47	773.9	45	7.2	84	nne.	1		0					mod.	wnw.	clear	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	30.42	772.7	33	0.6	100	e.	1		5?		w.					clear?	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 32° 47′, W. 117° 23′†	30.09	764.3	56	13.3	30	ese.	4		0					sm'h		clear	
S. S. Geo. W. Elder, Capt. H. G. Morse, Puget Sound†	30.18	766.6	41	5.0		ne.	3		4		se.	5 h'r	5 h'r	sm'h		clear	
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	30.24	768.1	57	13.9	87	n.	6		0							clear	
S. S. Orizaba, Capt. Chas. B. Johnson																	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, Monterey, Cal.†	30.34	770.6	43	6.1	73	e.	1		0			o	o	sm'h		clear	T. Wallace.
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.27	768.8	42	5.6	100	n.	4		0			o	o			clear	
S. S. Victoria, H. M. Hayward, N. 45° 27′, W. 124° 40′†	30.54	775.8	46	7.8	85	sw.	4		8		sw.			mod.	nw.	cloudy	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulley, Supt. New York.*																	
S. S. Australia, Capt. ——, S. 15° 43′, W. 171° 11′	29.82	757.4	77	25.0	100	ne.	2		10		ne.			sm'h		raining	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.89	759.2	71	21.7	90	se.	2		8			o	o			overcast	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, Hong Kong, China†	30.47	773.9	56	13.3	62	n.	3		5		ne.	o	o			fair	J. M. Dow, 3d Officer, E. Le Sauk.
S. S. City of Sydney, Capt. H. C. Dearborn																	
S. S. City of Tokio, Com. J. Maury N. 33° 38′, W. 130° 51′†	30.60	777.2	62	16.7	61	nne.	8		5		se	o	o	mod.	e.	fair	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 8° 29′, W. 83° 50′†	29.85	758.2	80	26.7	75	ese.	2		5		calm	o	o	mod.	ssw.	clear	
S. S. Grenada, Capt. M. Connolly, N. 27° 42′, W. 115° 25′†	29.95	760.7	60	15.6	70	ne.	3		5		e.	o	o	long	nw.	fair	
S. S. South Carolina, Capt. W. J. Russell, La Libertad, San Salvador *†	29.84	757.9	75	23.9	85	calm	o		o			o	o	light	sw.	clear	
S. S. Zelandia, Capt. H. Webber, S. 31° 23′ E. 179° 40′	29.85	758.2	67	19.4	68	sw.	5		10		s.			r'gh	s.	cloudy	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind. Up'er	Amount and kind. Lo'er	Direction. Upper.	Direction. Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke, N. 18° 44′, W. 63° 40′						ene.	3		2			0	0	mod.	ene.	fair	G. S. Locke
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, N. 48° 35′, W. 22° 53′*	30.08	764.0	48	8.9	77	nnw.	3		10		nnw.	0	0	long	sw.	cloudy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 40° 59′, W. 68° 12′*†	30.55	776.0	39	3.9	91	ne.	1		10		e.	0	0	sm'h		cloudy	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 50° 29′, W. 0° 50′*	30.06	763.5	48	8.9		w.	6		10		wsw.	2 h'r	2 h'r	sm'h	wsw.	cloudy	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis																	
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub, N. 50° 17′, W. 33° 45′†	30.17	766.3	42.8	6.0		sw.	1		3		wsw.	3 h'r	3 h'r	mod.	wsw.	clear	J. T. Ulberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters																	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jenninge																	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 51° 14′, W. 20° 05′*†	29.86	758.4	47	8.3		w.	4		10		nw.	shr's	shr's	mod	wnw.	d. clouds	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 40° 55′ W. 66° 48′*†	30.09	764.3	41	5.0	83	wsw.	3		10		w.	5 h'r	sh'rs	sm'h		rainy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. N. 51° 06′, W. 11° 02′*†	30.10	764.5	53	11.7	93	nw.	5		10		w.	shr's	shr's	mod.	nw.	raining	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, N. 26° 19′, W. 71° 20′†	30.43	772.9	72	22.2	71	ene.	3	5 c	2 k	s.	e.	0	0	mod.	ene.	fair	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona N. 36° 42′, W. 14° 38′	30.47	773.8	62.1	16.7		ne.	1	0	4 s?					large	nw.	cloudy?	
Bk. Alpha, Capt. Ole Grönn,																	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis																	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin,																	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	29.84	757.9				ssw.	3				sw.	4 h'r	4 h'r			cloudy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 19° 12′, W. 40° 57′†	30.10	764.5				e.	3		5		e.	light	shr's	r'gh	e.		
S. Enoch Train, Capt. H. D. Chapman. N. 45° 00′ W. 27° 00′*	30.12	765.0				n.	3		3		n.	h'vy	shr's	con.	sw. nw.	clear	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 38° 07′, W. 53° 55′*	29.91	759.7				w.	7		4		nw.	8 h'r	light	mod.	sw.	cloudy	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.23	767.8	40	4.4	73	ne.	1		10		ne.			sm'h		foggy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 35° 57′, W. 51° 47′†	29.88	758.9	68	20.0		wsw.	3		1		w.	0	0	mod.	var.	clear	G. D. Morrison.
Bk. Freya, Capt. Blaouw, Limerick, Ireland			46	7.8		wsw.	8		10		wnw.	5 h'r	rain			raining	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.08	738.6				wnw.	2		3		wnw.	0	0				
Bk. Geo. Booth, Capt. D. Williams,																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 48° 02′, W. 19° 16′*	29.64	752.8	54.9	12.7	98	sw.	9		10		sw.	9 h'r	9 h'r	h'vy crose	sw.	drizzling	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 3° 25′, W. 31° 54′*	29.79	756.7				ese.	4		1		se.	0	0	mod	ese.	fair	G. Kuswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 50′, W. 24° 48′*†	30.50	774.7				var.	3					0	0	mod.	s.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.16	766.1	50	10.0	86	ne.	2		2		e.					fair	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 42° 10′, W. 68° 50′*†	30.10	764.5				baff.			10			0	0			overcast	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 33° 10′, W. 35° 23′*	30.28	769.1	66.2	19.0	97	e.	1		5		se.			mod.	s.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.45	773.4	58	14.4	100	e.	5		0			0	0			clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 7° 20′, W. 34° 07′*†	30.00	762.0				ese.	6		5		ese.			mod.	ese.		I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton,																	N. P. Dutton.

Published by order of the Secretary of War.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 9, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours																			Moiroud.
Algiers			30.45	773.3	60.4	15.8	79	w.			3		2			0	0	fair	Nicolas.
La Calle			30.48	774.2	56.5	13.6	82	wnw.			2		3			0	0	pretty fair	Fonfréde.
Tunis			30.40	772.2	60.1	15.6	70	nnw.			3		6			0	0	cloudy	Jacques.
Sfax			30.29	769.4															Gau.
Saida																			Perès.
Tebessa			30.46	773.7	54.3	12.4	61	sse.			1		0			0	0	clear	Derché.
Geriville			30.42	772.6	44.2	6.8	68	nnw.			6		5			0	0	cloudy	Lonchamp.
Laghout					54.3	12.4	42	n.			2		0			0	0	clear	Herbin.
Biskra			30.57	776.5	55.4	13.0	49	n.			1		0			0	0	clear	Malau.
			30.43	772.9	66.2	19.0	29	nw.			1		0			0	0	clear	
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.70	754.4	29.79	756.6	60.0	15.6	77	s.	4	1.8			2			0	0		R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.72	755.0	30.30	769.5	41.0	5.0	79	s.			2		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.24	742.8	30.03	762.8	41.0	5.0	51	sw.	5.6	2.5			10			0.016	0.4		Dr. Wierzbiski.
Eperies	29.24	742.8	30.17	766.2	34.3	1.3	75	s.			5	7 cs	0			0	0		Julius Mikolik.
Gratz	28.97	735.8	30.27	768.9	37.4	3.0	33	sw.			2		9			0	0		Andreas Rospini.
Hermannstadt	28.84	732.4	30.34	770.6	35.2	1.8	66	sw.			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.77	730.7	30.17	766.3	34.9	1.6	78	sw.			1		10			0.110	2.8	gloomy	The Staff.
Lemberg	29.10	739.1	30.13	765.3	36.3	2.4	65	sw.			2		3			0.028	0.7		Dr. T. Stanecki.
Pola	30.18	766.5	30.29	769.4	47.8	8.8	46	nw.			3		7			0.051	1.3		I. R. Hydrographic Office
Szathmar	29.80	756.9	30.26	768.7	38.5	3.6	63	s.			2		7			0.051	1.3		Joseph Midlinszky, S. J.
Szegedin	30.03	762.8	30.32	770.2	39.6	4.2	80	calm			0		3			0	0		Karl Stancel.
Trieste	30.26	768.6	30.36	771.2	46.0	7.8	55	calm			0		0			0	0		Rieder.
Vienna	29.45	747.9	30.19	766.8	38.8	3.8	55	w.			1		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cue.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	29.60	751.8	29.70	754.4	40.6	4.8	69	sw.	12	5.4		6				0	0	d. clouds	W. Boswell.
Armagh, Observatory	29.80	756.9	30.06	763.5	41.0	5.0	83	sw.	17	7.6		3						d. clouds	S. Call.
Bidston, Liverpool Obs'y			30.08	764.0	44.2	6.8	78	wsw.	34	15.2		5						d. clouds	John Hartnup.
Bolton, Sharples	29.50	749.3	30.05	763.3	42.9	6.1	81	wsw.	24	10.7		4						d. clouds	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.59	751.6	29.99	761.7	43.1	6.2	79	nw.			2	5				0.01	0.3	d. clouds	J. McLandsborough, F.R.
Bridgetown, Barbadoes	30.00	762.0	30.02	762.5	80.0	26.7	66	ne.			4	3						d. clouds	Pvt. J. Surgenor.
Cardington			30.12	765.0	43.5	6.4	83	w.			1.0	7							John McLaren.
Chatham, School M. E.	30.04	763.0	30.17	766.3	43.9	6.6	91	nw.			1	6				blank	blank	d. clouds	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.08	764.0	30.31	769.9	47.8	8.8	73					2						d. clouds	The Staff.
Fort Napier, Natal	27.44	697.0	29.66	753.4	88.1	31.2	45	sw.			6	6							Pvt. E. K. Anniss. A. H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	87.0	30.6	65	nw.			1	3						d. clouds	Sergt. John Robinson.
Galway, Queen's College			29.96	761.0	47	8.3	77	sw.			5	10				0.02	0.5	drizzling	J. O'Donaghue.
Gibraltar, Mediterranean	30.43	772.9	30.48	774.2	59.2	15.1	86	e.			3	9						overcast	Cpl. O. Baldwin.
Glasgow, Observatory	29.64	752.8	29.84	757.9	41.4	5.2	85	w.			7	10						squally	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.99	761.7	30.17	766.3	44.6	7.0	82	w.			1	5				0.53	13.5	d. clouds	The Staff.
Guernsey	30.00	762.0	30.30	769.6	49.3	9.6	83	nnw.			2	5				blank	blank	d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.14	765.5	30.18	766.6	45.3	7.4	76	w.	12	5.4		7						d. clouds	The Staff.
Leicester, Museum	29.85	758.2	30.11	764.8	44.0	6.7	69	s.			1	0						blue sky	J. C. Smith.
Malta, Mediterranean	29.98	761.5	30.05	763.3	60.0	15.6	68	nw.			3	2						blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.22	767.6	30.27	768.8	69.0	20.6	94	se.			1	8				blank	blank	overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.61	752.1	30.14	765.5	43.7	6.5	71	wsw.			2	2						d. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.95	760.7	30.18	766.6	44.6	7.0	82	wsw.			4	1						squally	The Staff.
Plymouth	30.20	767.1	30.28	769.1	47.1	8.4	79	wnw.			3	8						d. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.45	748.0	40.2	4.6	72	w.	46	20.6		10						showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.06	763.5	30.13	765.3	45.0	7.2	92	ne.			2	10						raining	W. H. Lyne.
Sheffield	29.78	756.4	30.07	763.8	43.6	6.4	81	ssw.			2	9				0	0	overcast	W. F. Cooper.
Silloth Rectory	29.92	760.0	29.95	760.7	42.5	5.8	82	w.			5	4				0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.06	763.5	43.1	6.2	77	w.	24	10.7		7						d. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.97	761.2	30.20	767.1	46.1	7.8	74	nw.			2	5						d. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.29	769.4	30.35	770.9	52	11.1	66	nw			4	5						d. clouds	W. Newcombe.
Valencia, Observatory	30.24	768.1	30.26	768.6	47.6	8.7	74	wsw.	19	8.5		6						d. clouds	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected		Reduced		Temperature of the Air. Fah.	Cent.	Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind. Up'er	Lo'er	Direction. Upper.	Lower.	Rain-fall. Inch.	Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.58	751.3	29.63	752.6	34	1.1	89	s.	13	5.8			10 n			0.280	7.1	light rain	H. J. Cundall, C. E.
Chatham, N. B.*	29.43	747.5	29.49	749.0	36	2.2	96	s.	4	1.8			10 n		s.	0.24	6.1	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.30	744.2	29.32	744.7	31	— 0.6	92	sw.	6	2.7			10 n		calm	0.25	6.3	light rain	J. McWilliams.
Fort Garry, Manitoba*	29.05	737.9	29.93	760.2	14	—10.0	100	se.	7	3.1			10 n			0	0	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.61	752.1	29.74	755.4	38	3.3	96	sw.	8	3.6			10 n			0.678	17.2	light rain	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.45	748.0	29.79	756.7	36	2.2	82	sw.	9	4.0			10 k		w.	0.09	2.3	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.43	747.5	29.63	752.6	36	2.2	85	w	26	11.6			10 8			0.63	16.0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.11	739.4	29.82	757.4	33	0.6	88	w.	18	8.0			10 n		w.	0.48	12.2	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.24	742.7	29.95	760.7	34	1.1	79	w.	13	5.8		2 k	8 n	w.		0.08	2.0	cloudy	H. Morgan.
Port Stanley, Ontario	29.30	744.2	29.96	761.0	33	0.6	81	w.	18	8.0			10 n		w.	0.03	0.8	cloudy	M. Payne.
Quebec, Quebec*	29.14	740.1	29.47	748.5	31	— 0.6	100	nw.			1		10 n		nw.	0.37	9.4	heavy rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.20	741.7	29.67	753.6	33	0.6	85	w.	8	3.6			10 8		nw.	0.32	8.1	cloudy	W. H. McIntyre.
Sangeen, Ontario*	29.13	739.9	29.87	758.7	34	1.1	72	w.	11	4.9			10 ks			0.48	12.2	cloudy	K. Stewart.
St. Andrews, N. B.	29.54	750.3	29.59	751.6	38	3.3	93	sw.	4	1.8			10 n			0.32	8.1	light rain	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	29.74	755.4	29.81	757.2	32	0.0	92	s.	22	9.8			10 n			0.10	2.5	sleeting	T. C. Hill, C. E.
Toronto, Ontario*	29.51	749.5	29.90	759.4	36	2.2	79	w.	13	5.8			10 ks		w.	0.04	1.0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	29.63	752.6	29.70	754.4	42	5.6	100	sw.	12	5.4			fg.			0.66	16.8	foggy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.90	759.4	30.17	766.3	16	— 8.9		s.	2	0.9			10			0.50	12.7	threatening	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected		Reduced		Temperature of the Air. Fah.	Cent.	Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind. Up'er	Lo'er	Direction. Upper.	Lower.	Rain-fall. Inch.	Mill.	Weather.	Observers.
Cape St. Francis Lt. House	29.84	757.9	29.87	758.7	70.0	21.1	83	sw.	13.1	5.9		0	1 8			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.94	760.5	29.98	761.5	77.0	25.0	71	wnw.	9	4.0		0	9			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected		Reduced		Temperature of the Air. Fah.	Cent.	Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind. Up'er	Lo'er	Direction. Upper.	Lower.	Rain-fall. Inch.	Mill.	Weather.	Observers.
Sub-Series.																			
Hankow	30.38	771.6	30.67	779.0	43.2	6.2	58	nnw.			4		0			0	0	clear	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.30	769.7	30.33	770.4	36.0	2.2	75	w.	1.1	0.5		0	0			0	0	clear	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.60	751.7	29.64	752.9	37.6	3.1	91	nw.	11	5			10						Oversergent Fischer.
Fanöe	29.74	755.4	29.76	755.9	41.7	5.4	92	w.			4		2						Overloerer Lauridsen.
Godthaab, Greenland	29.73	755.2	29.78	756.3	0.9	—17.3	95	nnw.			3		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.38	746.2	29.42	747.3	18.3	— 7.6		ne.			7		8						A. O. Thorlacius.
Thorshavn	29.11	739.4	29.15	740.3	35.4	1.9	78	wnw.	22	10			4						Overloerer Bergh.
Vestervig	29.59	751.6	29.68	753.9	41.0	5.0	84	w.			4		1						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.82	757.5	30.50	774.7	38.5	3.6	93	sse.			1	0				0	0	light fog	M. Labroue, Director.
Alençon, Normal School	29.73	755.2	30.28	769.2	50.0	10	97	w.			4		n		w.	0	0		M. Nicot, Director.
Arras, Engineer School	29.91	759.8	30.18	766.6	44.6	7.0	88	nnw.			3		kn		ssw.	0.012	0.3		M. Klein, Commandant
Avignon, Normal School	30.34	770.5	30.41	772.5	46.4	8	59	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.71	754.5	30.28	769.1	42.6	5.9	72	s.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.93	760.1	30.16	766.0	46.8	8.2	85	wnw.			2		10		wnw.	0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.35	771.0	40.1	4.5	67	sso.			1		n			0	0		M. Gobin, Director.
Bordeaux, Observatory	30.19	766.7	30.45	773.5	48.4	9.1	80	se.			1		8			0.008	0.2	very cloudy.	M. Rayet, Director.
Bourges, Normal School	29.91	759.7	30.40	772.1	50.0	10	74	sw.			1		n		sw.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.09	764.3	30.33	770.4	50.4	10.2	84	n.			1		8		n.	0.087	2.2		M. de Kennaree, Dir.
Caen, Normal School	30.17	766.2	30.24	768.1	48.2	9	92	nw.			2		5		nnw.	0.04	1.	cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.84	758.0	30.17	766.3	45.0	7.2	97	ssw.			1		8	ssw.	ssw.	0	0	very cloudy	M. Jadot, Director.
Charleville, Normal School	29.60	751.8	30.13	765.2	42.8	6	85	n.			1		10			0.008	0.2	raining	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.99	736.3	30.37	771.4	50.4	10.2	39	w.			1	5 c	0			0	0	½ covered	M. Allnard, Director.
Cluny, Normal School	29.43	747.5	30.30	769.5	44.8	7.1	56	s.			2		6		e.				M. de Villemontée, Dir.
Commercy, Normal School	29.30	744.3	30.20	767.1	41.9	5.5	88	sw.			4		10	sw.	sw.	0.031	0.8	raining	Dr. Coulet, Director.
Gap, Normal School	27.87	707.8	30.50	774.7	41.0	5	63	sw.			1	0	2 s		se.	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.25	743.0	30.01	762.3	50.9	10.5	44	nw.			1		2		nw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.03	752.5	30.43	772.8	42.4	5.8	68	sso.			1	0	2 s			0	0	slightly cl'dy	M. Allard, Director.
Guéret, Normal School	28.78	731.0	30.38	771.7	41.0	5	63	sw.			3		10		sw.	0	0	covered	M. Rivoire, Director.
Lamballe, Normal School	30.05	763.3	30.33	770.3	49.1	9.5	80	nw.			2		5		nw.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.91	759.6	30.48	774.2	57.2	14	39	e.			1	0	2 s			0	0	slightly cl'dy.	M. Chauvin, Director.
Lorient, Naval Observatory	30.28	769.1	30.38	771.7	53.6	12.0	87	n.			2		8		nw.	0.039	1.0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.32	744.8	30.43	772.9	37.9	3.3	73	se.			1	c	0	w.		0	0		M. André, Director.
Mans, Normal School	29.97	761.3	30.29	769.4	47.8	8.8	98	w.			3		10			0	0	covered	M. Piboeu, Director.
Marseille, Observatory	30.08	764.0	30.35	771.0	54.1	12.3	62	wsw.			0.1		2		sw.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.13	638.4	29.98	761.4	43.3	6.3	27	w.	5.6	2.5			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.28	769.0	30.39	771.9	47.5	8.6	83	ssw.			1		2			0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.38	746.2	30.20	767.0	42.4	5.8	49	s.			1	0	5 n			0	0	cloudy	M. Hasse, Director
Nantes, Observatory	30.19	766.9	30.30	771.1	53.4	11.9	94	wsw.			2–3		10					light rain	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.32	770.2	30.44	773.1	50.0	10.0	58	sw.	3.8	1.7			3	nw.		0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.50	546.0			30.0	—1.1		nw.			1		1		nw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School					42.1	5.6	91	s.			1			s.	s.	0	0		M. Tallieu.
Puy de Dôme Obs'y, Summit	25.34	643.6			35.1	1.7	23	w.			8		5			0	0	½ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.39	771.9	30.42	772.7	49.3	9.6	93	ssw.			1		10			0.024	0.6	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.20	767.1	30.42	772.7	52.5	11.4	93	w.			1		5	sw.	w.	0	0	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.25	717.6	30.48	774.1	42.1	5.6	51	e.			1		sn		e.	0	0		M. Colrat, Director.
Rouen, Normal School	30.17	766.2	30.21	767.4	47.1	8.4	86	nnw.			1		5			0.04	1.	cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.14	765.5	30.30	769.5	48.9	9.4	80	nw.			1		2		nnw.	0.098	2.5	slightly cld'y	M. Delaplanche, Dir.
Saint Maur, Observatory	30.04	763.1	30.21	767.3	45.1	7.3	92	sw.			2		10		ssw.	0.008	0.2	covered	M. Renou, Director.
Toulouse, Observatory	29.78	756.3	30.51	774.9	42.8	6.0	73	nw.			1		2	w.		0	0	slightly cl'dy	M Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.71	754.7	30.21	767.2	45.7	7.6	97	sw.			3					0.016	0.4		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.24	742.8	30.10	764.5	42.3	5.7	86	w.			4	0	8 k;s		w.	0.087	2.2	rain & snow.	Prof. Dr. Hoh.
Berlin	29.64	752.8	29.82	757.4	42.8	6.0	80	ne.			2		10			0.405	10.3		Prof. Dr. Arndt.
Breslau	29.40	746.8	29.93	760.2	39.2	4.0	70	sw.			4		10			0.039	1.0	raining	Royal University Obs'y.
Carlsruhe	29.74	755.4	30.19	766.8	45.0	7.2	44	sw.			8		10	w.		0.236	6.0		Albert Senz.
Cassel	29.19	741.5	29.91	759.7	41.5	5.3	89	s.			4		10	s.		0.079	2.0		Dr. H. Möhl.
Frankfort on the Main	29.67	753.6	30.04	763.1	39.6	4.2	85	sw.			2		10			0.039	1.0		Physical Society.
Friedrichshafen	28.78	730.9	30.26	768.7	39.9	4.4	72	s.			1		8		wnw.	0.209	5.3		Wilhelm, Chief Tel.
Hamburg	29.75	755.6	29.84	758.0	41.9	5.5	88	nw.			4		10			0.181	4.6	rainy	E. Preller.
Kiel	29.76	755.8	29.77	756.2	43.0	6.1	87	w.			5		8			0.299	7.6		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.49	749.0	29.92	760.0	40.6	4.8	65	ssw.			5		10	n.				rainy	H. Leppig, Asst.
Magdeburg	29.65	753.1	29.84	758.0	43.0	6.1	86	w.			5		10 n		nw.	0.272	6.9	light rain	Dr. Assmann.
Memel	29.72	755.0	29.77	756.2	36.7	2.6	91	sw.			4		10					raining	Isserman.
Munich	28.30	718.7	30.17	766.2	43.5	6.4	31	nw.			2		9	w.		0	0		Central Station.
Neufahrwasser	29.65	753.0	29.60	753.4	34.9	1.6	94	s.			3		10			0.079	2.0	rain & snow.	A. Lothes.
Neustadt, Palatinate	29.54	750.4	30.07	763.8	45.9	7.7	45	sw.			6		10			0.114	2.9		Dickmether.
Stuttgart	29.21	741.8	30.12	765.1	45.0	7.2	45	sw.			1		10			0.151	3.9		Prof. Dr. Schoder.
Wustrow	29.72	755.0	29.75	755.6	38.7	3.7	98	wnw.			4		10			0.091	2.3		Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.55	750.5	29.95	760.6	52.2	11.2		ne.			1.0		10			1.543	39.2	raining	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.03	762.8	30.08	764.1	71.2	21.8	78	sw.					7	ssw.		0	0	d. clouds	
Deesa	29.52	749.7	30.00	761.9	80.2	26.8	60	wsw.	6.6	3.0			6		w.	0	0	d. clouds	
Bombay	29.92	760.0	29.96	760.9	81.6	27.6	77	nw.	10	4.5			5	w.		0	0	d. clouds	
Poona, Yarrowda.	28.11	714.0	29.95	760.8	85.6	29.8	30	ene.	6	2.7			7	w.		0	0	d. clouds	
Belgaum	27.43	696.7	29.95	760.7	82.0	27.8	34	nne.	10	4.5			0			0	0	blue sky	
Lahore	29.33	744.9	30.10	764.6	63.6	17.6	39	calm	0.3	0.1			3			0	0	blue sky	
Roorkee	29.17	740.9	30.11	764.7	62.8	17.1	57	w.	0.6	0.3			5			0	0		
Agra	29.53	750.1	30.12	765.0	67.8	19.9	39	nw.	0.9	0.4						0	0		
Nagpur	28.98	736.1	30.03	762.8	77.9	25.5	31	calm	2.0	0.9			5	w.		0	0	d. clouds	
Jubbulpore	28.73	729.6	30.13	765.4	64.6	18.1	36	calm	0.8	0.4			4			0	0	d. clouds	
Lucknow	29.72	755.0	30.11	764.8	71.2	21.8	36	calm	0.7	0.3			0			0	0	blue sky	
Allahabad	29.78	756.5	30.11	764.9	62.3	16.8	59	calm	0.6	0.3			1	w.		0	0	d. clouds	
Patna	29.92	760.0	30.12	764.9	63.0	17.2	59	sw.	2.1	0.9			2	sw.	sw.	0	0		
Hazaribagh	28.02	711.7	30.09	764.2	67.8	19.9	27	n.	3.2	1.4			0			0	0	blue sky	
Cuttack	29.97	761.3	30.06	763.4	71.0	21.7	56	ne.					0			0	0	blue sky	
Calcutta, Alipore	30.02	762.5	30.04	763.0	70.7	21.5	62						0			0	0	blue sky	
Dhubri	29.95	760.8	30.08	763.9	70.0	21.1	59	ene.	5.3	2.4			0			0	0	blue sky	
Chittagong	29.96	761.0	30.05	763.4	69.8	21.0	73	w.	2.0	0.9			2			0	0	blue sky	
Sibsagar	29.76	755.8	30.11	764.8	61.9	16.6	85	ne.	2.1	0.9			0			0	0	blue sky	
Jeypore	28.60	726.4	30.07	763.8	73.7	23.2	41	ese.	3.2	1.4			5	se.		0	0	d. clouds	
Zanzibar, Africa	29.90	759.4			83.9	28.8	77	nnw.	5.8	2.6		c	3 fk		nw.	0	0	d. clouds	
Trichinopoly	29.76	755.9			79.3	26.3	64	nne.	1	0.4			0			0	0	blue sky	
Bellary	28.49	723.6			87.0	30.6	26	e.	2.9	1.3			5			0	0	d. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.93	760.2	30.35	770.9	43.9	6.6	45	calm	0	0			4			0	0		Prof. Giovanni Clodig.
Milan	29.85	758.3	30.39	772.0	38.5	3.6	87	w.	2.5	1.1			5	nnw.		0	0		Prof. Schiaparelli.
Padua	30.23	767.9	30.35	770.8	42.4	5.8	57	se.	0.7	0.3			2	w.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.43	747.5	30.38	771.7	34.3	1.3	96	nne.	1.3	0.6			8			0	0		Prof. P. F. Denza.
Genoa	30.17	766.3	30.37	771.3	53.8	12.1	34	calm	0	0			4	sw.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.39	721.1	30.38	771.7	39.4	4.1	49	w.			2		4	wnw.		0	0		Prof. D. C. Bruno.
Pesaro	30.30	769.7	30.35	771.0	44.6	7.0	68	nnw.	11.2	5.0			6	nw.		0	0		Prof. Luigi Guidi.
Florence	30.09	764.2	30.35	770.9	47.5	8.6	46	s.			2		2			0	0		Prof. Costantino Pitter.
Leghorn	30.27	768.8	30.35	771.0	49.3	9.6	52	ne.	9.8	4.4			3			0	0		Prof. P. Monte.
Rome	30.06	763.6	30.24	768.1	52.0	11.1	37	n.	10.5	4.7			0			0	0		Prof. P. S. Ferrari.
Lecce	29.86	758.4	30.12	765.0	52.5	11.4	53	nne.	26.2	11.7			0			0.453	11.5		Prof. C. de Giorgi.
Cosenza	29.23	742.4	30.14	765.5	49.1	9.5	74	nw.	9.8	4.4			3	w.		0	0		Prof. D. Conti.
Cagliari	30.11	764.8	30.30	769.7	56.8	13.8	35	nw.			4		0			0	0		Prof. A. Pacinotti.
Palermo	29.96	761.0	30.21	767.4	55.4	13.0	52	n.	13.6	6.1			4	n.		0.181	4.6		Prof. G. Ciacciatore.
Syracuse	30.00	761.9	30.04	763.0	58.3	14.6	61	ne.	2.5	1.1			8	nne.		0.394	10.0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.69	754.2	30.23	767.9	50.7	10.4	51	ne.	8.0	3.6			1	n.		0	0		Prof. T. Brioschi.
Stelvio	22.24	565.0			20.1	— 3.3	40	s.			2		1			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.30	566.4			28.8	— 1.8	43	n.			6		2			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.12	765.0	30.15	765.8	29.9	— 1.2	86	s.				0	6 n;s					light snow.	
Hakodate	30.12	765.0	30.13	765.3	27.0	— 2.8	61	nne.	6.0	2.7			2			0.008	0.2		
Hiroshima, I. M. Obs'y	30.19	766.8	30.20	767.1	35.0	1.7	77	w.	8.8	3.9		0	0			inap.	inap.	clear	K. Sasaki.
Kanazawa	30.16	766.0	30.26	768.6	34.0	1.1	72					0	0					clear	S. Endo.
Kioto	30.03	762.7	30.22	767.6	32.0	0.0	90	nne.	1.9	0.8		0	0			0	0	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.03	762.7	30.25	768.3	36.5	2.5	83	e.	0.9	0.4		0	3 s			0.140	3.6	clear	S. Takehayashi.
Niigata	30.19	766.8	30.23	767.8	34.7	1.5	79	sw.	3.9	1.7		ck	0			0	0	clear	
Nobiru	30.17	766.3	30.19	766.8	35.8	2.1	75	w.	7.5	3.3		0	3 s			0	0	fair	H. Midzushina.
Supporo					21.6	— 5.8	57	sse.	12.0	5.4			4			0.060	1.5	clear	
Tokei Obs'y, Yeddo	30.12	765.0	30.19	766.8	37.3	2.9	66	nnw.	7.3	3.3		0	2 s			0	0	clear	The Staff.
Wakayama	30.15	765.8	30.20	767.1	35.9	2.2	86	ne.	3.9	1.7		0	0			0	0	clear	Y. Kuwamues.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.84	757.9	30.03	762.7	80.0	26.7	72	wnw.	6.5	2.9		0	9 ks;p		nne.	0	0	cloudy.	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.67	601.4	29.89	759.4	50.9	10.5	75	calm	0	0		5 cs	0			inap.	inap.	½ cloudy	Vicente Fernandez.
Leon	24.43	620.4	30.18	766.6	53.6	12.0	86	n.			1	1 c	2 s			0	0	clear	Prof. M. Leal.
Mazatlan	29.66	753.5	29.93	760.2	67.8	19.8	79	nw.			3	8 cs	0	sw.		0	0	cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.7	30.28	769.1	45.3	7.4	76	calm	0	0		0	0			0	0		The Staff.
Morelia	24.30	617.1	30.48	774.3	45.3	7.4	71	s.			3	1 c	1 k	s.	s.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.92	607.5	30.01	762.3	54.3	12.4	76	calm			0	0	7 ks		se.	0	0	cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.5	30.40	772.2	41.9	5.5	60	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.21	615.0	30.22	767.8	51.3	10.7	57	ssw.			1	3	0	w.		0	0	hazy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.52	572.0	30.14	765.9	51.3	10.7	67					4 cs	0			0	0	clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.11	764.9	30.11	764.9	44.8	7.1		wnw.			3					0.165	4.2		
Groningen	29.91	759.7	29.97	761.1	43.2	6.2		nw.			2					0.354	9.0		
Helder	29.97	761.3	29.97	761.3	42.8	6.0		w.			4					0.079	2.0		
Hellevoetsluis	30.05	763.2	30.05	763.2	43.9	6.6	88	w.			1					0.492	12.5		
Utrecht	29.99	761.7	30.04	762.9	45.3	7.4	86	wnw.			1		2			0.654	16.6	lightly cl'dy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.34	745.1	29.40	746.7	38.1	3.4	90	sw.	13	6		10				0.323	8.2	raining	
Brono	29.10	739.1	29.14	740.1	33.8	1.0	83	s.	18	8		10				0.087	2.2	snowing	
Christiania	29.34	745.1	29.49	749.0	27.5	— 2.5	100	ssw.	4	2		10				0	0	foggy	
Gjæsvær	29.16	740.6	29.18	741.2	10.0	—12.2		se.			2	7							
Lodingen	29.06	738.1	29.11	739.3	28.2	— 2.1	68	se.			4	10				0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					57.6	14.2	93	wnw.	1.3	0.6		6				0.102	2.6		Dr. J. A. Sampaio.
Campo Major	29.44	747.8	30.47	774.0	52.0	11.1	63	ene.	3.1	1.4		8				0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.30	769.5	30.38	771.7	64.2	17.9	74	calm	0	0		10				0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.12	765.0	30.49	774.5	49.1	9.5	79	nne.	8.1	3.6		7	sw.			0	0		The Staff.
Ponta Delgada, Azores	30.30	769.6	30.37	771.4	60.8	16.0	91	ssw.	8.7	3.9		10				0.122	3.1		
Saint Paul de Loando	29.73	755.2	29.93	760.2	83.3	28.5	90	w.	0.7	0.3		8				0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.01	736.8	30.19	766.8	8.1	—13.3		sw.	45	20		10 n				0.016	0.4		Major K. Lasarew.
Archangel	29.91	759.7	29.93	760.2	—19.7	—28.7	78	e.	4	2		0				0	0		Capt. Sseliwerstow.
Astrakhan	30.26	768.5	30.17	766.4	37.0	2.8	84	se.	4	2		10 s				0	0		Capt. Wisganow.
Barnaul	29.53	750.1	30.07	763.8	14.2	— 9.9	72	sw.	22	10		10				0.008	0.2		Meteorological Obs'y.
Dorpat	29.49	749.0	29.74	755.5	31.3	— 0.4	79	sw.	4	2		9 k				0	0		Observatory.
Ekaterinburg	28.71	729.2	29.69	754.2	27.3	— 2.6	81	wsw.	27	12		10				0.024	0.6	snowing	Meteorological Obs'y.
Kasan	29.50	749.4	29.78	756.5	29.8	— 1.4	89	sw.	2	1		10				0.051	1.3		Observatory.
Kertch	30.13	765.3	30.15	765.8	35.8	2.1	98	nw.	11	5		10 n				0	0		Lagorio & Sastyrez.
Kieff	29.44	747.8	30.10	764.6	36.3	2.4	74	wnw.	9	4		c	9 ks			0	0		Observatory.
Lugan	29.85	758.1	30.06	763.5	30.3	2.4	82	wnw.	9	4			8			0.087	2.2		Meteorological Obs'y.
Moscow	29.19	741.3	29.68	753.8	33.4	0.8	87	s.	7.8	3.5			10 s			0.055	1.4		Meteorological Obs'y.
Nikolaiev	30.23	767.9	30.30	769.7	37.4	3.0	85	nw.	4	2		0	0			0	0		Capt. Kurdiakow.
Nikolaievsk, on the Amoor	30.07	763.8	30.16	766.0	—21.6	—29.8	83	nw.	2	1		0	0			0	0		Lieut. Iwanow.
Pekin, China	30.35	770.8	30.49	774.4	21.2	— 6.0	36	nw	7	3		0	0			0	0		Physical Observatory.
St. Petersburg	29.67	753.7	29.69	754.1	24.6	— 4.1	82	wnw.	11	5			9 n			0.008	0.2		Central Physical Obs'y.
Tashkend, Laboratory	28.91	734.4	30.63	777.9	22.6	— 5.2	96	nw.	13	6			1			0	0		Teich, A. M.
Tiflis	28.82	732.0	30.28	769.1	44.8	7.1	43	e.	2	1		6 ck	0			0	0		Physical Observatory.
Warsaw	29.49	749.0	29.93	760.1	36.3	2.4	84	s.	13	6			10 n					raining	Astronomical Obs'y.
Wilna	29.48	748.7	29.91	759.7	36.7	2.6	87	ssw.	2	1			10			0.146	3.7	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.51	749.5	29.82	757.3	15.4	— 9.2	84	s.	4	2			10			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.67	753.6	44	6.7	84	w.			7	10	5	w.		0.1	3.	h'vy clouds.	Andrew Gibb.
Monach Lt. House, Hebrides																			J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.30	769.7	30.40	772.2	54.1	12.3	51	w.	3.8	1.7			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.42	772.6	30.48	774.1	55.4	13.0	66	se.	2.2	1.0		2	0	e.		0	0	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.50	698.6	30.65	778.6	33.6	0.9	83	sw.	4.9	2.2			10			0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	28.23	717.1	30.54	775.6	50.0	10.0	57	e.	2.0	0.9		2	0	nw.		0	0	light clouds	The Staff.
Murcia, Met. Obs'y	30.35	770.9	30.48	774.1	57.4	14.1	74	w.	1.8	0.8		0	1			0	0	almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.51	749.6	30.43	773.0	49.8	9.9	70	calm	0	0		0	9			0.004	0.1	almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.08	764.0	30.15	765.7	67.0	19.4	90	e.	1.3	0.6		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.93	760.2	29.99	761.7	77.9	25.5	74	ne.	14.3	6.4		1 ck	9 km	e.	e.	0	0	threatening	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.37	771.3	30.47	773.8	62.1	16.7	63	ese.	6.6	3.0		2	3	e.	ese.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.04	763.0	30.13	765.3	74.8	23.8	86	se.	11.0	4.9		5 k	3 km	se.	se.	0.087	2.2	cloudy	E. Gadea, Chief Engn'r.
Tuguegarito, Philippine Id's	29.98	761.5	30.12	765.0	68.2	20.1	89	nw.	9.4	4.2			10 km		n.	inap.	inap.	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.52	749.9	29.56	750.9	8.6	—13.0	92	se.			4		10			0.055	1.4		
Umoa	29.33	745.0	29.38	746.3	23.4	— 4.8	100	se.			2		10			0	0		
Hernosand	29.39	746.4	29.44	747.7	24.3	— 4.3	89	wsw.			2		10			0.012	0.3		
Stockholm	29.35	745.5	29.53	750.0	36.9	2.7	93	sw.			2		10			0.031	0.8	raining	
Wisby	29.57	751.1	29.63	752.6	39.2	4.9	93	s.			2		10			0.091	2.3	raining	
Sub-Series.																			
Upsala	29.40	746.8	29.49	749.0	35.8	2.1	94	sw.	7.2	3.2			10		wsw.	0.012	0.3		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.53?	724.7?	30.00?	761.9?	41.4	5.2	78	nne.			1					0	0	covered	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.19	766.9	44.4	6.9	94	n.	27	12.0		10		n.		0.413	10.5		The Observatory.
Valona			30.04	762.9	56.8	13.8		nw.			1	2				0.87	22.	slightly cl'd'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.06	763.5	63.1	17.3	63	n.			1	10 cs	0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	29.76	755.9	29.85	758.2	45.2	7.3	83	w.	6	2.7			10 s		w.	0.15	3.8	cloudy	
Alpena, Michigan	29.24	742.7	29.95	760.7	29	— 1.7	88	w.	8	3.6			10 s			0.49	12.4	cloudy	
Atlanta, Georgia	28.93	734.8	30.16	766.1	62.0	16.7	96	s.	4	1.8			10 n		calm	0.47	11.9	light rain	
Atlantic City, New Jersey	29.91	759.7	29.92	760.0	47	8.3	100	sw.	5	2.2			fg.			0.06	1.5	dense fog	
Augusta, Georgia	29.97	761.2	30.17	766.3	61.2	16.2	93	s.	1	0.4			10 n			0.24	6.1	light rain	
Baltimore, Maryland	29.90	759.4	29.95	760.7	44	6.7	100	s.	2	0.9			fg.			0.04	1.0	dense fog	
Barnegat, New Jersey	29.88	758.9	29.90	759.4	48.0	8.9	96	sw.	12	5.4		0	8 s		w.	0.10	2.5	clearing	
Bismarck, Dakota	28.02	711.7	30.02	762.5	21	— 6.1	87	calm	0	0		1 c	0	calm		0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.39	695.7	30.32	770.1	23	— 5.0	96	nw.	4	1.8			10 s		calm	0.10	2.5	cloudy	
Boston, Massachusetts	29.57	751.1	29.74	755.4	48.0	8.9	93	w.	12	5.4			10 s		w.	0.04	1.0	cloudy	
Brownsville, Texas	29.94	760.5	29.99	761.7	71	21.7	94	calm	0	0			10 s		se.	0	0	cloudy	
Buffalo, New York	29.18	741.2	29.98	761.5	36	2.2	73	sw.	24	10.7			10 s		s.	0.37	9.4	cloudy	
Burlington, Vermont	29.41	747.0	29.72	754.9	43.0	6.1	65	w.	11	4.9		0	7 s		w.	0.06	1.5	fair	
Cairo, Illinois	29.85	758.2	30.27	768.8	35.8	2.1	75	ne.	5	2.2		1 ck	0	calm		0.04	1.0	clear	
Campo, California	27.50	698.5	30.13	765.3	23.5	— 4.7	51	e.	3	1.3		0	0			0	0	clear	
Camp Thomas, Arizona	27.24	691.9	30.07	763.8	36.5	2.5	81	calm			0		9 ks			0	0	cloudy	
Cape Henry, Virginia	30.01	762.2	30.03	762.7	59	15.0	93	sw.	10	4.5		4 ck	0	sw.		0.11	2.8	fair	
Cape May, New Jersey	29.91	759.7	29.94	760.5	47	8.3	93	sw.	19	8.5		0	8 ks		sw.	0.02	0.5	cloudy	
Castroville, Texas	29.30	744.2	30.15	765.8	50	10.0	64	n.	6	2.7			10 s			inap.	inap.	cloudy	
Cedar Keys Florida	30.17	766.3	30.19	766.8	63	17.2	93	se.	5	2.2		0	5 ks			0	0	fair	
Champaign, Illinois	29.39	746.5	30.26	768.6	29.0	— 1.7	74	w.	8	3.6		0	0			0	0	clear	
Charleston, S. Carolina	30.13	765.3	30.19	766.8	60	15.6	93	sw.	4	1.8		0	9 s		sw.	0	0	cloudy	
Charlotte, N. Carolina	29.22	742.2	30.11	764.8	58.0	14.4	93	sw.	3	1.3			10s;fg		sw.	0.01	0.3	cloudy	
Chattanooga, Tennessee	29.29	744.0	30.15	765.8	56.5	13.6	95	nw.	6	2.7			10 n		nw.	0.09	2.3	light rain	
Cheyenne, Wyoming	23.93	607.8	30.18	766.6	20.2	— 6.6	51	w.	6	2.7		0	0			0	0	clear	
Chicago, Illinois	29.43	747.5	30.18	766.6	27.3	— 2.6	83	w.	10	4.5		0	0			inap.	inap.	clear	
Chincoteague, Virginia	29.95	760.7	29.97	761.2	54	12.2	93	sw.	12	5.4		2 cs	2 ks	w.	sw.	0.03	0.8	fair	
Cincinnati, Ohio	29.55	750.6	30.24	768.1	35.2	1.8	69	nw.	9	4.0			10 s		w.	0.02	0.5	cloudy	
Cleveland, Ohio	29.33	745.0	30.11	764.8	33	0.6	68	w.	17	7.6			10 s		w.	0.05	1.3	cloudy	
Coleman City, Texas	28.36	720.3			38	3.3	56	n.	15	6.7			10 s			0	0	cloudy	
Columbus, Ohio	29.28	743.7	30.18	766.6	33	0.6	68	w.	17	7.6			10 s			0.04	1.0	cloudy	
Concho, Texas	28.23	717.0	30.25	768.3	39	3.9	65	n.	14	6.3			10 s		ne.	0	0	cloudy	
Davenport, Iowa	29.53	750.0	30.24	768.1	32	0.0	68	w.	6	2.7		0	0			0	0	clear	
Dayton, Washington T'y	28.46	722.9	30.26	768.6	33.8	1.0	89	sw.	5	2.2		5 k	0	sw.		0.02	0.5	fair	
Deadwood, Dakota	25.22	640.6	30.17	766.3	21	— 6.1	87	s.	1	0.4		6 cs	0	w.		0	0	fair	
Decatur, Texas					38	3.3	82	n.	13	5.8			10 s			0	0	cloudy	
Delaware Breakwater, Del.	29.90	759.4	29.92	760.0	52	11.1	100	sw.	22	9.8		3 cs	4 ks		sw.	inap.	inap.	fair	
Denison, Texas	29.40	746.7	30.24	768.1	35.8	2.1	69	n.	8	3.6		0	0			0	0	clear	
Denver, Colorado	24.68	626.9	30.20	767.1	19.0	— 7.2	61	s.	12	5.4		0	0			0	0	clear	
Des Moines, Iowa	29.25	742.9	30.22	767.6	26	— 3.3	88	nw.	6	2.7		0	0			0	0	clear	
Detroit, Michigan	29.34	745.2	30.10	764.5	31.6	— 0.2	78	w.	12	5.4			10 s		w.	0.02	0.5	cloudy	
Dodge City, Kansas	27.57	700.3	30.32	770.1	22.5	— 5.3	86	w.	4	1.8		8 cs	0			0	0	cloudy	
Dubuque, Iowa	29.40	746.7	30.17	766.3	21.5	— 5.8	70	sw.	3	1.3		0	0			0	0	clear	
Duluth, Minnesota	29.31	744.5	30.07	763.8	23	— 5.0	73	w.	6	2.7			10 s		w.	0.03	0.8	cloudy	
Eagle Pass, Texas	29.34	745.2	30.18	766.6	50.0	10.0	93	nw.	6	2.7			10 n			inap.	inap.	light rain	
Eagle Rock, Idaho	25.33	643.4	30.29	769.4	12	—11.1	83	w.	4	1.8			10 s			0	0	cloudy	
Eastport, Maine	29.55	750.6	29.62	752.3	41	5.0	96	sw.	11	4.9			10 n		sw.	0.31	7.9	light rain	
El Paso, Texas	26.26	667.0	30.14	765.5	38.3	3.5	56	e.	11	4.9			10 s		e.	0	0	cloudy	
Erie, Pennsylvania	29.27	743.4	30.04	763.0	35	1.7	79	w.	16	7.2			10 s		w.	0.05	1.3	cloudy	
Escanaba, Michigan	29.29	744.0	30.01	762.2	25	— 3.9	88	sw.	6	2.7			10 s			0.17	4.3	cloudy	
Florence, Arizona																			
Fort Apache, Arizona	24.94	633.5	30.06	763.5	26	— 3.3	80	calm	0	0			10 s		calm	0	0	cloudy	
Fort Assinnaboine, Montana	26.94	684.3	29.98	761.5	28	— 2.2	59	sw.	14	6.3			10 s		sw.	0	0	cloudy	
Fort Bennett, Dakota	28.34	719.8	30.08	764.0	18	— 7.8	87	calm	0	0		0	0			0	0	clear	
Fort Benton, Montana	27.08	687.8	30.06	763.5	25	— 3.9	76	w.	24	10.7			10 ks		calm	0	0	cloudy	
Fort Buford, Dakota	27.82	706.6	30.02	762.5	22	— 5.6	73	w.	6	2.7			10 s		calm	0	0	cloudy	
Fort Custer, Montana	26.75	679.4	30.13	765.3	26	— 3.3	82	s.	6	2.7			10 s		calm	0	0	cloudy	
Fort Davis, Texas	25.18	639.6	30.16	766.1	30	— 1.1	81	ne.	4	1.8			10 s		calm	0	0	cloudy	
Fort Elliott, Texas	27.38	695.4	30.32	770.1	31	— 0.6	62	calm	0	0			10 s			inap.	inap.	cloudy	
Fort Gibson, Indian T'y	29.69	754.1	30.29	769.4	33.2	0.7	88	calm	0	0			10 s		n.	0	0	cloudy	
Fort Grant, Arizona	25.18	639.6	30.08	764.0	35	1.7	44	sw.	20	8.9		7 cs	0			0	0	fair	
Fort Griffin, Texas	28.94	735.1	30.32	770.1	39	3.9	54	n.	8	3.6			10 s		calm	0	0	cloudy	
Fort Keogh, Montana	27.36	694.9	30.05	763.3	25	— 3.9	76	sw.	10	4.5		8 cs	0	sw.		0	0	cloudy	
Fort Macon, North Carolina	30.12	765.0	30.14	765.5	55	12.8	100	w.	5	2.2			fg.		calm	0.14	3.6	dense fog	
Fort McKavett, Texas	27.89	708.4	30.28	769.1	40.3	4.6	67	n.	10	4.5			10 s			0	0	cloudy	
Fort Missoula, Montana	26.69	677.9	30.15	765.8	23	— 5.0	88	sw.	2	0.9			10 s			0.02	0.5	cloudy	
Fort St. Michaels, Alaska	29.85	758.2	29.88	758.9	— 2	—18.9	100	calm	0	0		0	8 s			0.01	0.3	fair	
Fort Shaw, Montana	26.19	665.2	30.05	763.3	25	— 3.9	64	w.	16	7.2		7 k	0	w.		0	0	fair	
Fort Sill, Indian Territory	29.01	736.8	30.34	770.6	35.5	1.9	90	n.	9	4.0		10 k	0	w.		0	0	cloudy	
Fort Stevenson, Dakota	27.95	709.9	30.01	762.2	16	— 8.9	70	w.	3	1.3		3 c	0	calm		0	0	clear	
Fort Verde, Arizona					26.7	— 2.9	56	nw.			2	0	0			0	0	clear	
Fredericksburg, Texas	28.36	720.3	30.18	766.6	45	7.2	76	n.	8	3.6			10 s		n.	0	0	cloudy	
Galveston, Texas	30.04	763.0	30.08	764.0	59	15.0	100	ne.	12	5.4			10 n		n.	0.02	0.5	light rain	
Grand Haven, Michigan	29.41	747.0	30.12	765.0	30.0	— 1.1	78	w.	24	10.7			10 s		w.	0.14	3.6	cloudy	
Hatteras, North Carolina	30.10	764.5	30.12	765.0	54	12.2	100	sw.	13	5.8		3 c	3 s	s.		0.52	13.2	fair	
Helena, Montana	25.67	652.0	30.10	764.5	27	— 2.8	77	nw.	10	4.5			10 n		w.	0.04	1.0	light snow	
Henrietta, Texas	29.28	743.7	30.35	770.9	35	1.7	79	n.	4	1.8			10 s			0	0	cloudy	
Huron, Dakota	28.56	725.4	30.10	764.5	16	— 8.9	73	se.	6	2.7		0	0			0	0	clear	
Indianapolis, Indiana	29.39	746.5	30.23	767.8	32	0.0	74	w.	5	2.2		0	3 s		sw.	0.02	0.5	clear	
Indianola, Texas	30.06	763.5	30.09	764.3	56.2	13.4	62	n.	25	11.2			10 s		n.	0.02	0.5	cloudy	
Jacksboro, Texas	29.04	737.6	30.28	769.1	36	2.2	69	n.	6	2.7		0	8 s		n.	0	0	cloudy	
Jacksonville, Florida	30.14	765.5	30.19	766.8	61	16.1	87	s.	3	1.3			10 s			0	0	cloudy	
Keokuk, Iowa	29.53	750.0	30.23	767.8	29.0	— 1.7	84	w.	4	1.8		0	0			0	0	clear	
Key West, Florida	30.14	765.5	30.17	766.3	70.0	21.1	90	e.	3	1.3		0	4k;fg.		e.	0	0	fair	
Kittyhawk, North Carolina	30.08	764.0	30.10	764.5	54	12.2	100	sw.	15	6.7			fg			0.27	6.9	dense fog	
Knoxville, Tennessee	29.07	738.4	30.15	765.8	54.9	12.7	82	nw.	10	4.5			10 s		w.	0.11	2.8	cloudy	
La Crosse, Wisconsin	29.31	744.5	30.15	765.8	23	— 5.0	73	s.	2	0.9			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.09	662.7	30.12	765.0	37.0	2.8	72	calm	0	0		5 ck	5 s	sw.		0	0	cloudy	
Leavenworth, Kansas	29.34	745.2	30.30	769.6	29	— 1.7	77	calm	0	0		0	2 s			0	0	clear	
Lewiston, Idaho	29.32	744.7	30.19	766.8	40	4.4	65	nw.	16	7.2			10 s		nw.	0	0	cloudy	
Little Rock, Arkansas	29.92	760.0	30.25	768.3	40	4.4	73	ne.	8	3.6		0	0			0	0	clear	
Los Angeles, California	29.82	757.4	30.22	767.6	54.1	12.3	74	ne.	12	5.4		0	0			0	0	clear	
Louisville, Kentucky	29.66	753.4	30.25	768.3	34.5	1.4	79	w.	12	5.4		8 cs	0	w.		0.04	1.0	cloudy	
Lynchburg, Virginia	29.29	744.0	30.01	762.2	49.0	9.4	100	s.	1	0.4		6 ck	fg.	sw.		0.10	2.5	fair	
Mackinac City, Michigan																			
Madison, Wisconsin	29.09	738.9	30.18	766.6	25	— 3.9	73	sw.	8	3.6		0	0			0	0	clear	
Marquette, Michigan	29.18	741.2	29.96	761.0	27	— 2.8	88	w.	14	6.3			10 s		w.	inap.	inap.	cloudy	
Mason, Texas	28.47	723.1	30.21	767.3	44.6	7.0	58	n.	11	4.9			10 s		n.	0	0	cloudy	
Memphis, Tennessee	29.92	760.0	30.28	769.1	41	5.0	73	n.	12	5.4			10 s		n.	0.02	0.5	cloudy	
Milwaukee, Wisconsin	29.34	745.2	30.14	765.5	26	— 3.3	88	w.	16	7.2			10 s		nw.	inap.	inap.	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.08	764.0	30.12	765.0	62.2	16.8	100	s.	3	1.3	.....	.....	10n;fg	.....	sw.	0.52	13.2	light rain	
Montgomery, Alabama	29.87	758.7	30.11	764.8	63	17.2	93	s.	5	2.2	.....	.....	10 n	.....	.....	1.20	30.5	heavy rain	
Moorhead, Minnesota	28.94	735.1	30.05	763.3	7.1	—13.8	76	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Morgantown, W. Virginia	29.04	737.6	30.10	764.5	49.0	9.4	80	nw.	14	6.3	.....	.....	10 s	.....	w.	0.46	11.7	cloudy	
Mt. Washington, N. H.	23.29	591.6	29.92	760.0	28.0	— 2.2	100	nw.	70	31.3	.....	.....	fg	.....	nw.	0.32	8.1	dense fog	
Nashville, Tennessee	29.69	754.1	30.25	768.3	41.0	5.0	74	nw.	9	4.0	.....	.....	10 ks	.....	nw.	0.05	1.3	cloudy	
New Haven, Connecticut	29.69	754.1	29.81	757.2	43	6.1	100	w.	11	4.9	.....	.....	fg	.....	.....	0.28	7.1	dense fog	
New London, Connecticut	29.79	756.7	29.84	757.9	45	7.2	100	sw.	10	4.5	.....	.....	10n;fg	.....	calm	0.26	6.6	light rain	
New Orleans, Louisiana	30.02	762.5	30.08	764.0	68.0	20.0	93	s.	4	1.8	.....	.....	10 s	.....	s.	1.00	25.4	threatening.	
Newport, Rhode Island	29.74	755.4	29.78	756.4	45.0	7.2	100	sw.	12	5.4	.....	.....	10n;fg	.....	calm	0.26	6.6	light rain	
New River, N. Carolina	.....	.....	.....	.....	54.5	12.5	100	sw.	.....	.....	1	.....	fg	.....	.....	0.10	2.5	dense fog	
New Shoreham, Rhode I'd.	29.81	757.2	29.84	757.9	47.0	8.3	93	sw.	16	7.2	.....	.....	fg	.....	.....	0.27	6.9	dense fog	
New York, New York	29.70	754.4	29.89	759.2	41	5.0	100	sw.	8	3.6	.....	.....	fg	.....	.....	0.14	3.6	dense fog	
Norfolk, Virginia	30.01	762.2	30.04	763.0	58	14.4	93	w.	10	4.5	.....	.....	10 ks	.....	sw.	0.09	2.3	cloudy	
North Platte, Nebraska	27.13	689.1	30.25	768.3	12.6	—10.8	82	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Olympia, Washington T'y	30.26	768.6	30.30	769.6	38.0	3.3	89	sw.	6	2.7	.....	9 k	0	w.	.....	0.23	5.8	cloudy	
Omaha, Nebraska	28.97	735.8	30.24	768.1	27.0	— 2.8	84	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Ogdaamie, Pt. Barrow, Alas-	30.11	764.8	30.13	765.3	—32.0	—35.6	97	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	29.52	749.8	29.87	758.7	40.8	4.9	71	w	18	8.0	.....	.....	10 s	.....	w.	0.24	6.1	cloudy	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	30.09	764.3	30.12	765.0	65.6	18.7	100	sw.	5	2.2	.....	.....	fg	.....	.....	0.03	0.8	dense fog	
Philadelphia, Pa.	29.86	758.4	29.92	760.0	42	5.6	100	sw.	8	3.6	.....	.....	fg	.....	.....	0.14	3.6	dense fog	
Pike's Peak, Colorado	17.44	443.0	30.14	765.5	— 6	—21.1	75	calm	0	0	.....	0	0	.....	.....	0.03	0.8	clear	
Pioche, Nevada	24.12	612 6	30.32	770.1	16	— 8.9	58	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.23	742.4	30.08	764 0	41.2	5.1	73	w.	6	2.7	.....	.....	10 s	.....	w.	0.38	9.7	cloudy	
Port Eads, Louisiana	30.10	764.5	30.11	764.8	61.5	16.4	100	s.	4	1.8	.....	0	fg	.....	.....	0	0	clear	
Port Huron, Michigan	29.32	744.7	30.05	763.3	30.8	— 0.7	81	w.	15	6.7	.....	.....	10 n	.....	calm	0.05	1.3	light snow	
Portland, Maine	29.61	752.1	29.66	753.4	40	4.4	89	sw.	8	3.6	.....	.....	fg	.....	.....	0.38	9.7	dense fog	
Portland, Oregon	30.33	770.4	30.40	772.1	39.0	3.9	89	s.	2	0.9	.....	.....	10 ks	.....	sw.	0.09	2.3	cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	57	13.9	100	sw.	13	5.8	.....	.....	fg.	.....	sw.	0.45	11.4	dense fog	
Prescott, Arizona	24.72	627.9	30.10	764.5	13	—10.6	38	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Punta Rassa, Florida	30.17	766.3	30.18	766.6	65	18.3	84	e.	6	2.7	.....	1 c	0	calm	.....	0	0	clear	
Red Bluff, California	29.97	761.2	30.35	770.9	37.5	3.1	77	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Rio Grande City, Texas	29.79	756.7	30.04	763.0	58	14.4	87	nw.	7	3.1	.....	.....	10 s	.....	sw.	0	0	cloudy	
Rochester, New York	29.21	741.9	29.92	760.0	37	2.8	82	w.	20	8.9	.....	0	9 ks	.....	nw.	0.11	2.8	cloudy	
Roseburg, Oregon	29.88	758.9	30.45	773.4	39	3.9	92	calm	0	0	.....	.....	10 ks	.....	nw.	0.06	1.5	cloudy	
Sacramento, California	30.23	767.8	30.31	769.9	36.5	2.5	79	se.	6	2.7	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.68	753.9	30.32	770.1	32.1	0.1	78	w.	6	2.7	.....	3 c;cs	0	w.	.....	0	0	clear	
St. Paul, Minnesota	29.14	740.1	30.09	764.3	22.5	— 5.3	89	s.	2	0.9	.....	.8 k	0	sw.	.....	0	0	cloudy	
St. Vincent, Minnesota	29.04	737.6	30.02	762.5	12	—11.1	100	s.	12	5.4	.....	.....	10 s	.....	calm	0.02	0.5	cloudy	
Salt Lake City, Utah	25.76	654.3	30.33	770.4	19	— 7.2	44	calm	0	0	.....	6 k	0	w.	.....	0	0	fair	
San Antonio, Texas	29.39	746.5	30.12	765.0	50.6	10.3	52	n.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	
San Diego, California	30.06	763.5	30.12	765.0	41.0	5.0	36	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Sandusky, Ohio	29.42	747.3	30.14	765.5	33	0.6	78	n.	17	7.6	.....	.....	10 s	.....	w.	0.08	2.0	cloudy	
Sandy Hook, New Jersey	29.86	758.4	29.90	759.4	43.0	6.1	100	nw.	13	5.8	.....	.....	fg	.....	calm	0.06	1.5	dense fog	
San Francisco, California	30.26	768.6	30.33	770.4	46	7.8	76	w.	3	1.3	.....	1 cs	0	nw.	.....	0	0	clear	
Santa Fé, New Mexico	23.17	588.5	30.18	766.6	19.5	— 6.9	78	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	
Savannah, Georgia	30.07	763.8	30.17	766.3	62	16.7	87	s.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	
Shreveport, Louisiana	29.93	760.2	30.18	766.6	48	8.9	77	n.	5	2.2	.....	.....	10 s	.....	n.	0	0	cloudy	
Silver City, New Mexico	24.15	613.4	30.01	762.2	32	0.0	81	calm	0	0	.....	.....	10 n	.....	calm	0.12	3.0	light snow	
Sitka, Alaska	29.57	751.1	29.64	752.8	38.1	3.4	82	e.	16	7.2	.....	.....	10 n	.....	se.	0.49	12.4	sleeting	
Smithville, North Carolina	30.10	764.5	30.14	765.5	54	12.2	100	sw.	4	1.8	.....	.....	fg	.....	.....	0.05	1.3	dense fog	
Spokane Falls, Wash. Ter.	28.08	713.2	30.22	767.6	25	— 3.9	64	sw.	7	3.1	.....	0	0	.....	.....	0.02	0.5	clear	
Springfield, Illinois	29.58	751.3	30.30	769.6	33	0.6	78	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Springfield, Massachusetts	29.64	752.8	29.78	756.4	44.1	6.7	96	s.	4	1.8	.....	.....	fg	.....	.....	0.05	1.3	dense fog	
Springfield, Mo.	28.79	731.3	30.37	771.4	34	1.1	71	n.	3	1.3	.....	0	6 ks	.....	.....	0	0	fair	
Stockton, Texas	27.11	688.6	30.25	768.3	35.0	1.7	82	n.	4	1.8	.....	.....	10 s	.....	n.	0	0	cloudy	
Thatcher's Island, Mass.	29.68	753.9	29.74	755.4	45.0	7.2	93	sw.	8	3.6	.....	.....	fg	.....	.....	0.21	5.3	dense fog	
Toledo, Ohio	29.39	746.5	30.13	765.3	35	1.7	64	sw.	20	8.9	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	
Tucson, Arizona	27.52	699.0	30.02	762.5	31	— 0.6	71	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Umatilla, Oregon	29.94	760.5	30.33	770.4	33.5	0.8	94	n.	6	2.7	.....	1 cs	0	nw.	.....	0	0	clear	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.86	758.4	30.13	765.3	54	12.2	86	n.	10	4.5	.....	.....	10 s	.....	calm	c.50	12.7	cloudy	
Visalia, California	29.90	759.4	30.29	769.4	33.5	0.8	83	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Washington, D. C.	29.84	757.9	29.96	761.0	45.0	7.2	100	s.	3	1.3	.....	.....	fg	.....	.....	inap.	inap.	dense fog	
West Los Animas, Colorado	26.10	662.9	30.24	768.1	6	—14.4	87	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Wickenburg, Arizona	.....	.....	.....	.....	34	1.1	59	w.	.....	.....	1	0	0	.....	.....	0	0	clear	
Williamsport, Pa.	29.24	742.7	29.87	758.7	37	2.8	92	nw.	7	3.1	.....	5 k	5 ks	nw.	nw.	0.19	4.8	cloudy	
Wilmington, N. Carolina	30.07	763.8	30.13	765.3	59	15.0	93	sw.	1	0.4	.....	10 k	fg	w	calm	0.03	0.8	cloudy	
Winnemucca, Nevada	25.75	654.0	30.29	769.4	24	— 4.4	64	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass.	29.78	756.4	29.82	757.4	47	8.3	100	sw.	23	10.3	.....	.....	fg	.....	sw.	0.13	3.3	dense fog	
Yankton, Dakota	28.73	729.7	30.15	765.8	24	— 4.4	73	sw.	10	4.5	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	29.95	760.7	30.10	764.5	47.2	8.4	35	n.	20	8.9	.....	0	hz	.....	.....	0	0	dense haze	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559.3	.....	.....	50.0	10.0	75	calm	0	0	.....	0	2 s	.....	.....	1.10	27.9	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.06	763.5	30.07	763.8	78	25.6	77	e.	.....	.....	.....	5 k	5 ks	e.	e.	0.06	1.5	fair	J. A. Racker.
Buenaventura, U. S. C.	29.91	759.7	29.93	760.2	77	25.0	86	se.	8	3.6	.....	.....	10 ks	.....	se.	1.10	27.9	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.98	761.5	30.00	762.0	75	23.9	90	e.	.....	.....	.....	0	0	.....	.....	0	0	clear	B. Bigar.
Havana, Cuba, W. I.	30.18	766.6	30.23	767.8	70	21.1	100	se.	1.2	0.5	.....	0	2 ks	.....	calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.07	763.8	30.08	764.0	70.5	21.4	87	calm	0	0	.....	0	9 s	.....	.....	0	0	cloudy	Robert Johnstone
Navassa, W. I.	29.97	761.2	30.15	763.3	77	25.0	65	ne.	9	4.0	.....	5 k	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.03	762.7	75.5	24.2	93	e.	.....	.....	3	.....	10 n	e.	e.	0.400	10.2	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.94	760.5	81	27.2	85	calm	.....	.....	0	6 ck	3 ks	n.	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	73.4	23.0	92	ne.	.....	.....	2	4 cs	4 ks	.....	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.08	764.0	30.10	764.5	75	23.9	72	n.	4.8	2.1	.....	0	1 n	.....	.....	0	0	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.93	760.2	29.98	761.5	—28.0	—33.3	.....	nw.	13	5.8	.....	2 c	2 s	nw.	nw.	0.01	0.3	fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M S Alert, Singapore, India	29.95	760.7	77	25.0	90	n.			1		10							showery	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 37° 51′, E. 18° 15′	29.97	761.2	57.5	14.2	81	nnw.			7–8		7	nnw.				7	nnw.	raining	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.91	759.7	75	23.9	61	w.			2–3		6	w.						drizzling	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.83	757.7	65	18.3	100	sse.			1–2		10					2	s.	drizzling	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey.	30.25	768.3	45	7.2		n.			2–3		10							raining	Capt. F. W. Egerton.
H. M. S. Coquette																			Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curaçoa, Shanghai, China	30.22	767.6	39.5	4.2	82	sw.			1		0							blue sky	Capt. S. Long.
H. M. S. Diamond, S. 19° 40′, W. 30° 07′	30.07	763.8	79.5	26.4	80	ene.			3		4	ene.				3	e.	d. clouds.	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.25	768.3	63	17.2	86	ese.			1		3	ese.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 20° 20′, W. 83° 10′	30.10	764.5	77.5	25.3	95	e.			3		4	ne.				2	ene.	d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 52° 07′, W. 60° 49′	29.18	741.2	47	8.3	69	ene.			1–2		8					1	ene.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.92	760.0	83	28.3		nnw.			1		4	nnw.						d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.17	766.3	40	4.4		nnw.			2–3		3							d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, N. 3° 47′, W. 23° 55′	29.94	760.5	80	26.7	91	ne.			2		7					2	ne.	showery	Capt C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.93	760.2	78.5	25.8	73	s.			5–6		1					3	s.	blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.20	767.1	45	7.2	76	w.			1		4							misty	Capt. R. F. Moskyn.
H. M S. Gannet, Coquimbo, Chili	29.97	761.2	60.5	15.8	90	n.			2		10							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 41° 00, W. 59° 41′	29.44	747.8	65	18.3	78	w.			6		6							misty	Capt. L. Jones.
H. M. S. Iris, Off Jaffa, Palestine	30.04	763.0	67	19.4	54	se.			1		1					3	sw.	blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.32	770.1	52	11.1	93	calm			0		2							blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	30.32	770.1	56.7	13.7	54	ne.			1–2		0					1	n.	misty	Capt. A. Carpenter.
H. M. S. Malabar, Bombay, India	29.95	760.7	80	26.7	91	nw.			2		3	nw.				3	nw.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, St. Christopher, W. I.	30.07	763.8	77.5	25.3	82	ene.			2		6	ene.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 26° 12′, E. 44° 33′	30.07	763.8	77	25.0	72	se.			4		0					5	sse.	blue sky	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 33° 47′, W. 15° 33′	30.22	767.6	70	21.1	97	n.			2		7					1	nne.	d. clouds	Capt. F. R. Dicken.
H M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, Muscat, Arabia	30.10	764.5	73.1	22.8		nw.			4									d. clouds	Capt. W. H. Edwards.
H. M S. Rocket, N. 48° 27′, W. 123° 27′	30.27	768.8	39	3.9	90	wsw.			3		4							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.01	762.2	79.5	26.4	78	nne.			2		5	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 35° 46′, E. 15° 02′	30.04	763.0	56	13.3	93	nne.			6–8		10	nne.				7	nne.	d. clouds	Capt. G. O. Twiss.
H M. S. Tenedos, N. 18° 11′, W. 76° 27′	30.08	764.0	75	23.9	90	var.			1		10							showery	Capt. C. G. Fane.
H. M. S. Triumph, S. 2° 25′, W. 81° 22′	29.91	759.7	77	25.0	72	s.			4		1	calm				4	s.	blue sky	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.07	763.8	75	23.9		ne.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.24	768.1	64.5	18.1		nw.			3–4		0					4	nw.	misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Beugo																			Carlos Candid dos Reis.
Quanza, Santiago, Cape Verd Ids	30.03	762.8	74.8	23.8	89	ene.			3		6	sw.				3	e.	d. clouds	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stocknoim.																			
H. M. Corvette Balder, N. 14° 45′, W. 61° 11	30.04	762.9	75.0	24.2	93	ne.			3		8							raining	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.14	765.5	66	18.9	89	sse.	6	2.7	.....	.....	10	.....	se.	0	0	.....	.....	foggy	
N. Yard, Portsmouth, N. H.	29.71	754.6	36	2.2	.....	nw.	2	0.9	.....	.....	10	.....	w.	1.00	25.4	.....	.....	foggy	
Naval Hospital Yokohama, Japan	30.00	762.0	40	4.4	95	n.	.....	.....	3	.....	1	.....	sw.	0.03	0.8	.....	.....	clear	
Adams, Mollendo, Peru	29.69	754.1	67	19.4	89	ese.	.....	.....	1	.....	5	.....	.....	.....	.....	light	sse.	fair	
Alaska, Callao, Peru	29.84	757.9	69	20.6	100	sse.	.....	.....	1	.....	10	.....	.....	0	0	sm'h	.....	cloudy	
Alert, Hong Kong, China*	30.16	766.1	58	14.4	43	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	hazy	
Alliance, Boston, Mass	29.68	753.9	51	10.6	86	sw.	.....	.....	2	.....	10	.....	.....	0	0	.....	.....	cloudy	
Ashuelot, Tientsin, China	30.45	773.4	21	— 6.1	100	nnw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, S. 4° 37′, W. 31° 37′	29.92	760.0	81	27.2	87	se.	18	8.0	.....	.....	2	.....	se.	0	0	light	se.	fair	
Colorado, New York, N. Y	29.86	758.4	42	5.6	100	sw.	1	0.4	.....	.....	10	.....	calm	0.03	0.8	.....	.....	misty	
Essex, Norfolk, Va	30.04	763.0	59	15.0	94	sw.	.....	.....	3	.....	8	.....	sw.	.....	.....	.....	.....	cloudy	
Franklin, Norfolk, Va	30.03	762.7	60	15.6	88	sw.	10	4.5	.....	.....	10	.....	.....	0.05	1.3	.....	.....	cloudy	
Galena, Harper, Liberia, Africa	29.94	760.5	80	26.7	87	ene.	.....	.....	3	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy	
Independence, N. Yard, Mare I'd, Cal.	30.10	764.5	49	9.4	93	calm	0	0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La	30.06	763.5	67	19.4	100	calm	.....	.....	0	.....	10	.....	calm	.....	.....	.....	.....	rain & fog	
Lackawanna, Valparaiso, Chili†	30.01	762.2	60	15.6	94	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Lancaster, Villafranca, France	30.35	770.9	56	13.3	51	calm	.....	.....	0	.....	2	.....	.....	0	0	sm'h	s.	fair	
Michigan, Erie, Pa	29.89	759.2	36	2.2	.....	w.	.....	.....	5	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I	29.81	757.2	46	7.8	100	sw.	9	4.0	.....	.....	10	.....	.....	.....	.....	sm'h	.....	rain & fog	
Monocacy, Yokohama, Japan	30.18	766.6	44	6.7	52	nnw.	.....	.....	3	.....	2	.....	nw.	.....	.....	.....	.....	fair	
Nipsic, Naples, Italy	30.24	768.1	54	12.2	49	ne.	.....	.....	5	.....	2	.....	.....	.....	.....	sm'h	.....	squally	
Onward, Callao, Peru†	30.03	762.7	64	17.8	?	se.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	foggy	
Palos, Hong Kong, China	30.33	770.4	52	11.1	54	ssw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C	29.94	760.5	43	6.1	92	sw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Pensacola, Callao, Peru	29.91	759.7	64	17.8	94	sse.	3	1.3	.....	.....	10	.....	.....	0	0	sm'h	.....	foggy	
Powhatan, Boston, Mass	29.78	756.4	49	9.4	93	wsw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	overcast	
Quinnebaug, Villafranca, France	30.33	770.4	60	15.6	50	sw.	.....	.....	2	.....	2	.....	calm	.....	.....	sm'h	.....	clear	
Ranger, N. 18° 07′, W. 103° 06′*	29.86	758.4	74	23.3	86	ene.	.....	.....	3	.....	5	.....	se.	0	0	sm'h	.....	fair	
Richmond, Apia, Samoa Islands*	29.67	753.6	77	25.0	91	calm	.....	.....	0	.....	2	.....	.....	0.03	0.8	.....	.....	clear	
Shenandoah, Montevideo, Uruguay*	29.92	760.0	70	21.1	39	w.	.....	.....	3	.....	1	.....	.....	.....	.....	sm'h	.....	clear	
St. Louis, League Island, Pa	30.15	765.8	40	4.4	91	w.	6	2.7	.....	.....	10	.....	.....	0.1	3.	.....	.....	cloudy	
Swatara, N. 34° 45′, E 139° 10′*	29.97	761.2	54	12.2	61	ne.	.....	.....	4	.....	2	.....	ene.	.....	.....	long	ne.	fair	
Tennessee, New York, N. Y	29.85	758.2	44	6.7	92	sw.	4	1.8	.....	.....	10	.....	.....	0.04	1.0	.....	.....	foggy	
Vandalia, St. Pierre Martineque, W.I.	30.06	763.5	75	23.9	86	ene.	.....	.....	2	.....	10	.....	ene.	.....	.....	.....	.....	drizzling	
Wabash, Boston, Mass	29.73	755.1	48	8.9	92	sw.	6	2.7	.....	.....	8	.....	sw.	0.04	1.0	.....	.....	hazy	
Wachusetts, Sitka, Alaska	29.66	753.4	34	1.1	100	sw.	.....	.....	2	.....	10	.....	calm	.....	.....	long	n.	snowing	
Wyoming, Port Royal, S. C	30.14	765.5	57	13.9	100	sw.	3	1.3	.....	.....	10	.....	calm	0	0	.....	.....	overcast	
Yantic, Aux Cayes, Hayti, W.I*	30.03	762.7	74	23.3	81	ne.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear	

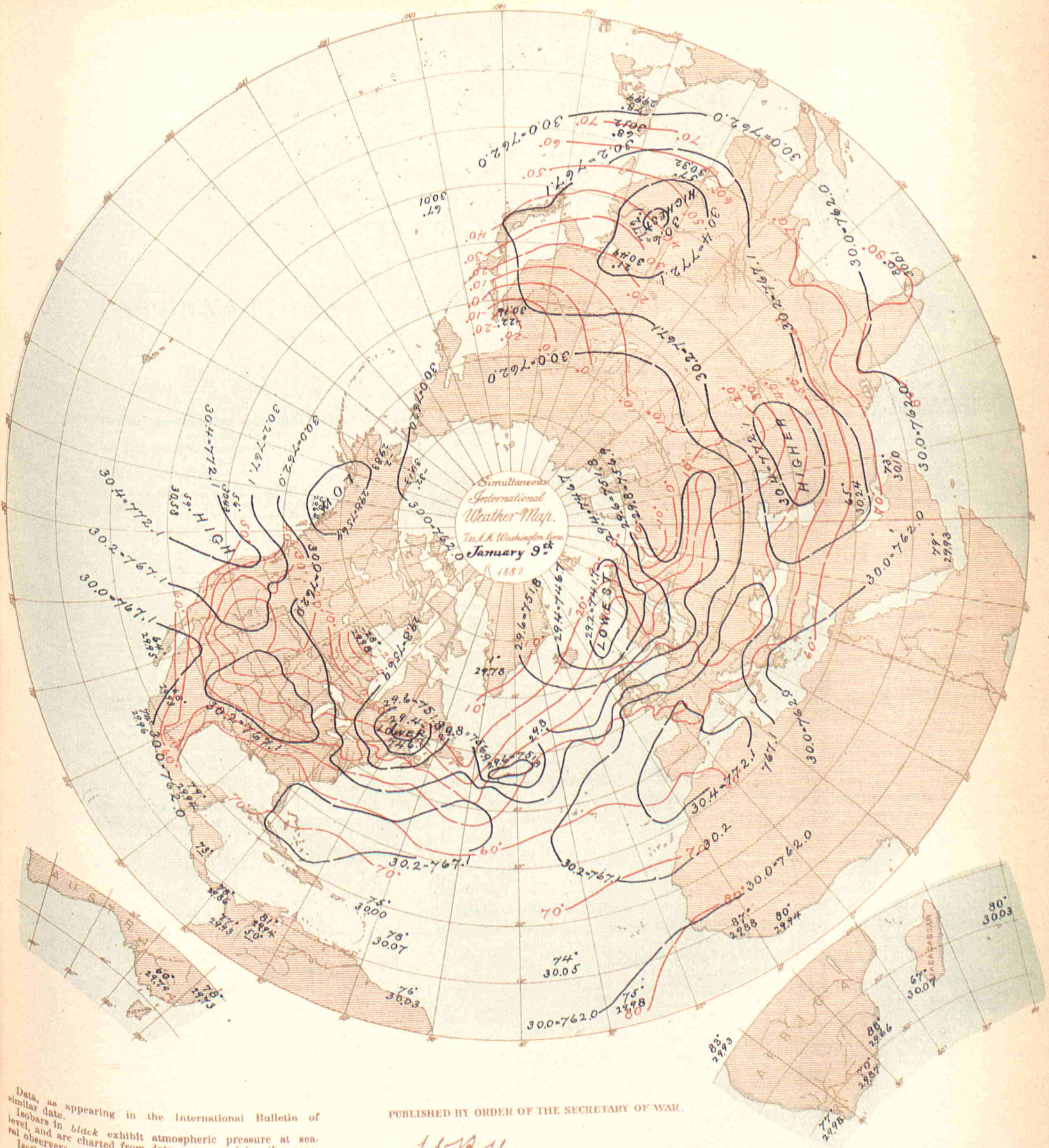
Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon, 2d Officer.
S. S. Nova Scotian, Capt. W. Richardson,																	
S. S. Polynesian, Capt. R. Brown, Halifax, N. S*	29.60	751.8	35	1.7		sse.	3		10		ssw.	4 h'r	4 h'r			foggy	Roberts & Spark
S. S. Prussian, Capt. J. G. Stephens, N. 51° 34′, W. 29° 50′..*	29.83	757.7	49	9.4		sw.	8		10		sw.			very h'vy	sw.	misty	J. G. Stephens.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, N. 48° 59′, W. 31° 23′	29.72	754.9	53	11.7	93	w.	7		8		sw.			mod.	s.	overcast	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, Eng†	29.92	760.0	43	6.1	51	w.	4		8		w.	light	light			cloudy	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, N. 51° 28′, W. 11° 46′.*†	30.22	767.6	50	10.0	100	sw.	6		5		sw.			mod.	w.	fair	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 46° —′, W. 46° —′†	29.46	748.3	42	5.6	91	n.	6		3		w.				w.	foggy	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Assyria, Capt. J. Brown																	J. Brown.
Utopia, Capt. A. McRitchie, N. 41° 42′, W. 49° 16′*†	30.19	766.8	38	3.3	90	nne.	4		10		nw; nne.	snow	sh'rs	cf'd	nw.	cloudy	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 22° 22′, W. 74° 16′*†	30.28	769.1	77	25.0	69	e.	6		2		se.	0	0	sm'h		fine	C. P. Krause.
S. S. Alvo, Capt. D. W. Williams, Kingston, Jamaica, W. I*	30.11	764.8	80	26.7		se.	1		7		e.	0	0			squally	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin																	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 31° 05′, W. 75° 30′						calm	0					0	0				R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse N. 18° —′, W. 74° —′	29.85	758.2				se.	2		2		se.	0	0	mod.	se.	clear?	Fisher & Weldon.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright																	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell																	
British Merchant, Capt. E. J. Molony, S. 10° 31′, E. 92° 11′	29.90	759.4	82.5	28.1	83	s.	1–2		1							blue sky	
Bk. Caldew, Capt. W. Peterson																	
S. S. Cipero, Capt. W. N. Lally																	
S. City of Agra, Capt. Thos. Young, S. 22° 46′, W. 18° 20′	30.13	765.3	74.5	23.6		ese.	4		9							raining	
Bk. Giaramara, Capt. R. Morton, N. 11° 20′, W. 35° 08′	30.05	763.3	74.2	23.4	85	ne.	4		9							d. clouds	
Glencairn, Capt. R. S. Tannock, S. 37° 50′ W. 9° 10′	30.26	768.6	64	17.8	78	wnw.	3		10							overcast	
S. S. Gordon Castle, Capt. W. Waring, N 37° 28′, E. 9° 34′	30.36	771.1	59.0	15.0	70	wnw.	6		2							d. clouds	
Bq. Hermine, Capt. S. G. Jones, S. 25° 19′, W. 74° 53′	30.00	762.0	63.5	17.5	78	sse.	5		8							overcast	
S. S. Humboldt, Capt. A. W. Jeffery, N. 11° 05′, W. 34° 50′	30.03	762.7	82.7	28.2	67	ese.	4		5							d. clouds	
S. Lochee, Capt. J. Raeburn, S. 0° 58′ E. 87° 15′	29.96	761.0	81	27.2	82	nw.	2		1							blue sky	
May Hulse, Capt. H. Youlden, S. 1° 38,′ W. 29° 25′	29.90	759.4	83.4	28.6	87	se.	4		5							d. clouds	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, N. 32° 00′, W. 14° 00′	30.43	772.9	65.6	18.7	68	ese.	2		7							d. clouds	
Naiad, Capt. John Smith S 23° 56′, W. 20° 49′	30.18	766.6	77.7	25.4	77	ne.	4		2							d. clouds	
Pole Star, Capt. F. Norman, S. 40° 00′, W. 58° 10′	29.54	750.3				nw.	6		8							misty	
Queen of Cambria, Capt. M. Parry, S. 38° 52′, W. 19° 55′	29.86	758.4	61.2	16.2	82	n.	6		10							overcast	
S. S. Strathleven, Capt. C. W. Pearson,																	
S. Superb, Capt. Berridge, N. 2° 26′ W. 25° 28′	29.98	761.5	75	23.9	100	n.	4		10							heavy rain	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham, N. 51° 10′, W. 14° 10′*†	30.30	769.6	54	12.2		wsw.	6		4		sw.	0	0	long	w.	fine	Wm. Fitt.
CALIFORNIA, AND MEXICAN S. S. CO. *J. Birmingham, Agent San Francisco.*																	
S. S. Newbern, Capt. E. Rogers, N. 29° 12′, W. 116° 46′†	30.07	763.8	58	14.4	69	n.	6		0			0	0	small	wnw.	clear	
CROMWELL LINE. *Clark & Seaman, Agents, New York*																	
S. S. Hudson, Capt. H. R. Freeman																	Crowell & Henry.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Galia, Capt. W. H. P. Hains, N. 46° 47′, W. 37° 29′*	29.57	751.1	53	11.7		sw.	6		10			rain	rain			raining	J. H. Mills, 3d Officer
GENERAL TRANS-ATLANTIC CO. *Louis de Rebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, N. 47° 17′, W. 45° 47′	29.64	752.9	33.8	1.0		nne.	3		5		sw.	0	0	large	sw.	hazy	
S. S. St. Laurent, Capt. A. Servan,																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York*																	
S. S. Gellert, Capt. Kuhlewein, N. 49° 50′ W. 9° 38′*..	30.32	770.1	52	11.1	7	nw.	4		3		nw.	1 h'r	light	long	nw.	fair	P. Froehlich, 3d Off.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch,																	Patterson & Thompson.
LAMPERT & HOLT S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, N. 29° —′, W. 19° —′*†	30.52	775.2	68	20.0		ese.	1		1		ese.	0	0		nnw.	clear	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE.																	
Thayer & Lincoln, Agents, Boston.																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE.																	
F. W. J. Hurst, Manager, New York.																	
S. S. England, Capt. T. P. Heeley N. 43° 19′, W. 46° 40′*	29.97	761.2				nnw.	3		8		nnw.	2 h'r	sleet	hv'y	nw;n.	showery	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO.																	
Jas. E. Ward & Co., Agents, New York.																	
S. S. Niagara, Capt. J. B. Baker, N. 33° 55′, W. 76° 57′†*	30.24	768.1	66	18.9		sw.	3		5?		w.	4h'r	driz	sm'h		overcast?	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips, N. 19° 50′, W. 75° 00′†	30.19	766.8	77	25.0		ene.	4		2		e.	light	shr's	mod.	e.	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 34° 46′, W. 74° 09′†	30.16	766.1	72	22.2		wsw.	3							sm'h	sw.		
S. S. Bothnia, Capt. W. McMickan																	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Timmerman																	
S. S. City of Washington, Capt. J. W. Reynolds N. 27° 52′, W. 79° 15′*†	30.36	771.1	79	26.1		se.	3								se.	clear	
S. S. Mans, Capt. T. H. Bonjer N. 19° 11′, W. 95° 37′*†	30.00	762.0	80	26.7		ne.	1										
S. S. New York, Capt. R. B. Quick														sm'h		fine	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier, N. 49° 16′, W. 20° 36′*	30.23	767.8	50	10.0		ssw.	5								sw.	cloudy	
NORTH GERMAN LLOYD.																	
A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.																	
S. S. General Werder, Capt. H. Christoffers																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander																	G. H. Lose, 3d Off.
S. S. Leipzig, Capt. F. Pfeiffer, N. 49° 05′, W. 27° 00′	30.08	764.0	51	10.6	72	s.	7		10		sw.	1 h'r	1h'r	long	s.	cloudy	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, N. 52° 04′, E. 2° 35′*	30.11	764.8	50.0	10.0		nne.	5		6		nw.	0	0	mod.	nne.	raining	
S. S. Mosel, Capt. J. Hesse, N. 41° 24′, W. 63° 22′	30.01	762.2	50.0	10.0		ssw.	5		10			0	0	mod.	s.		J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. Undeutsch																	Moutz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO.																	
Leland Stanford, President, San Francisco.																	
S. S. Belgic, Capt. H. Davison, N. 39° 29′, W. 131° 21′†	30.53	775.4	56	13.3	87	nnw.	4		5		n.	0	0	light	nw.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Hong Kong, China*†	30.50	774.7	64	17.8	67	calm	0		2		ne.					clear	
S. S. Oceanic, Capt. J. Metcalf, N. 31° 29′, E. 150° 34′*	30.01	762.2	67	19.4	79	nnw.	3		3		nw.			4	nw.	fine	
OCEAN S. S. CO.																	
George Young, Agent, New York.																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 36° 41′, W. 74° 58′*†	29.75	755.6				calm.	0							sm'h		dense fog	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, N. 40° 00′, W. 72° 44′†	29.57	751.1	55	12.8	80	wsw.	3		8		sw.	4 h'r	rain	mod.	ssw.	hazy	H. K. Hallett.
OREGON IMPROVEMENT CO.																	
John L. Howard, Agent, San Francisco.																	
S. S. Mississippi, Capt. E. W. Holmes, N. 39° 22′, W. 124° 04′†	30.44	773.2	52	11.1	79	wnw.	4		5		nnw.			mod.	nw.	fair	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer, N. 46° 23′, W. 124° 28′*	30.30	769.6	44	6.7	75	wnw.	5		2?		nw.	1 h'r	1 h'r	mod.	wnw.	cloudy?	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO.																	
K. Van Oterendorp, Agent, San Francisco.																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d Off.
S. S. Columbia, Capt. F. Bolles, San Francisco, Cal†	30.31	769.9	52.5	11.4	86	nnw.	2		0					mod.	w.	clear	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	30.33	770.4	40	4.4	91	calm	0		8?		w.					clear.?	G. Boese.
PACIFIC COAST S. S. CO.																	
Goodall, Perkins & Co., Agents, San Francisco.																	
S. S. Ancon, Capt. J. W. Ingalls, N. 33° 34′, W. 118° 08′	30.15	765.8	54	12.2	43	ne.	2		0					sm'h		clear	
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†	29.78	756.4	41	5.0		se.	4		7		se.	2 h'r	2 h'r	sm'h		cloudy	
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	30.24	768.1	49	9.4	93	calm	0		0							clear	
S. S. Grizaba, Capt. Chas. B. Johnson,																	G. H. Harisson.
S. S. Senator. Capt. Thos. Wallace, San Francisco, Cal†	30.47	773.9	44	6.7	76	calm	0		0			0	0			clear	T. Wallace.
S. S. State of California, Capt. G. Dobney, San Francisco, Cal†	30.30	769.6	42	5.6	83	calm	0		0			0	0			clear	
S. S. Victoria, Capt. H. M. Hayward, N. 42° 01′, W. 124° 44′†	30.57	776.5	47	8.3	62	nw.	3		0					sm'h		clear	
PACIFIC MAIL S. S. CO.																	
Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.																	
S. S. Australia, Capt. ——, S. 11° 11′, W. 169° 38′	29.75	755.6	77	25.0	100	ene.	2		8		ene.			sm'h		showery	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.73	755.1	78	25.6	86	ne.	1		8			0	0			cloudy	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, Hong Kong, China†	30.46	773.7	56	13.3	57	ne.	3		0			0	0			clear	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn,																	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 31° 34′, W. 135° 25′†	30.68	779.3	59	15.0	87	ene.	3		8		ne.	0	0	light	n.	cloudy	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 7° 22′, W. 80° 01′†	29.86	758.4	78	25.6	85	n.	5		3		n.	0	0	mod.	n.	clear	
S. S. Grenada, Capt. M. Connolly, N. 24° 24′, W. 111° 05′†	29.95	760.7	64	17.8	83	se.	1		5?		ese.	0	0	mod.	nw.	cloudy?	
S. S. South Carolina, Capt. W. J. Russell, N. 14° 48′, W. 92° 14′*†	29.84	757.9	79	26.1	80	w.	2		0			0	0	light	sw.	fine	
S. S. Zelandia, Capt. H. Webber, S. 34° 36′, E. 176° 06′	29.86	758.4	68	20.0	74	sw.	4		8		sw.			r'gh	s.	cloudy	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co.																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke St. Kitts, W. I.*						ne.	4		0			0	0	sm'h		clear	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, N. 49° 00′, W. 15° 22′*	30.45	773.4	52	11.1	53	w.	2		3		sw.	0	0	long	sw.	clear	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 41° 56′, W. 62° 21′	30.22	767.6	48	8.9	92	s.	4		10		sw.	0	0	sm'h	sw.	overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 49° 50′, W. 5° 12′*	30.14	765.5	50	10.0		wnw.	6		0			sh'rs	shr's	mod.	wnw.	clear	
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis																	
THINGVALLA LINE																	
Funch, Edye & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub N. 52° 53′, W. 28° 31′†.	29.79	756.7	48.7	9.3		s.	5		10		s.	2 h'r	2 h'r	h'vy	s.	covered	J. T. Uiberling
WARREN LINE.																	
Warren & Co, Agents, Boston.																	
S. S. Iowa, Capt. S. Walters. Off Ballycottin, Ireland†.	30.34	770.6	48	8.9		wnw.	3		0			1 h'r	light	mod.	wnw.	clear	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent.																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 50° 32′, W. 27° 58′*†	29.82	757.4	49	9.4		ssw.	6		10		sw.	shr's	shr's	h'vy	wsw.	misty	W. Thomas.
S. S. Celtic, Capt. B. Gleadell New York, N. Y.*†	29.72	754.9	48	8.9	85	wsw.	3		10		sw.	0	0	sm'h		cloudy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. St. George's Channel.*†	30.28	769.1	50	10.0	86	w.	3		2		wsw.	sh's	sh's	sm'h		d. clouds	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 26° 08′, W. 73° 08′†	30.39	771.9	72	22.2	80	ne.	2		8 n		ne.	0.04	1.0	mod	ne.	light rain	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona, N. 36° 58′, W. 9° 08′	30.47	774.0	59.9	15.5		ese.	2		10 s					large	nw.	cloudy	
Bk. Alpha, Capt. Ole Grönn,																	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis.																	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin																	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.12	765.0				nw.	4		5		nw.	0	0			fair	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 17° 29′, W. 39° 48′†	30.10	764.5				e.	3		2		e.	0	0	sm'h	e.		
S. Enoch Train, Capt. H. D. Chapman. N. 45° 51′, W. 25° 30′*	30.18	766.6				s.	1		9		sw.	0	0	sli't	ne.	fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 38° 45′, W. 50° 59′*	30.28	769.1				nnw.	5		10		nw.	3 h'r	h'vy	r'gh	nw.	cloudy	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.08	764.0	48	8.9	42	sw.	1		10		sw.			sm'h		foggy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 38° 36′, W. 54° 33′†	29.60	751.8	67	19.4		nw.	6		10		w.	¾ h'r	¾ h'r	sm'h		hazy	G. D. Morrison.
Bk. Freya, Capt. Blaouw, Limerick, Ireland			47	8.3		wsw.	4		2		wsw.	2 h'r	light			fair	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.07	738.4	49.5	9.7		w.	1		4		w.	0	0			clear	
Bk. Geo. Booth, Capt. D. Williams																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 48° 14′, W. 16° 38′*	30.09	764.2			74	wsw.	2		8		wsw.	12 h'r	12 h'r	long	nw.	fair	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 5° 22′, W. 33° 28′*	29.80	756.9	51	10.6		se.	4					0	0	long	se.	clear	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 55′, W. 23° 54′*†	30.60	777.2				ssw.	1					0	0	sm'h		fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.20	767.1			59	n.	2		5f		se.					cloudy	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly N. 42° 30′, W. 64° 05′†	29.80	756.9	66.0	18.9		wnw.			fg			0	0			foggy	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 33° 00′, W. 35° 40′*	30.17	766.3			96	s.	3		1		s.			mod.	s.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.46	773.7	56	13.3	100	e.	5		8		se.	0	0			cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 9° 50′, W. 34° 22′*†	30.00	762.0				e.	6		5		e.			mod.	e.		I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton																	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 10, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.37	771.4	61.9	16.6	69	w.			6		0			0	0	clear	Moiroud.
Algiers			30.41	772.4	53.6	12.0	84	ne.			1		1			0	0	fair	Nicolas.
La Calle			30.41	772.4	59.4	15.2	76	nnw.			3		6			0	0	cloudy	Fonfrède.
Tunis			30.37	771.3															Jacques.
Sfax																			Gau.
Saida			30.44	773.1	57.6	14.2	65	sw.			2		1			0	0	fair	Perès.
Tebessa			30.45	773.5	47.1	8.4	60	nw.			2		0			0	0	clear	Derché.
Geriville					59.7	15.4	29	n.			1		0			0	0	clear	Lonchamp
Laghouat			30.54	775.7	53.6	12.0	37	sw.			1		0			0	0	clear	Herbin.
Biskra			30.46	773.7	61.9	16.6	44	nw.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.37	746.0	29.46	748.3	65.0	18.3	82	sse.	3	1.3			9			0.05	1.3	showery	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram																			Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.84	757.9	30.41	772.4	42.8	6.0	83	w.			1		1			0	0		Dr. Wierzbiski.
Eperies	29.42	747.2	30.22	767.5	37.9	3.3	69	wsw.	8.7	3.9			10			0.024	0.6		Julius Mikolik.
Gratz	29.28	743.6	30.19	766.9	35.6	2.0	82	s.			1		10 ks		e.	0	0		Andreas Rospini.
Hermannstadt	29.08	738.7	30.39	771.9	39.7	4.3	71	s.			1		0			0	0		Prof. A. Gottschling.
Kremsmunster	28.75	730.2	30.26	768.7	30.0	— 1.1	98	nw.			3		6			0	0		The Staff.
Lemberg, Obs'y	29.04	737.5	30.44	773.1	39.2	4.0	73	sw.			2		8 k			0	0	al. covered	Dr. T. Stanecki.
Pola	29.03	737.4	30.06	763.5	35.6	2.0	84	nw.			3		10			0.114	2.9		I. R. Hydrographic Office
Szathmar	30.23	767.9	30.35	770.8	50.5	10.3	66	nnw.			1		2			0	0		Joseph Midlinszky, S. J.
Szegedin	29.75	755.6	30.21	767.4	36.7	2.6	91	sw.			2		10			0	0		Karl Stancel.
Trieste	30.01	762.3	30.30	769.7	43.2	6.2	65	nw.			3		0			0	0		Rieder.
Vienna	30.25	768.3	30.35	770.9	50.4	10.2	67	calm			0		0			0	0		I. R. Central Met. Obs'y.
	29.63	752.7	30.37	771.5	44.6	7.0	35	nw.			4		3			0	0		
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cne.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.50	749.3	29.60	751.8	43.6	6.4	74	s.	26	11.6			7			0	0	squally	W. Boswell.
Armagh, Observatory	29.71	754.6	29.96	761.0	43.8	6.6	79	ssw.	30	13 4			10					squally	S. Call.
Bidston, Liverpool Obs'y			30.09	764.3	46.0	7.8	76	sw.	25	11.2			9					overcast	John Hartnup.
Bolton, Sharples	29.54	750.3	30.08	764.0	42.2	5.7	85	ssw.	12	5.4			10					overcast	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.65	753.1	30.04	763.0	45.9	7.7	73	sw.			1		10			0.01	0.3	overcast	J.McLandsborough, F.R.
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	80.0	26.7	69	ne.			3		2					d. clouds	Pvt. J. Surgenor.
Cardington			30.24	768.1	43.0	6.1	83	sw.			1.0		9					overcast	John McLaren.
Chatham, School M. E.	30.20	767.1	30.33	770.4	42.1	5.6	90	w.			1		10					gloomy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.04	763.0	30.27	768.8	50.0	10.0	89	s.					10					rain & fog	The Staff.
Fort Napier, Natal	27.56	700.0	29.78	756.4	76.0	24.4	57	se.			3		6						Pvt. E. K.Anniss, A. H.C.
Free Town, Sierra Leone	29.60	751.8	29.83	757.7	86.0	30.0	65	calm			0		5					d. clouds	Sergt. John Robinson.
Galway, Queen's College			29.93	760.2	47	8.3	85	s.			2		10			0.15	3.8	drizzling	J. O'Donnghue.
Gibraltar, Mediterranean	30.37	771.4	30.42	772.7	58.0	14.4	87	ne.			1		6					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	29.63	752.6	29.67	753.6	44.0	6.7	79	wsw.			7		10			blank	blank	squally	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.12	765.0	30.30	769.6	43.8	6.6	83	ssw.			2		10					overcast	The Staff.
Guernsey	30.05	763.3	30.36	771.1	47.0	8.3	77	sw.			3		6					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.27	768.8	30.30	769.6	44.2	6.8	81	sw.	14	6.3			10					threatening.	The Staff.
Leicester, Museum	29.91	759.7	30.17	766.3	43.6	6.4	77	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.09	764.3	30.16	766.1	61.0	16.1	68	nw.			2		1					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.26	768.6	30.31	769 9	71.5	21.9	87	e.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.65	753.1	30.19	766.8	41.8	5.4	84	sw.			2		9					gloomy	John Mac Email.
Oxford, Radcliffe Obs'y	30.03	762.7	30.26	768.6	45.2	7.3	71	s.			4		6					squally	The Staff.
Plymouth	30.21	767.3	30.28	769.1	49.7	9.8	90	ssw.			4		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			29.25	742.9	43.9	6.6	88	sw.	36	16.1			10					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.01	762.2	30.08	764.0	42.6	5.9	83	nne.			2		10			blank	blank	overcast	W. H. Lyne.
Sheffield	29.77	756.1	30.05	763.3	46.9	8.3	84	ssw.			5		3			0.03	0.8	d. clouds	W. F. Cooper.
Silloth Rectory	29.93	760.2	29.96	761.0	44.0	6.7	78	sw.			6		10			0.020	0.5	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.08	764.0	42.3	5.7	90	sw.	11	4.9			10					overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.99	761.7	30.21	767.3	43.3	6.3	83	sw.			3		9					d clouds	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.16	766.1	30.22	767.6	54	12.2	86	sw.			6		10					raining	W. Newcombe.
Valencia, Observatory	30.05	763.3	30.08	764.0	48.5	9.2	85	ssw.	29	13.0			8					d. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.68	753.9	29.72	754.9	20	— 6.7	78	nw.	20	8.9			10 n			0.060	1.5	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	29.73	755 1	29.80	756.1	17	— 8.3	83	w.	18	8.0		2 k	8 ks	w.	w.	0.02	0.5	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.97	761.2	29.99	761.7	12	—11.1	83	nw.	30	13.4			10 n		calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.02	737.1	29.91	759 7	11	—11.7	96	w.	3	1.3		0	0			0	0	clear	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	29.67	753.6	29.80	756.9	29	— 1.7	67	w.	16	7.2		0	5 k		nw.	0.148	3.8	fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.00	762.0	30.36	771.1	29	— 1.7	88	ne.	9	4 0			10 ks		w.	inap.	inap.	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	30.08	764.0	30.30	769.6	18	— 7.8	73	w.	19	8.5		0	0			0	0	clear	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.62	752.3	30.36	771.1	25	—13.9	84	w.	0	0		5 ks	2 ks	w.	w.	0	0	fair	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.68	753.9	30.42	772.7	26	— 3.3	88	calm	0	0		10 cs	0	w.		inap.	inap.	fair	H. Morgan.
Port Stanley, Ontario	29.71	754.6	30.40	772.1	22	— 5.6	87	w.	2	0.9		hz.	0			0	0	cloudy	M. Payne.
Quebec, Quebec*	29.83	757.7	30.18	766.6	10	—12.2	91	w.			5	0	2 s		nw.	0.10	2.5	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.84	757.9	30.33	770.4	17	— 8.3	76	nw.	6	2.7			8 s		nw.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.59	751.6	30.35	770.9	27	— 2.8	92	sw.	4	1.8		3 cs	0			0.05	1.3	clear	K. Stewart.
St. Andrews, N .B	29.92	760.0	29.97	761.2	23	— 5.0	81	nw.	7	3.1		0	0			0.02	0.5	clear	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.50	749.3	29.56	750.8	25	— 3.9	73	nw.	24	10.7			10 n		w.	0.41	10.4	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.00	762.0	30.41	772.4	31	— 0.6	81	nw.	6	2.7			10 ks		w.	0.01	0.3	cloudy	Magnetic Observatory.
Windsor, N. S																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.90	759.4	29.97	761.2	31	— 0.6	81	nw.	27	12.1		2 k	0	nw.		0.12	3.0	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.40	746.7	29.66	753.4	33	0.6	100	sw.	1	0.4			10 s			0.10	2.5		John Delany.
St. Pierre, N. F																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St.Francis Lt.House	30.02	761.5	30.05	763.3	70.0	21.1	69	w.	22.1	9.9		0	2 s			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	30.09	764.3	30.13	765.3	77.4	25.2	56	ssw.	15	6.7		6	6			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.46	773.7	30.75	781.0	39.2	4.0	64	se.			2		0			0	0	clear	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.57	776.5	30.60	777.2	28.6	— 1.9	64	nw.	4.5	2.0		0	0			0	0	clear	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.90	759.4	29.95	760.6	41.7	5.4	85	nw.	22	10			5						Oversergent Fischer.
Fanöe	29.98	761.6	30.00	762.1	42.3	5.7	91	w.			4		9						Overloerer Lauridsen.
Godthaab, Greenland	29.56	750.7	29.60	751.8	2.8	—16.2	100	nne.			6		6						S. Kleinschmidt.
Stykkisholm, Iceland	29.32	744.6	29.36	745.7	18.7	— 7.4		e.			2		8						A. O. Thorlacius.
Thorshavn	28.56	725.4	28.60	726.3	43.5	6.4	84	sw.	34	15			7					raining	Overloerer Bergh.
Vestervig	29.74	755.4	29.83	757.7	42.4	5.8	90	sw.			4		9						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.78	756.5	30.45	773.4	46.0	7.8	89	se.				0	8 kn			0	0	very cloudy	M. Labroue, Director.
Alençon, Normal School	29.93	760.1	30.48	774.1	38.8	3.8	97	n.			3		k	s.	se.	0.024	0.6		M. Nicot, Director.
Arras, Engineer School	30.11	764.7	30.37	771.5	43.2	6.2	94	ssw.			2		mist			0.185	4.7	misty	M. Klein, Commandant.
Avignon, Normal School	30.28	769.0	30.35	771.0	53.6	12	56	n.			2		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.89	759.1	30.48	774.2	33.4	0.8		se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.18	766.6	30.47	773.8	37.2	2.9	89	w.			1		2		w.	0.008	0.2	slightly cl'dy	M. Frère Eugène Marié.
Besançon, Normal School			30.43	772.8	41.4	5.2	97	sse.			1		10		sw.			raining	M. Gobin, Director.
Bordeaux, Observatory	30.16	766.1	30.43	772.9	49.5	9.7	77	ese.			1		10			0.012	0.3	covered	M. Rayet, Director.
Bourges, Normal School	29.87	758.7	30.43	773.0	48.2	9	95	nne.			1		n		nne.	0.110	2.8		M. Postel, Director.
Brest, Naval Observatory	30.13	765.2	30.37	771.3	49.6	9.8	81	se.			1		10		se.	0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.36	771.1	30.44	773.1	46.0	7.8	80	ssw.			1		5		sw.	0	0	cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.10	764.4	30.44	773.1	46.9	8.3	72	sw.			1		2		w.	0.138	3.5	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.89	759.3	30.43	772.9	38.5	3.6	90	s.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.05	737.9	30.43	772.8	54.1	12.3	52	e.			1		2			0	0	¼ covered	M. Allnard, Director.
Cluny, Normal School	29.57	751.1	30.46	773.6	42.8	6	82	n.			3		fg		e.	0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.61	752.0	30.50	774.8	41.9	5.5	90	nw.			1		5 ck		nw.	0.20	5.	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.84	707.0	30.43	772.9	48.2	9	48	s.			1					0	0		M. Jeanginard, Director.
Grénsque, du. Rhone	29.17	740.9	30.30	769.6	57.7	14.3	39	e.			2		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.66	753.4	30.46	773.7	43.9	6.6	69	sse.			1		0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.82	731.9	30.43	772.8	46.4	8	77	sw.			1		5		sw.	0.047	1.2	cloudy	M. Rivoire, Director.
Lamballe, Normal School	30.16	766.1	30.44	773.1	46.0	7.8	77	e.			1		5		e.	0.071	1.8	light fog	M. Ollitrault, Director.
Lescar, Normal School	29.88	759.0	30.46	773.6	53.6	12	65	s.			1	0	2 s			0	0	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	30.33	770.3	30.43	772.9	53.6	12.0	83	se.			2		8	s.	sw.	0.020	0.5	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.40	746.7	30.50	774.6	43.0	6.1	57	nnw.			1		10 n		n.	0.004	0.1	covered	M. André, Director.
Mans, Normal School	30.17	766.4	30.50	774.7	34.7	1.5	97	e.			1		10			0.04	1.	covered	M. Piboeu, Director.
Marseille, Observatory	30.00	762.1	30.28	769.0	58.1	14.5	52	nw.			0.1		0			0	0		M. Stephan, Director.
Montlouis l'instituteur	25.08	637.1	29.93	760.1	42.8	6.0	43	sw.	3.8	1.7			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.23	767.8	30.34	770.7	59.0	15	61	nw.			1		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.52	749.7	30.32	770.2	43.2	6.2	67	sw.			1	2 ck	0			0.063	1.6	slightly cl'dy	M. Hasse, Director
Nantes, Observatory	30.31	769.8	30.47	774.0	48.7	9.3	82	se.			0-1	ck	8 k		sse.	0.055	1.4		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.28	769.2	30.39	772.0	57.9	14.4	57	ne.	5.6	2.5			5			0	0	¼ covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.48	545.5			37.4	3.0		wsw.			1		1		wsw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School					49.6	9.8	73	s.			1			s.	s.	0	0		M. Tallieu.
Puy de Dôme Obs'y, Summit	25.43	646.0			33.8	1.0	56	nw.			1		0			0.346	8.8	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.43	772.9	30.46	773.7	49.6	9.8	100	e.			1		mist			0	0	misty	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.24	768.0	30.46	773.6	46.0	7.8	94	s.			1		2	se.	s.	0.28	7.	slightly cl'dy	M. Mouillot, Director.
Rodez, Normal School	28.24	717.2	30.46	773.7	42.4	5.8	81	n.			1		fg		se.	0	0	foggy	M. Colrat, Director.
Rouen, Normal School	30.40	772.2	30.45	773.4	39.6	4.2	93	nw.			1		5			0	0	cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.99	761.7	30.42	772.7	47.1	8.4	67	w.			1		1		ese.	0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.30	769.5	30.46	773.7	44.2	6.8	77	ssw.			1		1		sw.	0.016	0.4	clear	M. Renou, Director.
Toulouse, Observatory	29.80	756.9	30.53	775.5	50.9	10.5	86	nne.			2		8	e.		0	0	very cloudy	M Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.95	760.6	30.44	773.1	44.6	7.0	83	w.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.56	750.7	30.42	772.7	37.9	3.3	70	w.			2	0	8 s			0	0		Prof. Dr. Hoh.
Berlin	30.01	762.2	30.19	766.8	41.7	5.4	72	nw.			4		10			0.035	0.9	raining	Prof. Dr. Arndt.
Breslau	29.68	753.8	30.21	767.4	41.0	5.0	72	wnw.			5		9			0.126	3.2		Royal University Obs'y.
Carlsruhe	30.02	762.4	30.48	774.1	42.6	5.9	77	sw.			2		10	sw.		0	0		Albert Senz.
Cassel	29.59	751.5	30.30	769.6	41.0	5.0	78	s.			4		7	s.		0.193	4.9		Dr. H. Möhl.
Frankfort on the Main	30.05	763.3	30.43	773.0	41.9	5.5	77	wsw.			2		5			0.003	1.6		Physical Society.
Friedrichshafen	29.00	736.7	30.51	774.9	42.1	5.6	82	sse.			2		5	sw.		0	0		Wilhelm, Chief Tel.
Hamburg	30.11	764.7	30.20	767.1	41.7	5.4	91	wsw.			5		7			0.031	0.8		E. Preller.
Kiel	30.06	763.5	30.08	763.9	43.0	6.1	84	w.			4		9			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.89	759.1	30.32	770.1	41.0	5.0	78	w.			4		4	w.		0.142	3.6		H. Leppig, Asst.
Magdeburg	30.00	763.4	30.25	768.4	43.2	6.2	79	w.			5		9 ks		w.	0.016	0.4		Dr. Assmann.
Memel	29.65	753.2	29.70	754.4	39.7	4.3	83	wnw.			7	5 ck	0						Issermann.
Munich	28.58	725.9	30.47	773.9	39.0	3.9	62	nw.			2		9	w.		0.012	0.3		Central Station.
Neufahrwasser	29.87	758.6	29.88	759.0	42.1	5.6	69	wnw.			5		10			0.122	3.1		A. Lothes.
Neustadt, Palatinate	29.87	758.8	30.41	772.4	41.5	5.3	69	w.			4		2	w.		0	0		Dickmether.
Stuttgart	29.48	748.9	30.41	772.5	43.3	6.3	62	w.			1		4	w.		0	0		Prof. Dr. Schoder.
Wustrow	30.06	763.5	30.08	764.1	40.5	4.7	97	sw.			4		0			0	0		Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.70	754.4	30.10	764.5	52.2	11.2		w.			2.0		6 k			0.043	1.1		Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.99	761.8	30.04	763.1	59.8?	15.4?	88	nne.				8		se.	ese.	0.90	22.9	gloomy	
Deesa	29.46	748.4	29.95	760.8	68.7	20.4	66	nne.	13.0	5.8		8		se.	se.	0	0	d. clouds	
Bombay	29.88	759.1	29.92	760.0	81.1	27.3	79	wnw.	12	5.4		0				0	0	blue sky	
Poona, Yarrowda.	28.05	712.5	29.88	759.0	86.6	30.3	29	ese.	4	1.8		3		wnw.		0	0	d. clouds	
Belgaum	27.38	695.4	29.89	759.2	82.3	27.9	21	ese.	3	1.3		1		sw.		0	0	d. clouds	
Lahore	29.34	745.1	30.12	765.0	59.6	15.3	60	ne.	0.7	0.3		10			se.			drizzling	
Roorkee	29.21	741.9	30.16	766.2	54.8	12.7	94	n.	1.3	0.6		10				0.10	2.5		
Agra	29.51	749.6	30.10	764.4	70.7	21.5	45	ne.	3.2	1.4		8			ne.	0	0		
Nagpur	28.93	734.9	29.99	761.7	76.2	24.6	32	calm	2.3	1.0		5		w.		0	0	d. clouds	
Jubbulpore	28.66	727.8	30.06	763.4	65.4	18.6	30	ne.	1.0	0.4		5		s.		0	0	d. clouds	
Lucknow	29.68	753.9	30.07	763.7	72.2	22.3	48	calm	1.5	0.7		7		wsw.		0	0	d. clouds	
Allahabad	29.74	755.5	30.07	763.8	62.0	16.7	80	calm	0.8	0.4		4		w.		0	0	d. clouds	
Patna	29.90	759.4	30.09	764.3	66.0	18.9	66	calm	1.5	0.7		6		e.	e.	0	0	d. clouds	
Hazaribagh	28.00	711.3	30.06	763.5	69.8	21.0	30	e.	4.4	2.0		0				0	0	blue sky	
Cuttack	29.97	761.2	30.05	763.3	72.2	22.3	61	ne.	0.9	0.4		0				0	0	blue sky	
Calcutta, Alipore	30.03	762.8	30.05	763.3	70.9	21.6	69					0				0	0	blue sky	
Dhubri	29.96	760.9	30.08	764.0	70.3	21.3	55	calm	4.0	1.8		0				0	0	blue sky	
Chittagong	29.97	761.2	30.07	763.7	73.1	22.8	71	wnw.	1.9	0.8		4				0	0	blue sky	
Sibsagar	29.75	755.7	30.10	764.7	62.4	16.9	84	ne.	1.3	0.6		0				0	0	blue sky	
Jeypore	28.58	726.0	30.10	764.6	56.9	13.8	89	e.	6.3	2.8		10			e.	0.13	3.3	drizzling	
Zanzibar, Africa	29.93	760.2			86.2	30.1	67	nne.	6.8	3.0		6				0	0	d. clouds	
Trichinopoly	29.73	755.1			81.0	27.2	49	ene.	2	0.9		4				0	0	d. clouds	
Bellary	28.48	723.4			83.0	28.3	35	e.	2.2	1.0		4				0	0	d. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.94	760.4	30.36	771.1	48.6	9.2	46	e.	3.8	1.7		1				0	0		Prof. Giovanni Clodig.
Milan	29.85	758.1	30.39	771.8	39.4	4.1	72	e.	0.7	0.3		1				0	0		Prof. Schiaparelli.
Padua	30.26	768.5	30.37	771.4	43.3	6.3	55	wsw.	2.5	1.1		1		s.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.43	747.4	30.38	771.6	36.7	2.6	73	n.	4.2	1.9		0				0	0		Prof. P. F. Denza.
Genoa	30.10	764.6	30.30	769.6	57.4	14.1	43	calm	0	0		0				0	0		Prof. G. M. Garibaldi.
Mondovi	28.38	720.8	30.37	771.4	47.1	8.4	36	w.			2	0				0	0		Prof. D. C. Bruno.
Pesaro	30.32	770.1	30.37	771.4	42.8	6.0	73	n.	16.1	7.2		1				0	0		Prof. Luigi Guidi.
Florence	30.06	763.4	30.32	771.1	45.3	7.4	69	ese.			2	1				0	0		Prof. Costantino Pitter.
Leghorn	30.21	767.4	30.30	769.6	53.4	11.9	81	ne.	3.1	1.4		0				0	0		Prof. P. Monte.
Rome	30.07	763.8	30.25	768.3	51.4	10.8	40	ene.	4.2	1.9		0				0	0		Prof. P. S. Ferrari.
Lecce	29.93	760.1	30.19	766.7	55.6	13.1	68	wnw.	29.8	13.3		1		nw.		0	0		Prof. C. de Giorgi.
Cosenza	29.31	744.5	30.22	767.6	52.2	11.2	75	sse.	3.1	1.4		0				0	0		Prof. D. Conti.
Cagliari	30.05	793.2	30.24	768.1	58.6	14.8	58	nw.			4	1				0	0		Prof. A. Pacinotti.
Palermo	29.99	761.7	30.24	768.1	58.5	14.7	59	n.	5.6	2.5		9		n.		0	0		Prof. G. Ciacciatore.
Syracuse	30.13	765.3	30.17	766.4	56.5	13.6	68	e.	4.9	2.2		4		wnw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.67	753.7	30.21	767.3	54.3	12.4	37	ne.	1.8	0.8		1		ne.		0	0		Prof. T. Brioschi.
Stelvio	22.33	567.1			23.9	— 4.5	15	s.			2	9				0	0	clear	Prof. P. F. Denza.
Valdobbia	22.38	568.5			28.8	— 1.8	45	n.			2	0				0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.80	756.9	29.84	757.9	29.0	— 1.7	84	wnw.	3.7	1.6		0	1 s					fair	
Hakodate	29.88	758.9	29.89	759.2	31.9	— 0.1	75	ne.	3.0	1.3			10			0	0	overcast	
Hiroshima, I. M. Obs'y	30.09	764.3	30.11	764.8	33.9	1.1	67	wnw.	2.2	1.0		0	0			0.025	0.6	clear	K. Sasaki.
Kanazawa	30.15	765.8	30.26	768.6	38.2	3.4	86						10 n					light rain	S. Endo.
Kioto	29.81	757.2	29.99	761.7	43.0	6.1	75	sw.	5.9	2.6			10 s			0.060	1.5	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.01	762.2	30.23	767.8	36.2	2.3	80	w.	3 0	1.3			10 s			0.070	1.8	overcast	S. Takehayashi.
Niigata	29.82	757.4	29.85	758.2	41.8	5.4	78	sw.	14.8	6.6		ck	10 n			0.195	5.0	raining	
Nobiru	29.88	758.9	29.89	759.2	29.6	— 1.3	94	nnw.	5.2	2.3		0	2 s			0	0	fair	H. Midzushina.
Supporo					24.8	— 4.0	67	calm	0	0			10			inap	inap.	covered	
Tokei Obs'y, Yeddo	29.84	757.9	29.91	759.7	38.3	3.5	85	ssw.	3.0	1.3			10 s			0	0	cloudy	The Staff.
Wakayama	29.99	761.7	30.05	763.3	43.0	6.1	65	wnw.	10.4	4.6		9 ck	0	wsw.		0.010	0.2	cloudy	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.82	757.4	30.01	762.2	77.5	25.3	79	sw.	13.0	5.8		0	9 ks/m					drizzling	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.71	602.1	29.92	760.1	50.9	10.5	77	calm	0	0		0	1 k		s.			clear	Vicente Fernandez.
Leon	24.46	621.2	30.21	767.3	54.5	12.5	83	n.			1	2 ck	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.77	756.3	30.04	763.0	65.0	18.3	94	nw.			4		10 n		sw.	inap.	inap.	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.09	586.6	30.27	768.9	44.4	6.9	72	calm	0	0		0	0			0	0		The Staff.
Morelia	24.28	616.6	30.54	775.7	45.7	7.6	73	se.			4	2 c	0	s.		0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.93	607.8	30.02	762.5	49 8	9.9	77	calm			0	1 c	0	sw.		0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.6	30.40	772.1	41.9	5.5	63	nnw.	0.2	0.1		0	1		s.	0	0	fine	Prof. P. Spina.
San Luis Potosi	24.24	615.7	30.27	768.9	50.3	10.2	61	se.			1		10		w.	0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.54	572.3	30.25	768.4	48.0	8.9	79	sw.	33.5	15.0		0	0			0	0		J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.35	770.9	30.35	770.9	44.4	6.9		sw.			4					0.055	1.4		
Groningen	30.17	766.4	30.23	767.8	42.1	5.6		sw			4					0	0		
Helder	30.23	767.9	30.23	767.9	43.9	6.6		sw.			4					0	0		
Hellevoetsluis	30.31	769.8	30.31	769.8	42.8	6.0	85	sw.			3					0	0		
Utrecht	30.32	770.0	30.36	771.2	44.1	6.7	85	sw.			3		2			0	0	lightly cld'y	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.41	746.9	29.47	748.5	39.6	4.2	93	sw	22	10			10			0.669	17.0	raining	
Brono	29.10	739.2	29.14	740.2	33.8	1.0	85	sw.	18	8			10			0.165	4.2	snowing	
Christianiit	29.44	747.7	29.59	751.5	36.0	2.2	58	sw.	9	4			8			0	0		
Gjæsvær	29.16	740.6	29.18	741.2	20.3	— 6.5		calm			0		10					snowing	
Lodingen	28.96	735.5	29.00	736.7	31.8	— 0.1	81	se.			4		9			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					61.2	16.2	87	ssw.	4.9	2.2			7			0.126	3.2		Dr. J. A. Sampaio.
Campo Major	29.35	745.5	30.37	771.3	56.7	13.7	54	ese.	1.3	0.6			6			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.30	769.6	30.39	771.9	65.7	18.7	67	ese.	0.7	0.3			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.08	763.9	30.45	773.4	46.6	8.1	86	nne.	7.4	3.3			8	sw.		0	0		The Staff.
Ponta Delgada, Azores	30.15	765.9	30.22	767.7	63.0	17.2	81	s	10.5	4.7			3			0	0		
Saint Paul de Loando	29.70	754.3	29.90	759.4	82.4	28.0	90	wnw.	0.7	0.3			9			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.02	737.2	30.21	767.2	9.5	—12.5		sw.	45	20			10 n			0	0		Major K. Lasarew.
Archangel	29.53	750.0	29.55	750.5	2.8	—16.2	83	se.	9	4			9 ks			0.094	2.4		Capt. Sselliwerstow.
Astrakhan	30.24	768.2	30.16	766.1	34.0	1.1	79	nne.	7	3		0	7 s			0	0	light clouds	Capt. Wisganow.
Barnaul	29.73	755.1	30.27	768.8	19.6	— 6.9	92	sw.	18	8			10			0.087	2.2		Meteorological Obs'y.
Dorpat	29.17	749.9	29.43	747.4	30.0	— 1.1	100	wsw.	7	3			10 n			0.055	1.4		Observatory.
Ekaterinburg	28.72	729.4	29.76	756.0	— 2.7	—19.3	83	ene.	9	4			10			0.091	2.3	snowing	Meteorological Obs'y.
Kasan	29.47	748.5	29.75	755.6	27.1	— 2.7	97	s.	2	1			10			0.004	0.1		Observatory.
Kertch	29.95	760.7	29.97	761.2	32.7	0.4	91	nw.	7	3		0	7			0	0		Lagorio & Sastyrez.
Kieff	29.17	740.8	29.82	757.5	34.7	1.5	87	w.	9	4			10ks;n			0.004	0.1		Observatory.
Lugan	29.84	757.9	30.05	763.3	32.0	0.0	83	ssw.	9	4			7			0	0		Meteorological Obs'y.
Moscow	29.11	739.3	29.60	751.8	30.9	— 0.6	88	s.	7.8	3.5			10 s			0.083	2.1	light snow	Meteorological Obs'y.
Nikolaiev	30.01	762.2	30.08	764.0	34.5	1.4	96	sw.	4	2			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China												0	0			0	0		Physical Observatory.
St. Petersburg	30.37	771.4	30.51	775.0	20.3	— 6.5	55	calm	0	0			10 n			0.063	1.6	light snow	Central Physical Obs'y.
Tashkend, Laboratory	29.37	746.1	29.39	746.5	33.8	1.0	96	s.	7	3			10			0	0		Telch, A. M.
Tiflis	28.82	731.9	30.55	775.9	16.2	— 8.8	94	calm	0	0			10 s			0	0		Physical Observatory.
Warsaw	28.70	728.9	30.18	766.5	37.2	2.9	64	s.	2	1			10ks;n						Astronomical Obs'y.
Wilna	29.56	750.8	30.00	761.9	39.2	4.0	78	wnw.	22	10			9			0.020	0.5	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.23	742.4	29.66	753.3	35.6	2.0	87	w.	7	3			10			0.043	1.1	snowing	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.48	748.8	47	8.3	85	w.			8		10			0.2	5.	sleeting	J. Youngclause.
North Unst, Shetland Pds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.29	769.4	30.39	771.9	54.0	12.2	63	w.	1.1	0.5		3 c	0			0	0	almost clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.28	769.2	30.34	770.7	54.7	12.6	72	se.	2.2	1.0		3	1	sw.		0	0	cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.42	696.4	30.52	775.3	41.2	5.1	79	ne.	4.0	1.8		0	6			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.16	715.2	30.44	773.1	53.6	12.0	50	e.	1.8	0.8		3	0	wsw.		0	0		The Staff.
Murcia, Met. Obs'y	30.28	769.2	30.45	773.4	57.9	14.4	63	se.	0.9	0.4		2	4	ene.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.43	747.4	30.34	770.6	53.1	11.7	71	calm	0	0		0	7			0.004	0.1	cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.10	764.6	30.17	766.3	68.3	20.2	85	e.	2.7	1.2		6 c;cs	k	wsw.		0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.95	760.7	30.00	762.1	76.1	24.5	68	nne.	20.9	9.3		1 ck	9 kn	ene.	ene.	0	0	threatening	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.32	770.1	30.42	772.6	60.6	15.9	65	ese.	9.6	4.3		3	2	se.	ese.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.02	762.4	30.11	764.7	74.5	23.6	82	calm	0	0		2 s	5 k	s.	s.	0.126	3.2		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.06	763.5	30.19	766.8	65.8	18.8	81	nnw.	9.5	4.2			10 kn		n.	inap.	inap.	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.22	742.1	29.26	743.1	16.9	— 8.4	94	se.			2		10			0	0		
Umea	29.23	742.4	29.28	743.7	10.0	—12.2	100	nw.			2		0			0.138	3.5		
Hernosand	29.32	744.8	29.37	746.1	25.3	— 3.7	80	calm			0		0			0	0		
Stockholm	29.37	746.1	29.55	750.6	31.2	1.2	65	wnw.			6		0			0.055	1.4		
Wisby	29.54	750.4	29.60	751.9	38.5	3.6	83	wnw.			6		0			0	0		
Sub Series.																			
Upsala	29.43	747.4	29.51	749.6	33.1	0.6	75	w.	5.1	2.3			4	w.		0.028	0.7		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.00	736.7	30.47	773.8	42.4	5.8	74	n.			1					0.004	0.1	clear	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.12	765.1	49.5	7.9	81	n.	19	8.5			10		n.	0	0		The Observatory.
Valona			30.14	765.6	53.2	11.8		nw.			1		2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.91	759.6	68.9	20.5	58	sw.			3	0	1 k		sw.	0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.25	768.3	30.34	770.6	37	2.8	61	calm	0	0		0	0			0	0	clear	
Alpena, Michigan	29.62	752.3	30.33	770.4	27	— 2.8	88	s.	8	3.6			10 s			0.03	0.8	cloudy	
Atlanta, Georgia	28.98	736.1	30.21	767.3	59.0	15.0	96	se.	10	4.5			10 n		calm	0.24	6.1	light rain	
Atlantic City, New Jersey	30.42	772.7	30.43	772.9	28.1	— 2.2	77	nw.	6	2.7		1 cs	0			0	0	clear	
Augusta, Georgia	30.05	763.3	30.25	768.3	63.0	17.2	93	calm	0	0			10s;fg			0.20	5.1	cloudy	
Baltimore, Maryland	30.40	772.1	30.44	773.2	35	1.7	69	n.	2	0.9		4 c	fg.	w.		0	0	fair	
Barnegat, New Jersey	30.38	771.6	30.40	772.1	29.2	— 1.6	80	w.	8	3.6		0	4 k		nw.	0	0	fair	
Bismarck, Dakota	28.13	714.5	30.13	765.3	15	— 9.4	83	nw.	10	4.5		1 c	0	calm		0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.07	687.6	30.00	762.0	22	— 5.6	100	se.	12	5.4			10 n		calm	0.05	1.3	light snow	
Boston, Massachusetts	30.07	763.8	30.24	768.1	32.0	0.0	68	w.	12	5.4		0	0			0	0	clear	
Brownsville, Texas	29.94	760.5	29.99	761.7	55	12.8	100	calm	0	0			10 s			0.20	5.1	cloudy	
Buffalo, New York	29.63	752.6	30.43	772.9	29.4	— 1.4	92	sw.	7	3.1		0	3 s			0	0	clear	
Burlington, Vermont	30.00	762.0	30.31	769.9	25.5	— 3.6	69	nw.	13	5.8		0	7 s		nw.	0	0	fair	
Cairo, Illinois	29.71	754.6	30.13	765.3	37.8	3.2	84	se.	10	4.5			10 n		se.	0.28	7.1	light rain	
Campo, California	27.52	699.0	30.15	765.8	12.4	—10.9	83	nw.	2	0.9		0	0			0	0	clear	
Camp Thomas, Arizona	27.41	696.2	30.24	768.1	21.5	— 5.8	86	calm			0	0	0			0	0	clear	
Cape Henry, Virginia	30.42	772.7	30.44	773.2	39	3.9	73	ne.	15	6.7		2 c	3 s	ne.		0	0	fair	
Cape May, New Jersey	30.39	771.9	30.42	772.7	36	2.2	69	nw.	14	6.3		0	0			0.01	0.3	clear	
Castroville, Texas	29.21	741.9	30.06	763.5	49	9.4	93	nw.	4	1.8			10 n			0.23	5.8	light rain	
Cedar Keys Florida	30.24	768.1	30.26	768.6	63	17.2	84	e.	10	4.5		0	0			0	0	clear	
Champaign, Illinois	29.34	745.2	30.21	767.3	34.7	1.5	65	e.	9	4.0			10 s		e.	0	0	cloudy	
Charleston, S. Carolina	30.19	766.8	30.25	768.3	59	15.0	93	sw.	4	1.8			fg.			0.14	3.6	dense fog	
Charlotte, N. Carolina	29.41	747.0	30.30	769.6	48.0	8.9	93	ne.	6	2.7			10 n		e.	0.16	4.1	light rain	
Chattanooga, Tennessee	29.34	745.2	30.20	767.1	45.0	7.2	96	ne.	4	1.8			10 n		calm	0.98	24.9	heavy rain	
Cheyenne, Wyoming	23.91	607.3	30.16	766.1	13.5	—10.3	81	n.	6	2.7		0	0			0	0	clear	
Chicago, Illinois	29.53	750.0	30.28	769.1	37.9	3.3	61	s.	4	1.8		10 k	0			0	0	cloudy	
Chincoteague, Virginia	30.42	772.7	30.44	773.2	35	1.7	79	n.	12	5.4		5 cs	0	nw.		0	0	fair	
Cincinnati, Ohio	29.61	752.1	30.30	769.6	38.8	3.8	54	ne.	5	2.2			10 s			0	0	cloudy	
Cleveland, Ohio	29.63	752.6	30.41	772.4	28	— 2.2	90	s.	4	1.8		0	8 s		w.	0	0	cloudy	
Coleman City, Texas	28.20	716.3			39	3.9	92	nw.	7	3.1			10 s			0.37	9.4	cloudy	
Columbus, Ohio	29.45	748.0	30.35	770.9	33	0.6	68	e.	4	1.8		4 ck	0	sw.		0	0	fair	
Concho, Texas	28.10	713.7	30.12	765.0	41	5.0	92	calm	0	0			10 s			0.10	2.5	cloudy	
Davenport, Iowa	29.46	748.3	30.17	766.3	40	4.4	65	se.	6	2.7			10 s		se.	0	0	cloudy	
Dayton, Washington T'y	28.12	714.2	29.92	760.0	3.2	—16.0	88	sw.	2	0.9			10 n		sw.	0.07	1.8	light snow	
Deadwood, Dakota	25.27	641.8	30.22	767.6	21	— 6.1	87	sw.	2	0.9			10 s			0	0	cloudy	
Decatur, Texas					40	4.4	89	ne.	6	2.7			10 s			0.77	19.6	cloudy	
Delaware Breakwater, Del.	30.40	772.1	30.42	772.7	36	2.2	79	n.	19	8.5		4 c;cs	3 s	w.		inap.	inap.	fair	
Denison, Texas	29.20	741.7	30.04	763.0	42.2	5.7	100	calm	0	0			10 n			0.42	10.7	light rain	
Denver, Colorado	24.66	626.4	30.18	766.6	24.0	— 4.4	56	w.	24	10.7		0	0			0	0	clear	
Des Moines, Iowa	29.16	740.7	30.13	765.3	38	3.3	82	sw.	2	0.9			10 n		sw.	0.03	0.8	light rain	
Detroit, Michigan	29.64	752.8	30.40	772.1	35.0	1.7	69	s.	4	1.8			10 s		calm	inap.	inap.	cloudy	
Dodge City, Kansas	27.27	692.6	30.02	762.5	32	0.0	85	s.	9	4.0		1 cs	0			0	0	clear	
Dubuque, Iowa	29.41	747.0	30.18	766.6	33.3	0.7	78	s.	3	1.3			10 s		calm	0	0	cloudy	
Duluth, Minnesota	29.30	744.2	30.06	763.5	21	— 6.1	76	w.	2	0.9			10 s		w.	0	0	cloudy	
Eagle Pass, Texas	29.28	743.7	30.12	765.0	48.0	8.9	86	nw.	5	2.2			10 s			0.02	0.5	cloudy	
Eagle Rock, Idaho	25.30	642.6	30.26	768.6	8	—13.3	80	n.	4	1.8			10 s			0.51	13.0	cloudy	
Eastport, Maine	29.91	759.7	29.98	761.5	23.5	— 4.7	53	nw.	24	10.7		1 k	0	nw.		inap.	inap.	clear	
El Paso, Texas	26.30	668.0	30.18	766.6	32.1	0.1	81	nw.	8	3.6		0	1 s		w.	0	0	clear	
Erie, Pennsylvania	29.65	753.1	30.42	772.7	31	— 0.6	88	calm	0	0			10 s			inap.	inap.	cloudy	
Escanaba, Michigan	29.48	748.8	30.20	767.1	16	— 8.9	83	sw.	2	0.9		3 c	3 s			inap.	inap.	fair	
Florence, Arizona																			
Fort Apache, Arizona	25.06	636.5	30.18	766.6	15	— 9.4	55	e.	3	1.3		0	0			inap.	inap.	clear	
Fort Assinnaboine, Montana	27.11	688.6	30.15	765.8	19	— 7.2	58	sw.	10	4.5		0	0			0.02	0.5	clear	
Fort Bennett, Dakota	28.39	721.1	30.13	765.3	28	— 2.2	77	nw.	1	0.4			10 s			0	0	cloudy	
Fort Benton, Montana	27.16	689.9	30.14	765.5	20	— 6.7	73	w.	8	3.6		0	0			inap.	inap.	clear	
Fort Buford, Dakota	28.00	711.2	30.20	767.1	13	—10.6	66	sw.	4	1.8		0	0			0.04	1.0	clear	
Fort Custer, Montana	26.85	682.0	30.23	767.8	10	—12.2	100	se.	5	2.2		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.12	638.0	30.10	764.5	37	2.8	58	sw.	4	1.8			10 s		sw.	0	0	cloudy	
Fort Elliott, Texas	27.14	689.3	30.07	763.8	28	— 2.2	37	nw.	8	3.6		0	0			0.01	0.3	clear	
Fort Gibson, Indian T'y	29.43	747.5	30.03	762.7	41.1	5.1	92	nw.	2	0.9			10 n			0.50	12.7	light rain	
Fort Grant, Arizona	25.30	642.6	30.20	767.1	21	— 6.1	96	ne.	4	1.8		0	0			0	0	clear	
Fort Griffin, Texas	28.72	729.5	30.10	764.5	41	5.0	82	n.	4	1.8			10 s		calm	0.20	5.1	cloudy	
Fort Keogh, Montana	27.49	698.2	30.18	766.6	22	— 5.6	73	sw.	5	2.2		0	0			inap.	inap.	clear	
Fort Macon, North Carolina	30.33	770.4	30.34	770.6	48	8.9	93	ne.	25	11.2			10 s		calm	0.06	1.5	cloudy	
Fort McKavett, Texas	27.77	705.3	30.16	766.1	40	4.4	92	nw.	4	1.8			10 n			0.15	3.8	light rain	
Fort Missoula, Montana	26.75	679.4	30.21	767.3	19	— 7.2	87	sw.	2	0.9		0	0			0	0	clear	
Fort St. Michaels, Alaska	29.68	753.9	29.71	754.0	4	—15.6	74	ne.	15	6.7		0	5 s		ne.	0	0	fair	
Fort Shaw, Montana	26.27	667.2	30.13	765.3	19	— 7.2	58	sw.	18	8.0		0	0			0	0	clear	
Fort Sill, Indian Territory	28.72	729.5	30.05	763.3	39.5	4.2	94	e.	2	0.9			10 s			0.01	0.3	cloudy	
Fort Stevenson, Dakota	28.10	713.7	30.16	766.1	11	—11.7	80	nw.	9	4.0		3 c	3 s	w.	w.	0	0	fair	
Fort Verde, Arizona					19.6	— 6.9	58	nw.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.24	717.3	30.06	763.5	46	7.8	93	n.	5	2.2			10 n		n.	0.33	8.4	light rain	
Galveston, Texas	29.97	761.2	30.01	762.2	66	18.9	95	s.	14	6.3		0	5 s			1.15	29.2	fair	
Grand Haven, Michigan	29.59	751.6	30.30	769.6	32.0	0.0	83	se.	2	0.9			10 s		calm	0	0	cloudy	
Hatteras, North Carolina	30.28	769.1	30.30	769.6	47	8.3	86	ne.	22	9.8		4 k	5 k		n.	0.05	1.3	cloudy	
Helena, Montana	25.71	653.0	30.14	765.5	16	— 8.9	70	w.	2	0.9		0	8 s		calm	inap.	inap.	cloudy	
Henrietta, Texas	29.03	737.3	30.10	764.5	40	4.4	100	n.	4	1.8			10 n			0.07	1.8	light rain	
Huron, Dakota	28.55	725.2	30.09	764.3	26	— 3.3	70	nw.	4	1.8		3 cs	0			0	0	clear	
Indianapolis, Indiana	29.39	746.5	30.23	767.8	35	1.7	79	se.	4	1.8			10 s		se.	0	0	cloudy	
Indianola, Texas	29.94	760.5	29.97	761.2	53.5	11.9	100	n.	5	2.2			fg.			0.50	12.7	dense fog	
Jacksboro, Texas	28.83	732.3	30.07	763.8	40	4.4	100	n.	7	3.1			10 n			0.43	10.9	light rain	
Jacksonville, Florida	30.22	767.6	30.28	769.1	60	15.6	96	sw.	2	0.9		2 cs	fg.			0	0	fair	
Keokuk, Iowa	29.43	747.5	30.13	765.3	33.5	0.8	78	e.	6	2.7			10 s		e.	0	0	cloudy	
Key West, Florida	30.17	766.3	30.20	767.1	70.3	21.3	74	e.	9	4.0		2 cs	1 s			0.02	0.5	clear	
Kittyhawk, North Carolina	30.37	771.4	30.39	771.9	45	7.2	76	ne.	27	12.1		hz.	6 s		w.	0.01	0.3	fair	
Knoxville, Tennessee	29.15	740.4	30.23	767.8	43.2	6.2	95	ne.	8	3.6			10 n		calm	0.32	8.1	heavy rain	
La Crosse, Wisconsin	29.28	743.7	30.12	765.0	32	0.0	68	s.	9	4.0			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.14	663.9	30.17	766.3	22.0	— 5.6	91	calm	0	0		0	0			inap.	inap.	clear	
Leavenworth, Kansas	29.14	740.1	30.10	764.5	38	3.3	72	calm	0	0			10 s			0	0	cloudy	
Lewiston, Idaho	29.09	738.9	29.96	761.0	33.5	0.8	76	e.	4	1.8			10 s		e.	0	0	cloudy	
Little Rock, Arkansas	29.67	753.6	30.00	762.0	43	6.1	93	ne.	4	1.8			10 n			0.18	4.6	light rain	
Los Angeles, California	29.85	758.2	30.25	768.3	41.3	5.2	73	ne.	4	1.8		0	0			0	0	clear	
Louisville, Kentucky	29.64	752.8	30.23	767.8	36.0	2.2	79	ne.	8	3.6			10 n		calm	0.02	0.5	light rain	
Lynchburg, Virginia	29.68	753.9	30.40	772.1	41.2	5.1	65	calm	0	0			10 s		sw.	0	0	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.11	739.4	30.20	767.1	30	— 1.1	77	s.	6	2.7		1 cs	0	calm		0	0	clear	
Marquette, Michigan	29.36	745.7	30.14	765.5	26	— 3.3	76	sw.	9	4.0		2 ck	2 s	se.	se.	inap.	inap.	fair	
Mason, Texas	28.36	720.3	30.10	764.5	41	5.0	92	nw.	12	5.4			8 ks		sw.	0.56	14.2	cloudy	
Memphis, Tennessee	29.68	753.9	30.04	763.0	43	6.1	100	ne.	4	1.8			10 n			0.12	3.0	light rain	
Milwaukee, Wisconsin	29.46	748.3	30.26	768.6	34	1.1	79	s.	5	2.2		0	1 s			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.09	764.3	30.13	765.3	65.0	18.3	100	sw.	8	3.6			fg			0.85	21.6	dense fog	
Montgomery, Alabama	29.92	760.0	30.16	766.1	65.4	18.6	92	s.	5	2.2			10 s			0.33	8.4	threatening	
Moorhead, Minnesota	28.94	735.1	30.04	763 0	15	— 9.4	83	calm	0	0			10 s			0	0	cloudy	
Morgantown, W. Virginia	29.34	745.2	30.40	772.1	30.5	— 0.8	86	calm	0	0		3 cs	7 s		w.	0	0	cloudy	
Mt. Washington, N. H.	23.43	595.1	30.06	763.5	— 2.0	—18.9	100	nw.	75	33.5			fg		nw.	0.74	18.8	dense fog	
Nashville, Tennessee	29.56	750.8	30.12	765.0	42.2	5.7	92	e.	4	1.8			10 n			0.39	9.9	light rain	
New Haven, Connecticut	30.20	767.1	30.32	770.1	29	— 1.7	67	w.	5	2.2		1 cs	0	nw.		0	0	clear	
New London, Connecticut	30.28	769.1	30.33	770.4	31	— 0.6	78	nw.	7	3.1		2 c	0	calm		inap.	inap.	clear	
New Orleans, Louisiana	30.03	762.7	30.09	764.3	68.0	20.0	93	se.	9	4.0			fg			0	0	dense fog	
Newport, Rhode Island	30.24	768.1	30.29	769.4	35.2	1.8	71	w.	18	8.0		0	0			0.02	0.5	clear	
New River, N. Carolina					50	10.0	72	n.			1		10 s		ne.	0.07	1.8	cloudy	
New Shoreham, Rhode I'd.	30.28	769.1	30.31	769.9	35.0	1.7	64	w.	14	6.3		0	0			0	0	clear	
New York, New York	30.19	766.8	30.38	771.6	34	1.1	60	w.	11	4.9		5 cs	0	w.		0	0	fair	
Norfolk, Virginia	30.40	772.1	30.43	772.9	39	3.9	54	ne.	10	4.5		2 ks	2 s	ne		0	0	fair	
North Platte, Nebraska	27.00	685.8	30.12	765.0	12.6	—10.8	78	w.	6	2.7		0	0			0	0	clear	
Olympia, Washington T'y.	29.78	750.4	29.82	757.4	37.0	2.8	92	sw.	9	4.0		0	9 n		w.	0.69	17.5	light rain	
Omaha, Nebraska	28.84	732.5	30.11	764.8	36.0	2.2	85	s.	6	2.7			10 n			0.01	0.3	light snow	
Ooglaamie, Pt. Barrow, Alas-	30.18	766.6	30.21	767.3	—33.2	—36.2	87	ne.	5	2.2		6 c	0			0	0	fair	
Oswego, New York	30.02	762.5	30.38	771.6	34.8	1.6	64	nw.	10	4.5			10 s		w.	0.01	0.3	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.13	765.3	30.16	766.1	66.2	19.0	100	se.	10	4.5		0	4 s		s.	0	0	fair	
Philadelphia, Pa.	30.36	771.1	30.42	772.7	33	0.6	68	nw.	7	3.1		3 ck	sk.	nw.		0	0	fair	
Pike's Peak, Colorado	17.26	438.4	29.96	761.0	—15	—26.1	100	nw.	12	5.4		0	8 s		nw.	0	0	cloudy	
Ploche, Nevada	24.12	612.6	30.32	770.1	15	— 9.4	56	sw.	2	0.9		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.57	751.1	30.42	772.7	31.9	— 0.1	78	n.	2	0.9		9 k	fg	w.	calm	0	0	cloudy	
Port Eads, Louisiana	30.12	765.0	30.13	765.3	61.5	16.4	93	s.	7	3.1		hz	0	calm		0	0	clear	
Port Huron, Michigan	29.66	753.4	30.39	771.9	25.3	— 3.7	85	sw.	4	1.8		10 cs	sk.	calm		0.01	0.3	cloudy	
Portland, Maine	30.07	763 8	30.12	765.0	32	0.0	68	w.	25	11.2		0	0			0	0	clear	
Portland, Oregon	29.99	761.7	30.06	763.5	38	3.3	82	s.	12	5.4			10 n		sw.	0.51	13.0	light rain	
Portsmouth, N. Carolina					48	8.9	86	ne.	14	6.3			10 s		ne.	0	0	cloudy	
Prescott, Arizona	24.82	630.4	30.20	767.1	14	—10.0	27	calm	0	0		0	0			0	0	clear	
Punta Rassa, Florida	30.21	776.3	30.22	767.6	65	18.3	87	e.	8	3.6		0	1 s		calm	0	0	clear	
Red Bluff, California	29.87	758.7	30.25	768.3	40.0	4.4	73	s.	2	0.9			10 s		w.	0	0	cloudy	
Rio Grande City, Texas	29.78	756.4	30.03	762.7	52	11.1	93	nw.	3	1.3			10 s		nw.	0.10	2.5	cloudy	
Rochester, New York	29.69	754 1	30.40	772.1	29	— 1.7	88	sw.	5	2.2		0	9 s		sw.	0	0	cloudy	
Roseburg, Oregon	29.68	753.9	30.25	768.3	39.8	4.3	68	sw.	9	4.0		0	5 ks		nw.	0.10	2.5	fair	
Sacramento, California	30.24	768.1	30.32	770.1	36.2	2.3	79	se.	6	2.7		0	0			0	0	clear	
St. Louis, Missouri	29.50	749.3	30.14	765.5	35.1	1.7	79	e.	11	4.9			10 n			0.05	1.3	light rain	
St. Paul, Minnesota	29.11	739.4	30.06	763.5	26.0	— 3.3	88	se.	8	3.6		0	0			0	0	clear	
St. Vincent, Minnesota	29.02	737.1	30.00	762.0	3	—16.1	100	s.	5	2.2		0	0			0	0	clear	
Salt Lake City, Utah	25.72	653.3	30.29	769.4	18	— 7.8	42	calm	0	0		0	0			0.18	4.6	clear	
San Antonio, Texas	29.30	744.2	30.03	762.7	48.6	9.2	93	nw.	2	0.9			10 s		n.	0.21	5.3	cloudy	
San Diego, California	30.07	763.8	30.14	765.5	41.7	5.4	42	ne.	6	2.7		0	0			0	0	clear	
Sandusky, Ohio	29.67	753.6	30.39	771.9	31	— 0.6	88	s.	6	2.7		0	5 s			0	0	fair	
Sandy Hook, New Jersey	30.35	770 9	30.39	771.9	35.0	1.7	64	nw.	15	6.7		8 ck	0	nw.		0	0	cloudy	
San Francisco, California	30.30	769.6	30.37	771.4	48	8.9	67	w.	7	3.1		0	0			0	0	clear	
Santa Fé, New Mexico	23.17	588.5	30.18	766.6	13.3	—10.4	82	nw.	2	0.9		0	0			0.03	0.8	clear	
Savannah, Georgia	30.14	765.5	30.24	768.1	62	16.7	87	s.	4	1.8		0	fg			0	0	clear	
Shreveport, Louisiana	29.69	754.1	29.94	760.5	49	9.4	93	se.	2	0.9			10 s		calm	0.12	3.0	cloudy	
Silver City, New Mexico	24.22	615.2	30.08	764.0	25	— 3.9	58	n.	10	4.5		0	0			0.29	7.4	clear	
Sitka, Alaska	29.98	761.5	30.05	763.3	35.1	1.7	79	n.	4	1.8		7 k	1 s	n.	calm	0.61	15.5	cloudy	
Smithville, North Carolina	30.26	768.6	30.30	769.6	53	11.7	89	ne.	13	5.8			10 s			0.03	0.8	cloudy	
Spokane Falls, Wash. Ter.	27.88	708.1	30.02	762.5	21	— 6.1	87	s.	2	0.9			10 n		calm	0.02	0.5	light snow	
Springfield, Illinois	29.44	747.8	30.17	766.3	38	3.3	61	e.	8	3.6			10 s		sw.	0	0	cloudy	
Springfield, Massachusetts	30.17	766.3	30.31	769.9	35.2	1.8	58	nw.	10	4.5		3 k	0	w.		0	0	clear	
Springfield, Mo.	28.56	725.4	30.14	765.5	37	2.8	89	se.	7	3.1			10 n			0.03	0.8	light rain	
Stockton, Texas	27.00	685.8	30.14	765.5	30.6	— 0.6	88	s.	4	1.8		0	0			0	0	clear	
Thatcher's Island, Mass.	30.19	766.8	30.25	768.3	33.2	0.7	78	w.	12	5.4		1 k	0	w.		0	0	clear	
Toledo, Ohio	29.63	752.6	30.37	771.4	32	0.0	78	calm	0	0		9 cs	0	sw.		0	0	cloudy	
Tucson, Arizona	27.69	703.3	30.19	766.8	27	— 2.8	67	s.	7	3.1		0	0			0	0	clear	
Umatilla, Oregon	29.57	751.1	29.96	761.0	38.3	3.5	78	sw.	16	7.2			10 s		sw.	0.01	0.3	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.76	755.9	30.04	763.0	58	14.4	100	se.	4	1.8			fg		calm	0.54	13.7	dense fog	
Visalia, California	29.93	760.2	30.32	770.1	30.5	— 0.8	78	se.	4	1.8		0	0			0	0	clear	
Washington, D. C.	30.34	770.6	30.46	773.7	30.0	— 1.1	88	n.	1	0.4		5 c	fg	nw.		0	0	fair	
West Los Animas, Colorado	26.00	660.4	30.14	765.5	12	—11.1	91	nw.	6	2.7		4 cs	0	nw.		0	0	fair	
Wickenburg, Arizona					28	— 2.2	84	calm			0	0	0			0	0	clear	
Williamsport, Pa.	29.77	756.1	30.40	772.1	35	1.7	64	n.	3	1.3		6 ck	1 s	nw.	nw.	0	0	fair	
Wilmington, N. Carolina	30.24	768.1	30.30	769.6	55	12.8	69	e.	8	3.6		10 k	0	calm		0.12	3.0	cloudy	
Winnemucca, Nevada	25.62	650.7	30.16	766.1	27	— 2.8	67	sw.	16	7.2			10 ks		nw.	inap.	inap.	cloudy	
Wood's Holl, Mass.	30.22	767.6	30.26	768.6	36	2.2	69	nw.	18	8.0		0	0			0	0	clear	
Yankton, Dakota	28.64	727.4	30.06	763 5	26	— 3.3	76	s.	3	1.3		0	0			0	0	clear	
Yuma, Arizona	30.04	763.0	30.19	766.8	37.1	2.8	49	ne.	3	1.3		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1			50.0	10.0	75	calm	0	0		0	2 s			0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.10	764.5	30.11	764.8	78	25.6	77	e.				8 ck	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.94	760.5	29.96	761.0	77	25.0	90	calm	0	0			10 ks		se.	0.01	0.3	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.98	761.5	30.00	762.0	75	23.9	95	e.				0	2 ks			0.1	3.	clear	B. Bigar.
Havana, Cuba, W. I.	30.10	766.1	30.21	767.3	70	21.1	100	calm	0	0		5 cs	2 ks	calm	calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	70.5	21.4	78	n.	1	0.4		3 ck	6 s	e.	e.	0	0	fair	Robert Johnstone
Navassa, W. I.	29.99	761.7	30.07	763.8	78	25.6	65	ne.	12	5.4		5 ck	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	77	25.0	91	e.			2	5 k	5 ps	e.		1.100	27.9	½ cloudy	Dr. O. J. Hering
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.94	760.5	80	26.7	95	calm			0	1 c	1 k	calm	calm	0	0	clear	Miss Flora A. Nichols.
Rivas, Nicaragua					74	23.3	92	ne.			3	cs	2 ks	sw.	ne.	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.11	764.8	30.13	765.3	75	23.9	69	n.	4.8	2.1		1 c	0			0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.98	761.5	30.04	763.0	—29.0	—33.9		n.	1	0.4		0	1 s		n.	0	0	fair	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads. India.	29.95	760.7	79.2	26.2	78	ne.			1		4							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 38° 28′, E. 19° 33′	30.10	764.5	59.2	15.1	74	n.			4		7	ne.				4	n.	d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.08	764.0	67.5	19.7	66	wsw.			2		3	se.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.90	759.4	68	20.0	90	calm			0		8	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.20	767.1	43	6.1		nne.			2–3		10							overcast	Capt. F. W. Egerton.
H. M. S. Coquette																			Lieut. J. L. Burr
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.44	773.2	47.5	8.6	85	nnw.			1–2		0							blue sky	Capt. S. Long.
H. M. S. Diamond, S. 21° 15′, W. 28° 28′	30.10	764.5	79	26.1	82	ene.			2		2					2	e.	d. clouds	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	30.19	766.8	67	19.4	90	ssw.			1		6	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 22° 10′, W. 85° 09′	29.97	761.2	74.5	23.6	98	e.			4–5		4	e.				3	e.	d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 52° 07′, W. 60° 49′	29.24	742.7	49	9.4	85	calm			0		7					sm'h		d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.92	760.0	83	28.3		nw.			1-2		4					1	wsw.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	29 96	761.0	47	8.3		nw.			1		0							blue sky	Capt. G. Robinson.
H. M. S. Espiegle																			Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′ E. 43° 12′	29.91	759.7	78.5	25.8	80	s.			5		0					3	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	29.97	761.2	45	7.2	71	wnw.			4		5	wnw.				2	nw.	misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.98	761.5	62	16.7	86	nnw.			1		6							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 42° 03′, W. 60° 05′	29.43	747.5	63	17.2	88	nw.			2		7							d. clouds	Capt. L. Jones.
H. M. S. Iris, Off Jaffa, Palestine	29.96	761.0	65	18.3	63	sw.			3		0					4	sw.	blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.30	769.6	54	12.2	79	e.			1–2		2	ne.						blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	30.28	769.1	60	15.6	73	ne.			1–2		0					2	n.	misty	Capt. A. Carpenter.
H. M. S. Malabar, Bombay, India	29.95	760.7	79	26.1	86	nnw.			1–2		3	nw.						d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, N. 17° 00′, W. 62° 36′	30.08	764.0	78	25.6	80	ene.			6		3	ene.				1	e.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 24° 48′, E. 48° 00′	29.86	758.4	79	26.1	78	e.			2		3	ese.				4	ese.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 32° 14′, W. 13° 10′	30.18	766.6	73	22.8	100	n.			2		0							blue sky	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, Muscat, Arabia	30.15	765.8	68.1	20.1		nnw.			2									d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	29.66	753.4	39	3.9	100	ssw.			2		9							raining	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, Ind	30.03	762.7	81.5	27.5	83	ne.			1		7	ne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 34° 45′, E. 19° 59′	30.12	765.0	60	15.6	88	nnw.			4		8	nnw.				4	nnw.	d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Triumph, S. 0° 15′, W. 81° 09′	29.94	760.5	75	23.9	90	sw.			3		10	sw.				4	s.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.02	762.5	74	23.3		n.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.22	767.6	63.5	17.5		nw.			2–3		3	wnw.				2	nw.	d. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	30.03	762.7	75.2	24.0	79	ne.			3		5		sw.			3	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 14° 45′, W. 61° 11′	30.08	764 0	75.2	24.0	91	ne.			2		6							showery	Capt. A. L. Broberg.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
N. Yard, Pensacola, Fla	30.13	765.3	67	19.4	89	sse.	3	1.3			10		se.	0	0			foggy	
N. Yard, Portsmouth, N. H.	30.20	767.1	32	0.0		nw.	19	8.5			0			0	0			clear	
Naval Hospital Yokohama, Japan	29.83	757.7	41	5.0	82	calm			0		10		w.	0	0			cloudy	
Adams, Mollendo, Peru	29.75	755.6	67	19.4	89	s.			1		2					light	sse.	fair	
Alaska, S. 14° 49′, W. 76° 28′	29.93	760.2	68	20.0	95	se.			2		5			0	0	sm'h		fair	
Alert, Hong Kong, China*	30.16	766.1	60	15.6	65	sw.			1		0			0	0	sm'h		hazy	
Alliance, Boston, Mass	30.16	766.1	38	3.3	63	w.			2		0			0	0			clear	
Ashuelot, Tientsin, China	30.54	775.7	21	— 6.1	100	wsw.			2		0							clear	
Brooklyn, S. 6° 55′, W. 33° 06′	29.92	760.0	80	26.7	87	se.	12	5.4			5		se.	0	0	mod.	ese.	fair	
Colorado, New York, N. Y	30.35	770.9	34	1.1	62	nw.	3	1.3			8		w.	0	0			cloudy	
Essex, Hampton Roads, Va	30.44	773.2	41	5.0	65	nne.			4		2		ne.					clear	
Franklin, Norfolk, Va	30.39	771.9	40	4.4	64	ne.	6	2.7			2			0	0			fair	
Galena, N. 6° 02′, W. 10° 39′	29.97	761.2	79	26.1	82	n.			2		0					mod.	ne.	hazy	
Independence, N. Yard, Mare I'd, Cal	30.18	766.6	41	5.0	82	wnw.	4.8	2.1			0			0	0			clear	
Kearsarge, New Orleans, La	30.08	764.0	67	19.4	95	calm			0		10							foggy	
Lackawanna, Valparaiso, Chili†	30.12	765.0	63	17.2	94	nw.			1		8		nw.					cloudy	
Lancaster, Villafranca, France	30.26	768.6	66	18.9	68	sse.			0-1		0			0	0	sm'h	sw.	misty	
Michigan, Erie, Pa	30.04	763.0	29	— 1.7		s.			1		2							fair	
Minnesota, Newport, R. I	30.29	769.4	36	2.2	80	w.	4	1.8			0					sm'h		clear	
Monocacy, Yokohama, Japan	29.98	761.5	43	6.1	92	nw.			1		10		calm					cloudy	
Nipsic, Naples, Italy	30.22	767.6	54	12.2	55	sw.			2		2					sm'h		clear	
Onward, Callao, Peru†	30.05	763.3	67	19.4	92	sse.			1		8		n.			long	w.	cloudy	
Palos, Hong Kong, China	30.32	770.1	55	12.8	50	ese.			1		0							clear	
Passaic, Washington, D. C	30.43	772.9	28	— 2.2		ne.			1		2							fair	
Pensacola, Callao, Peru	29.99	761.7	66	18.9	94	calm	0	0			8		se.	0	0	sm'h	w.	cloudy	
Powhatan, Boston, Mass	30.18	766.6	32	0.0	89	wnw.			2		0							clear	
Quinnebaug, Villafranca, France	30.28	769.1	58	14.4	76	e.			2		0			0	0	long	ssw.	clear	
Ranger, N. 18° 04′, W. 102° 51′*	29.88	758.9	75	23.9	86	n.			2		2		calm	0	0	mod.	sw.	fair	
Richmond, Apia, Samoa Islands*	29.54	750.3	82	27.8	87	ese.			3		2		ne.	0.23	5.8			clear	
Shenandoah, Montevideo, Uruguay*	29.70	754.4	74	23.3	56	nnw			2		1					sm'h		clear	
St. Louis, League Island, Pa	30.62	777.7	30	— 1.1	68	wsw.	3	1.3			0			0	0			clear	
Swatara, N. 33° 50′, E. 136° 26′*	29.67	753.6	56	13.3	63	nnw.			4		8		w.			mod.	w.	fair	
Tennessee, New York, N. Y	30.36	771.1	35	1.7	63	nw.	6	2.7			5		nw.	0	0			fair	
Vandalia, Port Castre Lt. Lucia, W. I	30.07	763.8	79	26.1	82	ene.			1		5		ene.					fair	
Wabash, Boston, Mass	30.23	767.8	34	1.1	62	wnw.	5	2.2			0			0	0			clear	
Wachusetts, Sitka, Alaska	30.00	762.0	32	0.0		ne.			1		5		ne.					fair	
Wyoming, Port Royal, S. C	30.21	767.3	59	15.0	94	ssw.	3	1.3			5		calm	0	0			foggy	
Yantic, N. 17° 50′, W. 75° 21′*	30.03	762.7	79	26.1	78	e.			3		8		e.			mod.		cloudy	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Nova Scotian, Capt. W. Richardson,																	
S. S. Polynesian, Capt. Robt. Brown, N. 44° 11′, W. 63° 54′*	29.66	753.4	29	—1.7		nnw.	8		3		nw.	0	0	mod.	nnw.	clear	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, N. 51° 06′, W. 35° 35′*	29.84	757.9	45	7.2		s.	5		10		sw.			h'vy	ne.	cloudy	J. G. Stephens.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, N. 47° 28′, W. 37° 41′	29.64	752.8	52	11.1	93	w.	6		10		wsw.			r'gh	sw.	overcast	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	30.04	763.0	46	7.8	69	ne.	2		2		ne.	0	0			clear.	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, N. 53° 24′ W. 4° 39′*†	30.14	765.5	49	9.4	93	sw.	2		10		wsw.			long high	sw.	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 47° —′, W. 40° —′†	29.77	756.1	48	8.9	85	sw.	6				w.					d. clouds	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Utopia, Capt. A. McRitchie, N. 42° 57′, W. 44° 21′*†	29.82	757.4	59	15.0	87	sw.	7		10		wsw.	0	0	high cross			W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 19° 24′, W. 74° 43′†*	30.29	769.4	80	26.7	78	ene.	7		1		calm	½ h'r	light	long	e. ene.	fair	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Kingston, Jamaica, W. I.*	30.14	765.5	74	23.3		calm	0		4		se.	0	0			very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin																	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta N. 35° 00′, W. 74° 30′						var.	1					0	0			fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse, N. 18° —′, W. 75° —′	29.81	757.2				se.	3		3		se.	0	0	cross	se.	clear	Fisher & Welden.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright,																	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell																	
British Merchant, Capt. E. J. Molony, S. 8° 15′, E. 92° 11′	29.85	758.2	80.8	27.1	87	wsw.	3–4		5							d. clouds	
Bk. Caldew, Capt. W. Peterson S. 20° 10′, W. 70° 55′	30.04	763.0	70.2	21.2		sse.	4		6							misty	
S. S. Cipero, Capt. W. N. Lailey Off Horse Island, Ireland	29.90	759.4	49	9.4	64	sw.	4		10					4	ssw.	overcast	
S. City of Agra, Capt. Thos. Young. S. 20° 10′, W. 20° 02′	30.09	764.3	77.5	25.3		ese.	5		2							d. clouds	
Bk. Glaramara, Capt. R. Morton, N. 13° 57′, W. 35° 52′	30.06	763.5	76	24.4	81	ne.	4		3							d. clouds	
Glencairn, Capt. R. S. Tannock, S. 38° 18′, W. 5° 24′	30.14	765.5	65	18.3	73	wnw.	4		7							d. clouds	
S. S. Gordon Castle, Capt. W. Waring, N. 37° 20′, E. 4° 01′	30.44	773.2	62.5	16.9	66	calm	0		1							blue sky	
Hermine, Capt. S. G. Jones, S. 26° 58′, W. 77° 25′	30.06	763.5	65.5	18.6	90	sse.	3		8							overcast	
S. S. Humboldt, Capt. A. W. Jeffery, S. 14° 50′, W. 36° 22′	30.04	763.0	81.5	27.5	78	e.	3		5							d. clouds	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 2° 20′, E. 87° 00′	29.90	759.4	84.9	29.4	75	w.	3		6							showery	
May Hulse, Capt. H. Youlden, R. N. R., S. 3° 54′, W. 31° 46′	29.90	759.4	82	27.8	87	sse.	5		4							d. clouds	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson N. 27° 50′, W. 16° 21′	30.34	770.6	66.8	19.3	64	e.	4		0							blue sky	
Naiad, Capt. J. Smith, S. 21° 53′, W. 21° 38′	30.15	765.8	77.5	25.3	77	ne.	4		3							d. clouds	
Pole Star, Capt. F. Norman, S. 41° 18′, W. 59° 10′	29.44	747.8	62.2	16.8	94	w.	3		9							misty	
Queen of Cambria, Capt. M. Parry, S. 40° 28′, W. 14° 28′	29.64	752.8	60.8	16.0	88	nnw.	6		10							overcast	
S. S. Strathleven, Capt. C. W. Pearson,																	
S. Superb, Capt. Berridge. N. 3° 30′, W. 26° 45′	29.92	760.0	79	26.1	95	ne.	1		10							showery	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham N. 51° 18′, W. 9° 25′*†	30.20	767.1	56	13.3		sw.	5		5		sw.			mod.	s.	showery	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent San Francisco.*																	
S. S. Newbern, Capt. E. Y. Rogers, N. 26° 05′. W. 113° 38′†	30.10	764.5	61	16.1	50	n.	5		3		n.	0	0	mod.	nw.	clear	
CROMWELL LINE. *Clark & Seaman, Agents, New York.*																	
S. S. Hudson, Capt. H. R. Freeman																	Crowell & Henry.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains, N. 49° 01′, W. 29° 13′*	29.75	755.6	51	10.6		var.	2		5		sw.	0	0			fair	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, N. 48° 43′. W. 38° 00′	29.87	758.6	42.8	6.0		ssw.	3		5		ssw.	2 h'r	shr's	sm'h	sw.	showery	
S. S. St. Laurent, Capt. A. Servan																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein N. 49° 51′, W. 18° 04′*	29.92	760.0	53	11.7	86	ssw.	5		10		ssw.	2 h'r	light	r'gh	sw.	cloudy	P. Froehlich, 3d Off.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch.																	Patterson & Thompson.
LAMPERT & HOLT S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, N. 25° —′, W. 19° —′*†	30.40	772.1	70	21.1		e.	3		1		e.	0	0	long	n.	clear	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.* S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.* S. S. England, Capt. T. P. Heeley N. 43° 27′, W. 40° 59′*	29.73	755.1				wsw.	3		10		w.	0	0	cross	nw.	cloudy	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.* S. S. Niagara, Capt. J. B. Baker N. 30° 19′, W. 80° 00′*†	30.38	771.6	69	20.6		wsw.	2		0			rain	rain	sm'h		clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, Port St. Jago, Cuba, W. I†	30.20	767.1	72	22.2		n.	2		0			0	0			clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE. S. S. Ailsa, Capt. J. W. Sansom, N. 38° 46′, W. 74° 05′†	30.48	774.2	40	4.4		n.	2								nnw.		
S. S. Bothnia, Capt. MacMackan																	E. F. Steinbridge, 3d off
S. S. City of Alexandria, Capt. L. F. Timmerman																	
S. S. City of Washington, Capt. J. W. Rey- Havana, Cuba, W. I*†	30.33	770.4	78	25.6		sse.	3								e.	clear	
S. S. Maas, Capt. T. N. Bonjer																	
S. S. New York, Capt. R. B. Quick																	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier, N. 50° 50′, W. 14° 06′*	29.99	761.7	51	10.6		wnw.	6								sw.	cloudy	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.* S. S. Gen. Werder, Capt. H. Christoffers																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander																	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer, N. 49° 36′, W. 19° 41′	29.91	759.7	53	11.7	93	ssw.	6		10		sw.	3 h'r	3 h'r	long	sw.	cloudy	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, Southampton, England*	30.29	769.4	59.0	15.0		ssw.	4-5		8		ssw.	0	0	mod.		cloudy	
S. S. Mosel, Capt. J. Hesse. N. 42° 26′, W. 56° 00′	29.69	754.1	41.0	5.0		w.	7		10		w.	2 h'r	light	r'gh	w.	cloudy	J. Hesse.
S. S. Neckar, Capt. R. Busslus																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. C. Undeutsch																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.* S. S. Belgic, Capt. H. Davison, N. 38° 39′, W. 125° 23′†	30.35	770.9	56	13.3	80	nw.	3		8		nw.	driz.	driz.	light	nw.	cloudy	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Hong Kong, China*†	30.55	776.0	63	17.2	67	calm	0		2		ne.					clear	
S. S. Oceanic, Capt. J. Metcalf, N. 32° 51′. E. 146° 53′*	30.03	762.7	63	17.2	83	sse.	3		9		sw.			sm'h		cloudy	
OCEAN S. S. CO. *George Young, Agent, New York.* S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	30.00	762.0				nw.	2		2		nw.					smoky	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 42° 06′, W. 70′ 10′†	30.02	762.5	39	3.9	47	wnw.	6		1		nw.	0	0	mod.	nw.	clear	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.* S. S. Mississippi, Capt. E. W. Holmes, N. 42° 38′, W. 124° 45′†	30.32	770.1	48	8.9	57	nw.	6		8		nw.			h'vy	nw.	fair	E. W. Holmes.
S. S. Williamette, Capt. L. Meyer Strait of Juan de Fuca, W. T*	29.77	756.1	38	3.3	90	s.	6		8		s.	1 h'r	1 h'r			snow & hail	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.* S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d officer
S. S. Columbia, Capt. Fred Bolles																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.97	761.2	39	3.9	91	sw.	5		10		sw.					heavy rain	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.* S. S. Ancon, Capt. J. N. Ingalls, N. 34° 24′, W. 120° 20′†	30.22	767.6	54	12.2	61	n.	4		0					sm'h		clear	
S. S. Geo. W. Elder, Capt. H. G. Morse, Esquimalt, B. C†	29.78	756.4	39	3.9		se.	2		8		se.			sm'h		cloudy	
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	30.25	768.3	46	7.8	92	ne.	2		0							clear	
S. S. Orizaba, Capt. Chas. B. Johnson																	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.52	775.2	46	7.8	84	calm	0		0			0	0			clear	T. Wallace.
S. S. State of California, Capt. G. Debney, N. 40° 26′, W. 124° 30′†	30.32	770.1	50	10.0	86	nw.	5		3		nnw.	0	0	short	nw.	fair	
S. S. Victoria, H. M. Hayward, N. 38° 20′, W. 123° 40′†	30.45	773.5	50	10.0	93	var.	4		8					h'vy	nw.	light rain	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.* S. S. Australia, Capt. ——, S. 6° 30′, W. 168° 10′	29.79	756.7	78	25.6	95	nw.	3		8		nw.			mod.	nw.	cloudy	A. Bannerman, 2d Offi.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.53	750.0	78	25.6	69	ene.	4		0			0	0			clear	W. H. Hawes, 2d Offi.
S. S. City of Rio de Janeiro, Capt. Cavarly, Hong Kong, China†	30.53	775.4	58	14.4	48	ne.	3		0			0	0			clear	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn																	E. Le Salk.
S. S. City of Tokio, Com. J. Maury N. 30° 19′, W. 140° 53′†	30.63	778.0	63	17.2	61	ene.	4		10		se.	0	0	light	se.	cloudy	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, Panama, Panama†	29.89	759.2	75	23.9	90	nw.	1		3		w.	0	0	sm'h		clear	
S. S. Grenada, Capt. M. Connolly, N. 23° 00′, W. 107° 25′†	29.97	761.2	66	18.9	90	n.	6		10		n.	6 h'r	6 h'r	short	nnw.	cloudy	
S. S. South Carolina, Capt. W. J. Russell, N. 15° 54′, W. 95° 32′*†	29.90	759.4	80	26.7	82	wsw.	2		0			0	0	light	w.	fine	
S. S. Zelandia, Capt. H. Webber, Auckland, New Zealand	29.91	759.7	71	21.7	85	s.	2		5f		sw.			mod.	s.	cloudy?	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind. Up'er	Amount and kind. Lo'er	Direction. Upper.	Direction. Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke, St Kitt's, W. I.						ene.	4		0			0	0	sm'h		clear	G. S. Locke
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, N. 49° 47', W. 7° 51'*	30.37	771.4	53	11.7	86	sw.	4		10		sw.	0	0	mod.	sw.	hazy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 43° 08', W. 56° 26'*†	29.92	760.0	38	3.3	100	wnw.	7		10		w.	0	0	r'gh	wnw.	cloudy	M. Eymond.
S. S. Waesland, Capt. H. Nickels. N. 49° 40', W. 12° 24'*	29.95	760.7	52	11.1		sw.	5		2		sw.	0	0	mod	nw.	light fog	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W A. Scholten, Capt. G. J. Vis.																	
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub, N. 55° 24', W. 22° 47'†	29.88	758.9	42.4	5.8		nw.	2		6?		w.	2 h'r	2 h'r	mod.	sw.	covered?	J. T. Ulberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 50° 42', W. 14° 25'*†	30.14	765.5	50	10.0		ssw.	5		5		w.	2 h'r	light	mod.	w.	fair	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 49° 20', W. 35° 28'*†	29.65	753.1	48	8.9		wsw.	5		10		wsw.	1 h'r	1 h'r	mod.	wsw.	d. clouds	W. Thomas.
S. S. Celtic, Capt. B. Gleadell New York, N. Y*†	30.14	765.5	35	1.7	70	ne.	4		2		ne.	2 h'r	sh'rs			foggy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. Liverpool, Eng.*†	30.26	768.6	49	9.4	85	w.	3		2		wsw.	0	0			d. clouds	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, N. 26° 01', W. 74° 37'†	30.47	773.9	72	22.2	85	e.	3	0	2 k		se.	0	0	sm'h		clear	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona																	
Bk. Alpha, Capt. Ole Grönn, Pozzuoli, Italy*†.	30.22	767.6	60	15.6		se.	1		1		e.	0	0			fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis																	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin, S. 23° 18', W. 42° 54'*†	29.50	749.3				nw to sw.								light	w.	cloudy	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.14	765.5				w.	5		5		w.	0	0			fair	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 15° 38', W. 38° 29'†	30.10	764.5				ene	3		5		ene.	0	0	mod.	nne.		
S. Enoch Train, Capt. H. D. Chapman. N. 47° 00' W. 21° 30'*	29.89	759.2				ssw.	4		10		sw.	0	0	light	w.	hazy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 39° 33', W. 48° 18'*	29.98	761.5				sw.	8		10		wsw.	0	0	long	wnw.	cloudy	J. C. Andersen.
U. S. F. C. S. FishHawk, Lt. Tanner, U.S.N., Washington, D. C†	30.44	773.2	34	1.1		ene.	1		4		ene.			sm'h		fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 40° 25', W. 56° 27'†	29.52	749.8	64	17.8		w.	5		0			0	0	sm'h		hazy	G. D. Morrison.
Bk. Freya, Capt. Blaonw, Limerick, Ireland			47	8.3		wsw.	5		5		wsw.	0	0			fair	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.08	738.6				calm	0		0			0	0			clear	
Bk. Geo. Booth, Capt D. Williams,																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 49° 02', W. 13° 30'*	29.85	758.2	53.2	11.8	99	wsw.	5		5		wsw.	0	0	long	nw.	fair	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 5° 35', W. 33° 30'*	29.82	757.4				se.	4		1		se.	shr's	shr's	mod.	ese.	clear	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 37° 00', W. 22° 12'*†	30.40	772.1				s.	3					0	0	mod.	s.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.22	767.6	52	11.1	59	ne.	3		0							clear	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 42° 10', W. 60° 30'*†	29.80	756.9				wnw.			5		wnw.	1 h'r	hail			squally	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 32° 19', W. 33° 56'*	30.12	765.0	64.9	18.3	97	var.	2		8		sw.				s.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.39	771.9	51	10.6	86	e.	4		8		sw.	0	0			cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 12° 35', W. 34° 21'*†	30.10	764.5				e.	6		5		e.			mod.	e.		I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton,																	N. P. Dutton.

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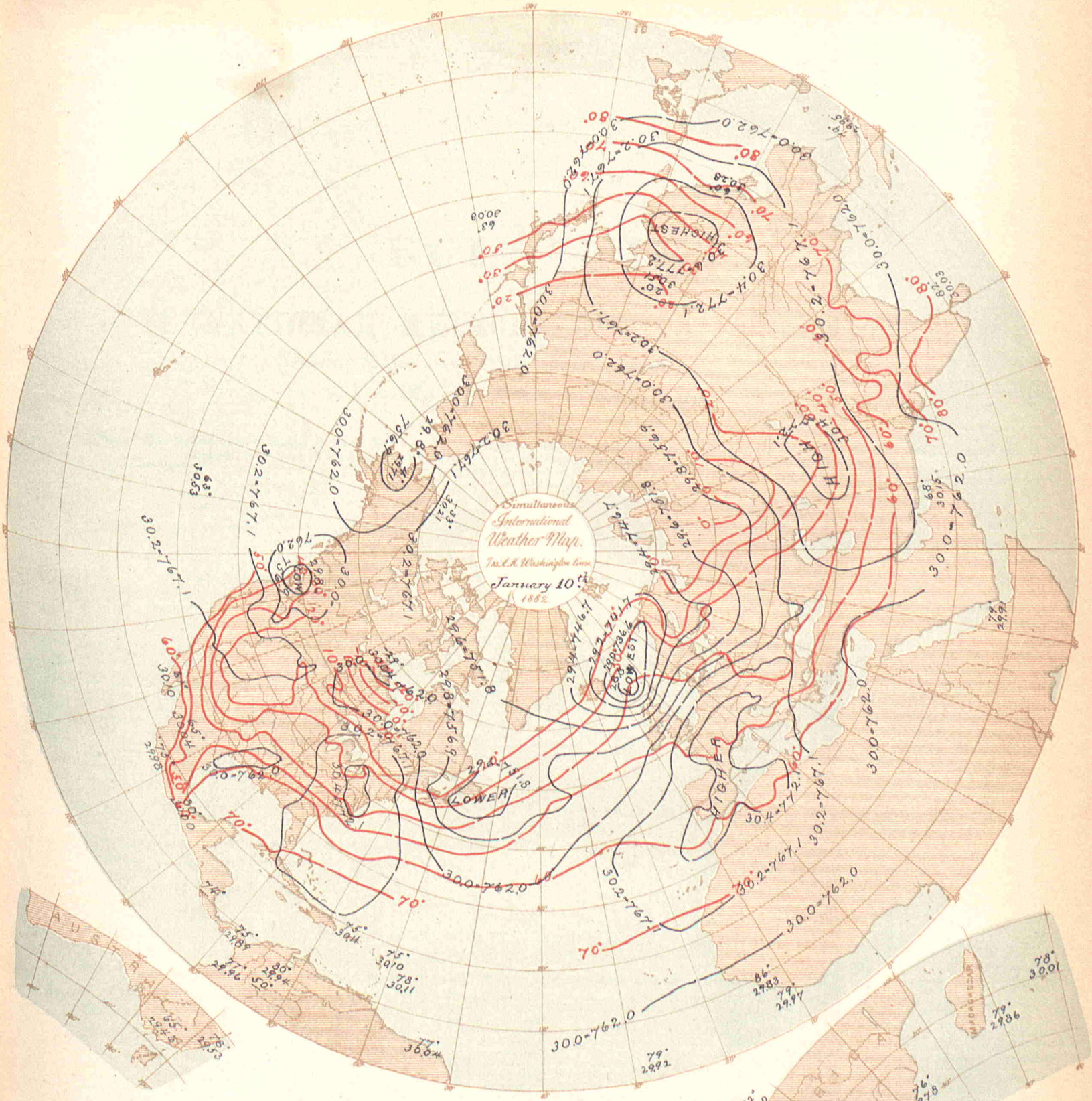
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Date, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Chief Signal Officer. U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 11, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.33	770.4	63.0	17.2	64	w.			3		0			0	0	clear	Moiroud.
Aigiers			30.35	770.8	57.9	14.4	72	w.			2		1			0	0	fair	Nicolas.
La Calle			30.39	771.9	64.4	18.0	63	e.			3		4			0	0	cloudy	Foufréde.
Tunis			30.41	772.3															Jacques.
Sfax																			Gau.
Saida																			
Tebessa			30.41	772.3	55.4	13.0	53	wsw.			2		3			0	0	pretty fair	Perès.
Geriville			30.45	773.4	50.4	10.2	39	sw.			1		2			0	0	fair	Derché.
Laghouat					57.6	14.2	32	ne.			1		2			0	0	fair	Lonchamp.
Biskra			30.47	774.0	53.6	12.0	56	e.			1		0			0	0	clear	Herbin.
			30.45	773.4	60.1	15.6	48	nw.			1		4			0	0	cloudy	Malan.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.49	749.0	29.58	751.3	57.7	14.3	84	ne.	6	2.7			8			0.10	2.5	dull	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.67	753.7	30.25	768.3	39.2	4.0	86	sw.			2		4			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.27	743.5	30.06	763.6	39.9	4.4	59	w.	21.0	9.4			2			0	0		Dr. Wierzbiski.
Eperies	29.17	741.0	30.09	764.3	35.6	2.0	73	s.			2	5 cs	0			0	0		Julius Mikolik.
Gratz	28.92	734.6	30.24	768.0	31.5	1.4	68	s.			2		0			0	0		Andreas Rospini.
Hermannstadt	28.78	731.0	30.27	768.8	38.5	3.8	64	nw.			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.91	734.4	30.31	769.8	38.8	3.8	77	w.			2	8 ck	0			0	0		The Staff.
Lemberg	28.94	735.0	29.95	760.8	38.5	3.6	67	sw.			4		1			0	0		Dr. T. Stanecki.
Pola	30.19	766.9	30.31	769.8	48.4	9.1	83	calm			0		6			0	0		I. R. Hydrographic Office
Szathmar	29.72	755.0	30.19	766.9	39.6	4.2	68	s.			2		2			0	0		Joseph Midlinszky, S. J.
Szegedin	29.97	761.1	30.26	768.5	43.0	6.1	78	s.			2		0			0	0		Karl Stancel.
Trieste	30.25	768.3	30.35	770.9	46.0	7.8	75	calm			0		2			0	0		Rieder.
Vienna	29.47	748.4	30.20	767.1	44.6	7.0	53	w.			3		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.94	760.5	30.04	763.0	40.6	4.8	60	w.	7	3.1			2			0.005	0.1	blue sky	W. Boswell.
Armagh, Observatory	29.80	756.9	30.05	763.3	45.0	7.2	96	s.	9	4.0			8					d. clouds	S. Call.
Bidston, Liverpool Obs'y			30.11	764.8	49.9	9.9	70	sw.	15	6.7			10					overcast	John Hartnup.
Bolton, Sharples	29.55	750.6	30.10	764.5	46.8	8.2	76	wsw.	6	2.7			10					overcast	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.68	753.9	30.07	763.8	47.1	8.4	77	w.			1		8			0	0	d. clouds	J. McLandsborough, F.R.
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	77.0	25.0	86	ne			2		6					gloomy	Pvt. J. Surgenor.
Cardington			30.16	766.1	49.0	9.4	89	w.			0.4		6					d. clouds	John McLaren.
Chatham, School M. E.	30.08	764.0	30.21	767.3	49.1	9.5	95	sw.			1		10			blank	blank	gloomy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.98	761.5	30.21	767.3	52.0	11.1	90	sw.					8					overcast	The Staff.
Fort Napier, Natal	27.64	702.0	29.86	758.4	63.2	17.3	94	ne.			1		10					raining	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	87.0	30.6	69	nw.			1		3					d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.05	763.3	48	8.9	93	s.			2		4			0	0	blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.30	769.6	30.36	771.1	60.3	15.7	82	e.			2		0					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	29.84	757.9	30.04	763.0	41.1	5.1	90	nw.			1		10					foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.02	762.5	30.20	767.1	50.5	10.3	89	sw.			1		7					d. clouds	The Staff.
Guernsey	29.96	761.0	30.26	768.6	50.0	10.0	95	sw.			2		5			blank	blank	d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.17	766.3	30.20	767.1	50.9	10.5	86	sw.	9	4.0			7					d. clouds	The Staff.
Leicester, Museum	29.88	758.9	30.14	765.5	48.9	9.4	78	sw.			1		7					d. clouds	J. C. Smith.
Malta, Mediterranean	30.29	769.4	30.36	771.1	59.4	15.2	68	ne.			2		2					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.26	768.6	30.31	769.9	71.5	21.9	84	e.			1		9					overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.63	752.6	30.16	766.1	46.5	8.1	81	sw.			1		9					d. clouds	John Mac Emall.
Oxford, Radcliffe Obs'y	29.95	760.7	30.18	766.6	49.7	9.8	89	sw.			1		4					threatening	The Staff.
Plymouth	30.13	765.3	30.20	767.1	52.7	11.5	93	sw.			2		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.00	762.0	40.1	4.5	90	calm	2	0.9			4					d. clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.24	768.1	30.31	769.9	46.0	7.8	69	ne.			2		2			blank	blank	blue sky	W. H. Lyne.
Sheffield	29.81	757.2	30.09	764.3	48.9	9.4	84	sw.			1		4			0	0	d. clouds	W. F. Cooper.
Silloth Rectory	30.02	762.5	30.05	763.3	44.5	6.9	98	sw.			1		10			0.020	0.5	drizzling	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.11	764.8	44.1	6.7	96	sw.	3	1.3			10					overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.98	761.5	30.20	767.1	51.4	10.8	89	w.			3		9					d. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.14	765.5	30.20	767.1	56	13.3	80	sw.			4		10					gloomy	W. Newcombe.
Valencia, Observatory	29.96	761.0	29.98	761.5	52.3	11.3	93	s.	37	16.5			10					drizzling	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.13	765.3	30.17	766.3	13	—10.6	90	nw.	5	2.2			10 n			inap.	inap.	light snow	H. J. Cundall, O. E.
Chatham, N. B*	30.18	766.6	30.25	768.3	2	—16.7	91	w.	1	0.4		0	0			0	0	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.22	767.6	30.24	768.1	—10	—23.3	100	s.	5	2.2		5 cs	2 s	calm	calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.25	742.9	30.15	765.8	12	—11.1	96	nw.	4	1.8		5 k	5 ks	nw.	nw.	0	0	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.09	764.3	30.23	767.8	9	—12.8	83	n.	10	4.5		2 cs	0			0	0	fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.35	745.5	29.69	754.0	32	0.0	96	se.	6	2.7			10 n			0.23	5.8	heavy snow	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.72	754.9	29.94	760.5	14	—10.0	91	ne.	16	7.2			10 s			0.01	0.3	light snow	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.06	738.1	29.80	756.9	21	— 6.1	84	n.	2	0.9			10 n		ne.	0.40	10.2	light snow	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.05	737.9	29.77	756.1	32	0.0	100	sw.	18	8.0			10 n			0.30	7.6	threatening	H. Morgan.
Port Stanley, Ontario	29.14	740.1	29.81	757.2	32	0.0	88	w.	32	14.3			10 n		w.	0.30	7.6	cloudy	M. Payne.
Quebec, Quebec*	29.83	757.7	30.18	766.6	10	—12.2	91	ne.			6		10 ks		ne.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.35	745.5	29.84	757.9	15	— 9.4	91	e.	5	2.2			10 k			0.30	7.6	heavy snow	W. H. McIntyre.
Saugeen, Ontario*	29.05	737.9	29.80	756.9	26	— 3.3	92	calm	0	0			10 s			0.28	7.1	light snow	K. Stewart.
St. Andrews, N. B.	29.17	740.9	30.22	767.6	8	—13.3	76	nnw.	3	1.3			10 n			0	0	cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.00	762.0	30.06	763.5	20	— 6.7	73	nw.	14	6.3		0	2 k			0	0	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.31	744.5	29.71	754.6	28	— 2.2	92	n.	12	5.5			10 n			0.25	6.3	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.16	766.1	30.23	767.8	18	— 7.8	87	e.	2	0.9		10 k	0	w.		0	0	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.51	774.9	30.78	781.8	20	— 6.7		nw.	4	1.8			10 s			blank	blank		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd'r

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	30.04	763.0	30.07	763.8	71.0	21.7	73	w.	18.2	8.1		0	2 s			0.110	2.8	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	30.04	763.0	30.08	764.0	83.2	28.4	51	s.	24	10.7		0	1			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Hankow	30.35	770.9	30.64	778.2	34.6	1.4	89	nnw.			1		0			0	0	clear	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.32	770.2	30.35	770.9	33.1	0.6	73	se.	2.7	1.2			10			0	0	covered	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From	Lower. From	Rain-fall or melted snow in the past 24 hours Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.66	753.3	29.71	754.5	41.7	5.4	80	nw.	31	14			5						Oversergent Fischer.
Fanöe	29.85	758.3	29.87	758.8	42.4	5.8	87	w.			6		2						Overloerer Lauridsen.
Godthaab, Greenland	29.10	739.2	29.15	740.3	3.0	—16.1		nne.			6		1						S. Kleinschmidt.
Stykkisholm, Iceland	29.42	747.3	29.47	748.4	29.8	—1.2		e.			6		10					snowing	A. O. Thorlacius.
Thorshavn	29.93	760.1	29.95	761.0	36.0	2.2	62	nw.	9	4			2						Overloerer Bergh.
Vestervig	29.72	754.8	29.81	757.1	42.3	5.7	71	nw.			6		1						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.71	754.7	30.38	771.6	45.0	7.2	94	se.			1		fg			0	0	dense fog	M. Labrous, Director.
Alençon, Normal School	29.82	757.3	30.37	771.3	40.6	4.8	97	s.			2		fg			0	0	foggy	M. Nicot, Director.
Arras, Engineer School	30.00	762.0	30.27	768.8	44.1	6.7	97	wsw.			2		n			0	0		M. Klein, Commandant.
Avignon, Normal School	30.28	769.1	30.36	771.1	46.4	8	72	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.80	757.0	30.39	771.8	37.4	3.0		se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.05	763.3	30.33	770.3	45.7	7.6	87	ssw.			1		5		wsw.	0	0	cloudy	M. Frère Eugène Marié
Besançon, Normal School			30.35	770.9	38.3	3.5	87	sw.			1		n			0	0		M. Gobin, Director.
Bordeaux, Observatory	30.07	763.8	30.35	770.8	37.8	3.2	100	e.			1		10			0.008	0.2	foggy	M. Rayet, Director.
Bourges, Normal School	29.87	758.7	30.42	772.6	35.2	1.8	93	ne.			1		n		ne.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.03	762.7	30.27	768.9	52.5	11.4	97	s.			1		10		s.	0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.21	767.2	30.28	769.2	46.8	8.2	94	ssw.			1		8		wnw.	0	0	very cloudy.	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.00	762.0	30.34	770.6	37.4	3.0	86	s.			1		5		sw.	0	0	cloudy	M. Jadot, Director.
Charleville, Normal School	29.82	757.3	30.35	770.8	38.1	3.4	93	se.			1		10					raining	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.92	734.5	30.31	769.9	46.8	8.2	57	wnw.			1		2			0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.47	748.5	30.34	770.6	39.2	4	86	se.			2		fg		nw.			foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.49	749.1	30.40	772.2	36.9	2.7	93	w.			1		5 kn	w.	w.	0	0	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.74	704.6	30.35	770.9	44.6	7	65	s.			1	0	1 s		se.	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.19	741.5	30.34	770.7	50.2	10.1	72	s.			1		5		s.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.58	751.2	30.39	771.9	32.4	0.2	93	nw.			1		fg			0	0	foggy	M. Ablard, Director.
Guéret, Normal School	28.71	729.3	30.32	770.2	46.4	8	81	sw.			1		2		sw.	0	0	slightly cl'dy	M. Rivoire, Director.
Lamballe, Normal School	30.04	762.9	30.31	769.9	50.5	10.3	89	sw.			1		2		sw.	0	0	slightly cl'dy	M. Ollitrault, Director.
Lescar, Normal School	29.78	756.3	30.35	770.8	53.6	12	76	w.			1		5			0	0	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	30.23	767.8	30.33	770.4	54.5	12.5	76	s.			2		10		sw.	0.079	2.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.30	744.3	30.41	772.4	30.9	2.7	93	nnw.			1		10			0	0	foggy	M. André, Director.
Mans, Normal School	30.04	763.1	30.38	771.6	43.0	6.1	95	w.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.02	762.5	30.29	769.4	55.8	13.2	62	e.			0.1		5		nne.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.00	635.1	29.85	758.1	42.8	6.0	40	n.	9.4	4.2			8						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.21	767.3	30.32	770.2	50.4	10.2	74	ne.					5		se.	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	29.56	750.9	30.38	771.7	37.8	3.2	80	se.			1	5 ck	0			0	0	cloudy	M. Hasse, Director
Nantes, Observatory	30.21	767.2	30.37	771.4	52.3	11.3	80	s.			0–1	ck	9 k		wsw.	0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.24	768.0	30.35	770.8	50.4	10.2	73	se.	2	0.8			10		sse.	0	0	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.39	543.2			27.5	—2.5		w.			1		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.20	741.6	30.31	769.8	41.0	5.0	78	s.			1			s.	s.	0	0		M. Talhen.
Puy de Dôme Obs'y, Summit	25.36	644.1			39.0	3.9	44	n.			2		2			0	0	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.34	770.6	30.37	771.4	46.4	8.0	89	se.			1		10			0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.11	764.8	30.33	770.4	46.8	8.2	94	s.			1		5	sw.	s.	0	0	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.13	714.4	30.34	770.7	42.4	5.8	75	e.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.26	768.5	30.30	769.7	45.7	7.6	88	sw.			1		10			0.047	1.2	covered	M. Platrier, Director.
Saint Lô, Normal School	30.15	765.7	30.30	769.7	47.3	8.5	90	w.			1		10		sse.	0.016	0.4	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.18	766.6	30.35	770.8	39.6	4.2	98	s.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.69	754.0	30.42	772.6	37.8	3.2	100	se.			1		fg	w.		0	0	foggy	M. Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.83	757.6	30.32	770.1	41.4	5.2	100	sw.			1					0.012	0.3		Dr. A. Bérigny, Director.
Sun-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.39	746.6	30.25	768.4	37.0	2.8	80	wsw.			3	0	8 k;s		sw.	0.020	0.5	raining	Prof. Dr. Hoh.
Berlin	29.77	756.2	29.95	760.8	44.1	6.7	80	nw.			3		10			0.016	0.4	light rain	Prof. Dr. Arndt.
Breslau	29.50	749.2	30.03	762.7	40.6	4.8	65	w.			5		10			0	0		Royal University Obs'y.
Carlsruhe	29.91	759.6	30.37	771.4	34.2	1.2	88	sw.			2		10	sw.		0	0	hazy	Albert Senz.
Cassel	29.42	747.2	30.13	765.3	37.8	3.2	96	s.			4		10	s.		0	0		Dr. H. Möhl.
Frankfort on the Main	29.89	759.3	30.28	769.0	38.8	3.8	85	sw.			1		7			0	0		Physical Society.
Friedrichshafen	28.90	731.0	30.41	772.4	34.9	1.6	93	s.			1		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	29.90	759.4	29.99	761.8	43.3	6.3	98	wnw.			5		10			0.004	0.1	foggy	E. Preller.
Kiel	29.91	759.7	29.93	760.1	44.4	6.9	81	w.			0		9			0.039	1.0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.69	754.1	30.12	765.1	42.1	5.6	80	wsw.			6		9	w.		0	0		H. Leppig, Asst.
Magdeburg	29.86	756.4	30.06	763.4	45.5	7.5	82	w.			3		10 ks		w.	0	0	hazy	Dr. Assmann.
Memel	29.33	744.9	29.37	746.0	40.6	4.8	78	wnw.			9	3 cs	0						Isermann.
Munich	28.45	722.6	30.33	770.4	37.6	3.1	73	sw.			1		5			0	0		Central Station.
Neufahrwasser	29.57	751.0	29.58	751.4	43.5	6.4	68	wnw.			8		2			0.024	0.6		A. Lothes.
Neustadt, Palatinate	29.70	755.8	30.29	769.3	41.0	5.0	72	w.			5		8	w.		0	0		Dicknether.
Stuttgart	29.35	745.6	30.29	769.4	36.5	2.5	77	n.			1		3	nw.		0.008	0.2		Prof. Dr. Schoder.
Wustrow	29.85	758.3	29.88	758.9	42.3	5.7	91	wnw.			5		10 s			0.079	2.0		Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.93	760.1	30.33	770.1	48.4	9.1		ne.			2.0		7 k			0.106	2.7		Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.00	761.9	30.05	763.2	64.6	18.1	63	nw.					3			0.13	3.3	d. clouds	
Deesa	29.52	749.7	30.01	762.2	63.8	17.7	64	w.	10.2	4.6			5	wsw.		0.19	4.8	d. clouds	
Bombay	29.96	761.1	30.00	762.0	77.3	25.2	71	nnw.	18	8.0			10		nw.	0	0	overcast	
Poona, Yarrowda	28.07	713.0	29.94	760.4	77.2	25.1	47	wnw.	24	10.7			7	wsw.	wsw.	0	0	d. clouds	
Belgaum	27.40	696.0	29.95	760.7	75.8	24.3	46	sw.	4	1.8			5	s.		0	0	d. clouds	
Lahore	29.14	740.3	29.93	760.1	57.1	13.9	91	e.	3.5	1.6			10		se.	0.30	7.6	raining	
Roorkee	29.03	737.4	29.97	761.3	60.8	16.0	88	calm	1.8	0.8			8			0.09	2.3		
Agra	29.36	745.7	29.93	760.3	73.3	22.9	43	se.	6.4	2.9						0	0		
Nagpur	28.92	734.5	29.97	761.3	75.7	24.3	48	calm	2.9	1.3			8	w.		0	0	d. clouds	
Jubbulpore	28.63	727.2	30.04	762.9	64.0	17.8	46	s.	3.3	1.5			4	e.		0	0	d. clouds	
Lucknow	29.67	753.6	30.05	763.4	73.2	22.9	53	calm	2.8	1.2			0			0	0	blue sky	
Allahabad	29.67	753.6	29.99	761.7	71.3	21.8	52	e.	1.4	0.6			1			0	0	d. clouds	
Patna	29.86	758.3	30.05	763.2	69.1	20.6	65	sse.	2.9	1.3			4	sse.	sse.	0	0	d. clouds	
Hazaribagh	27.98	710.7	30.05	763.3	65.6	18.7	57	sse.	4.7	2.1			3			0	0		
Cuttack	29.95	760.8	30.04	762.9	70.8	21.6	75	ne.	0.1	0.04			4			0	0	d. clouds	
Calcutta, Alipore	30.01	762.2	30.03	762.7	73.9	23.3	68						1			0	0	d. clouds	
Dhubri	29.93	760.1	30.05	763.3	68.9	20.5	67	calm	2.3	1.0			0			0	0	blue sky	
Chittagong	29.97	761.2	30.06	763.5	74.6	23.7	65	calm	1.7	0.8			2			0	0	blue sky	
Sibsagar	29.74	755.3	30.09	764.2	62.3	16.8	80	ne.	1.6	0.7			0			0	0	blue sky	
Jeypore	28.51	724.1	30.02	762.5	58.4	14.7	88	nw.	8.8	3.9			10		nw.	0.11	2.8	thund'rst'm	
Zanzibar, Africa	29.86	758.4			85.7	29.8	63	ne.	9.4	4.2			6		ene.			d. clouds	
Trichinopoly	29.73	755.1			79.5	26.4	49	sse.	1	0.4			0			0	0	blue sky	
Bellary	28.48	723.4			84.4	29.1	34	e.	3.4	1.5			4			0	0	d. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.91	759.7	30.34	770.5	43.5	6.4	59	calm	0	0			2			0	0		Prof. Giovanni Clodig.
Milan	29.85	758.3	30.41	772.3	38.3	3.5	78	sw.	3.8	1.7			7			0	0		Prof. Schiaparelli.
Padua	30.21	767.4	30.33	770.4	41.0	5.0	78	sse.	1.3	0.6			6			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.39	746.5	30.35	770.9	36.1	2.3	81	nne.	1.3	0.6			7	n.		0	0		Prof. P. F. Denza.
Genoa	30.14	765.5	30.34	770.6	53.6	12.0	69	se.	3.1	1.4			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.35	720.2	30.36	771.2	43.2	6.2	45	s.			2		8			0	0		Prof. D. C. Bruno.
Pesaro	30.28	769.2	30.34	770.6	41.0	5.0	84	n.	6.9	3.1			8			0	0		Prof. Luigi Guidi.
Florence	30.10	764.4	30.36	771.2	45.1	7.3	59	e.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.26	768.5	30.35	770.8	50.0	10.0	74	ene.	4.9	2.2			8			0	0		Prof. P. Monte.
Rome	30.19	766.7	30.37	771.3	50.4	10.2	55	n.	0.7	0.3			1			0	0		Prof. P. S. Ferrari.
Lecce	30.08	764.0	30.34	770.7	53.4	11.9	50	nw.	9.4	4.2			0			0	0		Prof. C. de Giorgi.
Cosenza	29.46	748.3	30.39	771.9	51.4	10.8	75	ese.	2.5	1.1			0			0	0		Prof. D. Conti.
Cagliari	30.11	764.9	30.32	770.0	57.9	14.4	57	calm			0		7	s.		0	0		Prof. A. Pacinotti.
Palermo	30.12	765.0	30.38	771.6	56.5	13.6	62	ne.	1.8	0.8			1			0	0		Prof. G. Cincciatore.
Syracuse	30.30	769.7	30.35	770.9	56.5	13.6	77	sse.	6.9	3.1			0			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.82	757.4	30.35	771.0	52.5	11.4	63	ne.	1.8	0.8			1	wnw.		0	0		Prof. T. Brioschi.
Stelvio	22.33	567.1			29.8	— 1.2	41	se.			1		7			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.29	566.2			30.9	— 0.6	42	se.			2		10			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.86	758.4	29.89	759.2	30.8	— 0.7	73	w.	11.8	5.3		ck	5 ks		w.	0.193	4.9	fair	
Hakodate	29.85	758.2	29.86	758.4	29.0	— 1.7	76	n.	6.0	2.7			1			0.253	6.4	snowing	
Hiroshima, I. M. Obs'y	30.24	768.1	30.25	768.3	36.7	2.6	72	nne.	3.6	1.6		6 ck	0			0.005	0.1	cloudy	K. Sasaki.
Kanazawa	30.16	766.0	30.27	768.8	33.7	0.9	90						10 n					snowing	S. Endo.
Kioto	30.02	762.5	30.21	767.3	33.5	0.8	80	wsw.	1.4	0.6		ck	1 s			0	0	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.09	764.3	30.31	769.9	31.0	— 0.6	87	calm	0	0		0	0			0	0	clear	S. Takehayashi.
Niigata	30.03	762.7	30.07	763.8	34.9	1.6	75	wnw	12.8	5.7		6 ck	0			0.135	3.4	cloudy	
Nobiru	29.89	759.2	29.90	759.4	33.2	0.7	74	nnw.	12.3	5.5		0	0			0	0	clear	H. Midzushina.
Sapporo					25.0	— 3.9	79	nw.	13.2	5.9			10			0.455	11.6	covered	
Tokei Obs'y, Yeddo	29.97	761.2	30.04	763.0	35.0	1.7	72	nw.	4.9	2.2		0	0			0	0	clear	The Staff.
Wakayama	30.18	766.6	30.23	767.8	37.4	3.0	68	nw.	0.9	0.4		ck	8 ks			0	0	cloudy	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.78	756.4	29.97	761.2	77.5	25.3	82	ssw.	10.5	4.7		0	8 k;n			0.23	5.8	cloudy	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.70	601.9	29.91	759.9	51.8	11.0	94	calm	0	0		1	0			0	0	fine	Vicente Fernandez.
Leon	24.45	621.0	30.19	766.8	55.0	12.8	81	n.			1	2 c	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.72	755.1	29.99	761.7	63.5	17.5	83	nw.			4		10 n		sw.	0.039	1.0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.17	588.6	30.36	771.2	46.4	8.0	77	nw	1.8	0.8		3 c	4 ks			0	0	cloudy	The Staff.
Morelia	24.29	617.0	30.56	776.2	46.4	8.0	75	ne.			3	0	1 k		e.	0	0	blue sky	M. Tena, M. D.
Pabellon, Aguascalientes	23.95	608.2	30.04	763.1	52.3	11.3	78	calm			0	0	6 ks		sw.	0	0	½ cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.5	30.40	772.2	41.9	5.5	64	calm	0	0		0	1		ssw.	0	0	fair	Prof. P. Spina.
San Luis Potosi	24.21	615.0	30.32	770.1	52.8	11.6	67	sse.			1	1	6	w.	se.	0	0	cloudy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. F.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.22	767.6	30.22	767.6	46.0	7.8		sw.			4					0.012	0.3		
Groningen	30.02	762.6	30.08	764.0	46.4	8.0		nw.			4					0	0		
Helder	30.10	764.6	30.10	764.6	45.7	7.6		w.			4					0.008	0.2		
Hellevoetsluis	30.18	766.6	30.18	766.6	45.9	7.7	92	wsw.			5					0.067	1.7		
Utrecht	30.13	765.4	30.18	766.6	46.9	8.3	94	wsw.			4		10			0.028	0.7	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.68	753.8	29.74	755.4	39.2	4.0	84	n.	18	8			5			0.008	0.2		
Brono	29.32	744.7	29.36	745.7	29.1	— 1.6	72	calm	0	0			2			0.051	1.3		
Christiania	29.28	743.7	29.43	747.4	42.3	5.7	38	wnw.	9	4			0			0	0		
Gjæsvær	29.53	750.1	29.56	750.7	15.1	— 9.4		ne.			6		9						
Lodingen	29.34	745.1	29.38	746.3	23.9	— 4.5	63	nne.			6		3			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					57.6	14.2	65	wsw.	15.0	6.7			5			0.331	8.4		Dr. J. A. Sampaio.
Campo Major	29.32	744.8	30.35	770.8	53.8	12.1	74	ese.	0.7	0.3			8			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.26	768.7	30.35	770.9	66.2	19.0	63	ese.	0.7	0.3			2			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.07	763.7	30.44	773.2	49.1	9.5	100	nne.	5.6	2.5			8	sw.		blank	blank		The Staff.
Ponta Delgada, Azores	30.08	763.9	30.15	765.7	60.4	15.8	61	sw.	15.4	6.9			4			0.331	8.4		
Saint Paul de Loando	29.63	752.7	29.84	757.8	79.5	26.4	93	wsw.	2.5	1.1			1	sse.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.97	735.8	30.13	765.4	13.5	—10.3		sw.	22	10			10 n			0	0		Major K. Lasarew.
Archangel	29.25	743.0	29.27	743.5	24.4	— 4.2	93	sse.	9	4			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.00	763.0	29.98	761.5	29.3	— 1.5	98	sse.	2	1		10 cp	0			blank	blank	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.58	751.4	30.12	765.0	21.6	— 5.8	82	sw.	9	4			10			0.020	0.5		Meteorological Obs'y.
Dorpat	28.71	729.3	28.96	735.5	35.1	1.7	98	sw.	11	5			10 n			0.228	5.8	raining	Observatory.
Ekaterinburg	28.88	733.6	29.91	759.8	7.0	—13.9	85	ssw.	4	2			10			0	0		Meteorological Obs'y.
Kasan	29.39	746.4	29.67	753.5	26.1	— 3.3	94	s.	16	7			10			0.028	0.7		Observatory.
Kertch	30.04	763.1	30.06	763.6	37.6	3.1	88	w.	4	2		0	7 ks			0.039	1.0		Lagorio & Sastyrez.
Kieff	29.15	740.4	29.81	757.1	34.9	1.6	84	wsw.	11	5			10ks;n			0.031	0.8	rain & snow.	Observatory.
Lugan	29.72	754.9	29.97	761.3	34.5	1.4	80	wsw.	13	6			7			0.004	0.1		Meteorological Obs'y.
Moscow	28.89	733.9	29.39	746.4	31.3	— 0.4	74	ssw.	7.8	3.5			10 s			0.028	0.7		Meteorological Obs'y.
Nikolaiev	30.04	763.0	30.11	764.8	40.5	4.7	74	sw.	9	4		0	0			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.91	759.6	29.98	761.8	—16.6	—27.0	82	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	29.98	761.6	30.13	765.2	26.4	— 3.1	42	calm	0	0		0	3 ks			0	0		Physical Observatory.
St. Petersburg	28.93	734.9	28.95	735.3	31.3	— 0.4	96	sse.	20	9			10 n			0.028	0.7	snowing	Central Physical Obs'y.
Tashkend, Laboratory	28.54	724.9	30.22	767.5	25.9	— 3.4	93	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.57	725.7	30.02	762.5	44.8	7.1	59	nw.	22	10		0	7 k			0	0		Physical Observatory.
Warsaw	29.39	746.4	29.82	757.4	37.2	2.9	78	wsw.	38	17			10 n					raining	Astronomical Obs'y.
Wilna	29.01	736.8	29.43	747.6	37.4	3.0	88	wsw.	9	4			10			0.012	0.3	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.15	765.9	30.50	774.6	—22.2	—30.1	79	calm	0	0			0			0	0		M. O. Marks
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park											4	5	5	s.		0.2	5.	cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.99	761.7	46	7.8	92	s.											J. Youngclause.
North Unst, Shetland Pds.																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.22	767.5	30.32	770.0	53.6	12.	81	s.	2.5	1.1			3			0	0	clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.31	769.9	30.37	771.4	52.9	11.6	75	se.	1.3	0.6		2	0	sw.		0	0	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.36	695.0	30.45	773.3	44.6	7.0	71	sw.	3.6	1.6		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.09	713.6	30.38	771.7	50.2	10.1	57	s.	2.5	1.1		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.21	767.4	30.36	771.2	56.7	13.7	71	wsw.	0.9	0.4		1	3	sw.		0	0	clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.40	746.7	30.31	769.9	54.3	12.4	84	calm	0	0		0	9			0.043	1.1	almost cov'd	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.10	764.6	30.17	766.3	68.3	20.2	90	e.	2.7	1.2		c	8	w.	calm	0	0	clear	Benito Vines, S. J.
Manila, Philippine Islands	29.98	761.5	30.04	763.0	73.4	23.0	68	ene.	0	0		3 c	2 ck		ene.	0	0		P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.31	769.8	30.41	772.4	57.9	14.4	74	e.	2.6	1.2		0	1		ne.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.03	762.7	30.12	765.0	75.6	24.2	84	se.	13.9	6.2		5 k	2 k	se.	se.	0.098	2.5	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.05	763.5	30.19	766.8	64.0	17.8	84	nw.	5.8	2.6			10 ks		n.	0.01	0.3	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.18	741.2	29.22	742.2	19.8	— 6.8	94	ne.			2		10			0	0		
Umea	28.93	734.8	28.98	736.1	23.0	— 5.0	90	ne.			7		10			0.197	5.0		
Hernosand	28.95	735.2	29.00	736.5	27.5	— 2.5	81	nnw.			6		10			0.120	3.2		
Stockholm	28.86	733.1	29.01	737.6	35.2	1.8	93	nw.			8		10					raining	
Wisby	29.08	738.6	29.14	740.1	41.4	5.2	57	wnw.			8		0			0.024	0.6		
SUB SERIES.																			
Upsala	28.92	734.6	29.01	736.8	38.1	3.4	76	nw.	16.3	7.3			10		nnw.	0.008	0.2		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.90	734.1	30.37	771.3	40.3	4.6	74	sse.			1					0	0		The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.37	771.5	44.2	6.8	62	n.	8	3.5			1		n.	0	0		The Observatory.
Valona			30.31	769.8	50.7	10.4		nw.			1		0			0	0	clear	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.95	760.9	59.9	15.5	84	sw.			3		10 n		sw.	1.06	26.9		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.		
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	29.86	758.4	29.95	760.7	32.5	0.3	88	s.	16	7.2			10 n		s.	0.33	8.4	light snow	
Alpena, Michigan	29.19	741.4	29.90	759.4	29	— 1.7	100	nw.	4	1.8			10 n			0.49	12.4	light snow	
Atlanta, Georgia	28.96	735.6	30.19	766.8	55.0	12.8	96	nw.	14	6.3			10 n		calm	0.16	4.1	light rain	
Atlantic City, New Jersey	29.91	759.7	29.92	760.0	44.1	6.7	100	s.	6	2.7			10 n			0.51	13.0	light rain	
Augusta, Georgia	29.97	761.2	30.17	766.3	53.0	11.7	93	calm	0	0			10s;fg			0.02	0.5	cloudy	
Baltimore, Maryland	29.88	758.9	29.94	760.5	37	2.8	89	nw.	2	0.9			10s;fg		sw.	0.43	10.9	threatening	
Barnegat, New Jersey	29.87	758.7	29.89	759.2	42.0	5.6	100	se.	14	6.3			10 n			0.82	20.8	light rain	
Bismarck, Dakota	28.31	719.1	30.31	769.9	9	—12.8	80	calm	0	0		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.18	690.4	30.11	764.8	18	— 7.8	96	sw.	4	1.8			10 s		calm	0.39	9.9	cloudy	
Boston, Massachusetts	29.95	760 7	30.12	765.0	29.4	— 1.4	100	se	8	3.6			10 n			0.19	4.8	heavy snow	
Brownsville, Texas	30.12	765.0	30.17	766.3	53	11.7	100	nw.	8	3.6			10 n			0.16	4.1	light rain	
Buffalo, New York	28.98	736.1	29.78	756.4	35.7	2.1	100	sw.	38	17.0			10 n		sw.	0.42	10.7	light rain	
Burlington, Vermont	29.60	751.8	29.91	759 7	25.0	— 3.9	80	s.	5	2.2			10 n		w.	0.07	1.8	light snow	
Cairo, Illinois	29.88	758.9	30.30	769.6	39.8	4.3	84	w.	4	1.8		0	0			1.36	34.5	clear	
Campo, California	27.37	695.2	30.00	762.0	42.5	5.8	82	nw.	7	3.1			10 s		w.	0.03	0.8	cloudy	
Camp Thomas, Arizona	27.26	692.4	30.09	764.3	21.5	— 5.8	72	calm			0	0	0			0	0	clear	
Cape Henry, Virginia	29.99	761.7	30.01	762.2	44	6.7	93	sw.	14	6.3			fg.			0.35	8.9	dense fog	
Cape May, New Jersey																0.45	11.4		
Castroville, Texas	29.39	746.5	30.24	768.1	52	11.1	66	e.	5	2.2			10 s			0.02	0.5	cloudy	
Cedar Keys Florida	30.18	766.6	30.20	767.1	65	18.3	90	e.	4	1.8			10 ks			0	0	cloudy	
Champaign, Illinois	29.33	745.0	30.20	767.1	33.6	0.9	83	nw.	14	6.3			10 s		nw.	0.21	5.3	cloudy	
Charleston, S. Carolina	30.11	764.8	30.17	766.3	59	15.0	93	sw.	6	2.7		0	8 s;fg		sw.	0.02	0.5	cloudy	
Charlotte, N. Carolina	29.20	741.7	30.09	764.3	40.0	4.4	100	sw.	3	1.3			fg			0.43	10.9	dense fog	
Chattanooga, Tennessee	29.37	745.0	30.23	767.8	50.5	10.3	82	nw.	9	4.0			10 n		nw.	0.66	16.8	light rain	
Cheyenne, Wyoming	23.90	607.0	30.15	765.8	42	5.6	78	nw.	4	1.8		0	0			0	0	clear	
Chicago, Illinois	29.35	745.5	30.10	764.5	32.3	0.2	91	w.	11	4.9			10 s			0.46	11.7	cloudy	
Chincoteague, Virginia	29.92	760.0	29.94	760.5	44	6.7	100	sw.	12	5.4			10 s		w.	0.26	6.6	cloudy	
Cincinnati, Ohio	29.48	748.8	30.17	766.3	41	5.0	73	w.	8	3.6			10 s			0.63	16.0	cloudy	
Cleveland, Ohio	29.22	742.2	30.00	762.0	34	1.1	78	w.	32	14.3			10 s		w.	0.41	10.4	cloudy	
Coleman City, Texas	28.41	721.6			36	2.2	64	n.	4	1.8		8 cs	0	w.		0	0	cloudy	
Columbus, Ohio	29.21	741.9	30.11	764.8	36	2.2	69	w.	21	9.4			10 ks		w.	0.53	13.5	cloudy	
Concho, Texas	28.25	717.5	30.27	768 8	32	0.0	85	calm	0	0			10 s			0	0	cloudy	
Davenport, Iowa	29.48	748.8	30.19	766.8	37	2.8	72	w.	4	1.8		4 k	0	w.		0.22	5.6	fair	
Dayton, Washington T'y	28.37	720.6	30.17	766.3	28.2	— 2.1	87	sw.	3	1.3			10 n			0.15	3.8	light snow	
Deadwood, Dakota	25 34	643.6	30.29	769.4	6.7	—14.1	63	s.	2	0.9		0	0			0	0	clear	
Decatur, Texas					38	3.3	82	n.	10	4.5			10 s			0	0	cloudy	
Delaware Breakwater, Del.	29.89	759.2	29.91	759.7	43	6.1	100	sw.	12	5.4			10n;fog		sw.	0.49	12.4	light rain	
Denison, Texas	29.47	748.5	30.31	709.9	38.0	3.3	72	n.	3	1.3		0	5 s			0.03	0.8	fair	
Denver, Colorado	24.66	626.4	30.18	766.6	9.0	—12.8	73	s.	4	1.8		0	0			0	0	clear	
Des Moines, Iowa	29.32	744.7	30.28	769 1	25	— 3.9	73	nw.	7	3.1		0	0			0.15	3.8	clear	
Detroit, Michigan	29.23	742.4	29.99	761.7	32.2	0.1	88	w.	18	8.0			10 s		nw.	0.40	10.2	cloudy	
Dodge City, Kansas	27.56	700.0	30.31	769.9	21.5	— 5.8	75	calm	0	0		0	0			0	0	clear	
Dubuque, Iowa	29.37	746.0	30.14	765.5	34	1.1	78	w.	4	1.8			10 s		w.	0.30	7.6	cloudy	
Duluth, Minnesota	29.28	743.7	30.04	763.0	23	— 5.0	73	w.	5	2.2			10 s		w.	0.01	0.3	cloudy	
Eagle Pass, Texas	29.46	748.3	30.30	769.6	51.7	10.9	86	nw.	1	0.4			10 s			0.06	1.5	cloudy	
Eagle Rock, Idaho	25.20	640.1	30.16	766.1	6	—14.4	80	calm	0	0		0	0			0.71	18.0	clear	
Eastport, Maine	30.20	767.1	30.26	768.6	10.5	—11.9	60	n.	9	4.0			10 s		n.	0	0	cloudy	
El Paso, Texas	26.24	666.5	30.12	765.0	22.0	— 5.6	67	calm	0	0		0	2 s			0	0	clear	
Erie, Pennsylvania	29.14	740.1	29.90	759.4	35	1.7	89	w.	25	11.2			10 s			0.19	4.8	cloudy	
Escanaba, Michigan	29.22	742.2	29.94	760.5	29	— 1.7	88	sw.	5	2.2			10 s			0.11	2.8	cloudy	
Florence, Arizona																			
Fort Apache, Arizona	24.99	634.7	30.11	764.8	14	—10.0	70	se.	2	0.9		0	0			0	0	clear	
Fort Assinnaboine, Montana	27.23	691.6	30.27	768.8	5	—15.0	54	calm	0	0		1 c	0	w.		0	0	clear	
Fort Bennett, Dakota	28.53	724.6	30.27	768.8	12	—11.1	64	calm	0	0			0			inap.	inap.	clear	
Fort Benton, Montana	27.24	691.9	30.22	767.6	9	—12.8	80	calm	0	0		3 c	0	calm		0	0	clear	
Fort Buford, Dakota	28.15	715.0	30.35	770.9	2	—16.7	75	calm	0	0		0	0			0	0	clear	
Fort Custer, Montana	26.85	682.0	30.23	767.8	7	—13.9	45	e.	2	0.9		0	0			0	0	clear	
Fort Davis, Texas	25.15	638.8	30.13	765.3	33	0.6	57	n.	4	1.8			10 s		calm	0	0	cloudy	
Fort Elliott, Texas	27.38	695 4	30.32	770.1	15	— 9.4	51	calm	0	0		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.72	754.9	30.32	770.1	32.0	0.0	88	calm	0	0		0	0			0.04	1.0	clear	
Fort Grant, Arizona	25.12	638.0	30.02	762.5	31	— 0.6	47	ne.	6	2.7		0	0			0	0	clear	
Fort Griffin, Texas	28.96	735.6	30.34	770.6	33	0.6	78	n.	2	0.9			10 s		calm	0	0	cloudy	
Fort Keogh, Montana	27.58	700.5	30.27	768.8	1	—17.8	72	sw.	1	0.4		0	0			0	0	clear	
Fort Macon, North Carolina	30.10	764.5	30.10	764.5	52	11.1	100	sw.	6	2.7			fg.		calm	0.29	7.4	dense fog	
Fort McKavett, Texas	27.93	709.4	30.32	770.1	37.1	2.8	82	calm	0	0			10 s			0.02	0.5	cloudy	
Fort Missoula, Montana	26.69	677.9	30.15	765 8	15	— 9.4		calm	0	0			10 n		nw.	0.07	1.8	light snow	
Fort St. Michaels, Alaska	28.96	735.6	28.99	736.3	25	— 3.9	100	s.	53	23.7			10 n			0.05	1.3	light snow	
Fort Shaw, Montana	26.35	669.3	30.21	767 3	7	—13.9	80	s.	1	0.4		0	0			0	0	clear	
Fort Sill, Indian Territory	29.03	737.3	30.36	771.1	28.5	— 1.9	79	n.	15	6.7		0	0			0	0	clear	
Fort Stevenson, Dakota	28.27	718.0	30.33	770.4	1	—17.2	72	n.	1	0.4		0	0			0	0	clear	
Fort Verde, Arizona					20	— 6.7	58	w.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.43	722.1	30.25	768.3	45	7.2	76	ne.	3	1.3			10 ks		ne.	0.05	1.3	cloudy	
Galveston, Texas	30.13	765.3	30.17	766.3	53	11.7	80	ne.	19	8.5			10 ks		ne.	0.18	4.6	threatening	
Grand Haven, Michigan	29.32	744.7	30.03	762.7	36.0	2.2	79	w.	18	8.0			10 s		w.	0.30	7.6	cloudy	
Hatteras, North Carolina	30.07	763.8	30.09	764.3	54	12.2	100	sw.	18	8.0			fg.			0.14	3.6	dense fog	
Helena, Montana	25.74	653 8	30.16	766.1	16	— 8.9	83	calm	0	0			10 n		w.	0.08	2.0	light snow	
Henrietta, Texas	29.28	743.7	30.36	771.1	33	0.6	78	e.	4	1.8		0	0			inap.	inap.	clear	
Huron, Dakota	28.78	731.0	30.32	770.1	14.2	— 9.9	64	nw.	6	2.7		0	0			inap.	inap.	clear	
Indianapolis, Indiana	29.34	745.2	30.18	766.6	35	1.7	79	nw.	9	4.0			10 s		nw.	0.53	13.5	cloudy	
Indianola, Texas	30.19	766.8	30.22	767.6	52.4	11.3	93	ne.	21	9.4			10 n		e.	inap.	inap.	light rain	
Jacksboro, Texas	29.09	738.9	30.33	770.4	34	1.1	85	calm	0	0			10 s			0.07	1.8	cloudy	
Jacksonville, Florida	30.17	766.3	30.22	767.6	60	15.6	93	s.	1	0.4		2 k;hz	0	sw.		0	0	fair	
Keokuk, Iowa	29.50	749.3	30.20	767.1	35.0	1.7	85	w.	7	3.1			10 s		w.	0.10	2.5	cloudy	
Key West, Florida	30.16	766.1	30.19	766.8	72.0	22.2	84	e.	9	4.0		0	7 k;s		e.	0.02	0.5	fair	
Kittyhawk, North Carolina	30.05	763.3	30.07	763 8	47	8.3	100	sw.	16	7.2			fg.			0.15	3.8	dense fog	
Knoxville, Tennessee	29.13	739.9	30.21	767.3	50.8	10.4	88	w.	12	5.4			10 s		w.	1.20	30.5	cloudy	
La Crosse, Wisconsin	29.30	744.2	30.14	765.5	31	— 0.6	88	w.	2	0.9			10 s			0.22	5.6	cloudy	
La Mesilla, New Mexico	26.08	662.4	30.11	764.8	19.8	— 6.8	87	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.39	746.5	30.35	770.9	29	— 1.7	77	calm	0	0		0	0			0.18	4.6	clear	
Lewiston, Idaho	29.31	744.5	30.18	766.6	31.8	— 0.1	66	ne.	1	0.4			10 s		calm	0.20	5.1	cloudy	
Little Rock, Arkansas	29.93	760.2	30.26	768.6	42	5.6	92	calm	0	0		0	7 s			1.18	30.0	fair	
Los Angeles, California	29.70	754.4	30.10	764 5	44.3	6.8	83	n.	20	8.9		3 c	0	calm		0	0	clear	
Louisville, Kentucky	29.64	752.8	30.24	768.1	43.0	6.1	83	w.	16	7.2			10 s		calm	1.01	25.7	cloudy	
Lynchburg, Virginia	29.30	744.2	30.02	762.5	38.3	3.5	89	sw.	1	0.4			10 s		w.	0.29	7.4	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.01	736.8	30.10	764.5	31	— 0.6	88	sw.	4	1.8			10 s		calm	0.64	16.3	cloudy	
Marquette, Michigan	29.11	739 4	29.89	759 2	35	1.7	79	w.	8	3.6			10 s		sw.	0.02	0.5	cloudy	
Mason, Texas	28.55	725.2	30.29	769 4	41	5.0	82	nw.	2	0.9			10 s		nw.	0	0	cloudy	
Memphis, Tennessee	29.94	760.5	30.30	769 6	42	5.6	100	calm	0	0			10 s		nw.	0.75	19.0	cloudy	
Milwaukee, Wisconsin	29.27	743.4	30.07	763.8	31	— 0.6	88	w.	12	5.4			10 s		w.	0.21	5.3	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.09	764.3	30.13	765.3	64.0	17.8	93	sw.	6	2.7		10 cs	0	w.		0.03	0.8	cloudy	
Montgomery, Alabama	29.91	759.7	30.15	765.8	62.6	17.0	94	n.	10	4.5			10 s			0.06	1.5	cloudy	
Moorhead, Minnesota	29.14	740.1	30.25	768.3	0.0	—17.8	68	nw.	8	3.6		0	0			0	0	clear	
Morgantown, W. Virginia	29.00	736.6	30.06	763.5	48.5	9.2	88	nw.	20	8.9			10 n		nw.	0.80	20.3	light rain	
Mt. Washington, N. H.	23.48	596.4	30.11	764.8	14.0	—10.0	83	sw.	78	34.9			10n;fg		sw.	0.18	4.6	light snow	
Nashville, Tennessee	29.71	754.6	30.27	768.8	44.4	6.9	82	nw.	2	0.9			10 ks		n.	1.55	39.4	cloudy	
New Haven, Connecticut	29.86	758.4	29.98	761.5	31	— 0.6	100	ne.	5	2.2			10 n		ne.	0.53	13.5	light rain	
New London, Connecticut	29.97	761.2	30.02	762.5	35	1.7	89	e.	7	3.1			10 n		e.	0.36	9.1	light rain	
New Orleans, Louisiana	30.08	764.0	30.14	765.5	65.0	18.3	93	nw.	9	4.0			10 n			0.16	4.1	light rain	
Newport, Rhode Island	29.99	761.7	30.04	763.0	33 7	0.9	86	e.	16	7.2			10 n		calm	0.23	5.8	heavy snow	
New River, N. Carolina					49	9.4	100	sw.			1		fg			0.28	7.1	dense fog	
New Shoreham, Rhode I'd	30.00	762 0	30.03	762.7	37.0	2.8	100	se.	21	9.4			10 n		se.	0.94	23.9	sleeting	
New York, New York	29.79	756.7	29.98	761.5	36	2.2	100	e.	8	3.6			10n;fg			0.90	22.9	light rain	
Norfolk, Virginia	29.98	761.5	30.02	762 5	44	6.7	100	sw.	8	3.6			10s;fg			0.40	10.2	cloudy	
North Platte, Nebraska	27.22	691.4	30.34	770.6	9.6	—12.4	80	calm	0	0		0	0			0	0	clear	
Olympia, Washington T'y	30.17	766.3	30.21	767.3	33.5	0.8	94	calm	0	0			fg		calm	0.11	2.8	dense fog	
Omaha, Nebraska	29.07	738.4	30.34	770.6	24.0	— 4.4	80	w.	6	2.7		0	0			0.39	9.9	clear	
Ooglanmie, Pt. Barrow, Alas-	29.89	759.2	29.91	759.7	—26.4	32.4	70	ene.	18	8.0		hz.	3 s			0	0	hazy	
Oswego, New York	29.35	745.5	29.70	754.4	33.0	0.6	78	se.	17	7.6			10 n		s.	0.27	6.9	light snow	
Palestine, Texas																			
Pensacola, Florida	30.12	765.0	30.15	765 8	65.2	18.4	97	s.	2	0.9		0	4 s		w.	0	0	fair	
Philadelphia, Pa.	29.88	758.9	29.94	760.5	36	2.2	100	e.	2	0.9			10n;fg		e.	0.83	21.1	light rain	
Pike's Peak, Colorado	17.31	439.7	30.01	762.2	— 5	—20.6	100	sw.	36	16.1		0	8 s		sw.	0.15	3.8	cloudy	
Ploche, Nevada	23.82	605.0	30.02	762.5	15	— 9.4	87	n.	12	5.4			10 n		calm	0.04	1.0	light snow	
Pittsburg, Pennsylvania	29.14	740.9	29.99	761.7	40.1	4.5	86	sw.	14	6.3			10 s		sw.	0.46	11.7	cloudy	
Port Eads, Louisiana	30.13	765.3	30.14	765.5	61.0	16.1	96	s.	4	1.8		0	9 s; k		s.	0	0	cloudy	
Port Huron, Michigan	29.21	741.9	29.94	760.5	30.0	— 1.1	92	w.	13	5.8			10 s		w.	0.32	8.1	cloudy	
Portland, Maine	30.10	764.5	30.16	766.1	24	— 4.4	88	ne.	13	5.8			10 n		calm	0.01	0.3	light snow	
Portland, Oregon	30.19	766.8	30.26	768.6	35.0	1.7	89	s.	3	1.3		6 c	0	nw.		0.31	7.9	fair	
Portsmouth, N. Carolina					52	11.1	100	sw.	3	1.3			fg.		sw.	0.48	12.2	dense fog.	
Prescott, Arizona	24.56	623.8	29.94	760.5	30	— 1.1	54	sw.	12	5.4		0	0			0	0	clear	
Punta Rassa, Florida	30.18	766.6	30.19	766.8	67	19.4	92	e.	8	3.6			10 ks		calm	0	0	cloudy	
Red Bluff, California	29.88	758.9	30.26	768.6	36.0	2.2	66	n.	6	2.7		0 k	0	n.		0	0	fair	
Rio Grande City, Texas	30.00	762.0	30.25	768.3	53	11.7	80	n.	6	2.7		10 cs	0	calm		0	0	cloudy	
Rochester, New York	29.02	737.1	29.73	755.1	30	2.2	69	sw.	13	5.8			10 n		sw.	0.15	3.8	light rain	
Roseburg, Oregon	29.77	756.1	30.34	770.6	33.5	0.8	94	calm	0	0			10 ks			0.27	6.9	cloudy	
Sacramento, California	30.13	765 3	30.21	767.3	38.0	3.3	62	nw.	8	3.6		0	0			0	0	clear	
St. Louis, Missouri	29.63	752.6	30.27	768.8	37.8	3.2	72	nw.	17	7.6			10 s		w.	0.37	9.4	cloudy	
St. Paul, Minnesota	29.19	741.4	30.14	765.5	20.5	— 6.4	76	sw.	10	4.5		0	0			0.03	0.8	clear	
St. Vincent, Minnesota	29.23	742.4	30.21	767.3	9	—12.8	100	n.	5	2.2			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.49	647.4	30.06	763.5	23	— 5.0	73	calm	0	0			10 n			0.34	8.6	light snow	
San Antonio, Texas	29.50	749 3	30.23	767.8	51.6	10.9	72	ne.	4	1.8			10 n		ne.	0.02	0.5	light rain	
San Diego, California	29.91	759.7	29.98	761.5	46.5	8.1	78	e.	2	0.9		3 k	6 n	w.	w.	inap.	inap.	light rain	
Sandusky, Ohio	29.31	744.5	30.03	762.7	34	1.1	79	w.	22	9.8			10 s		w.	0.25	6.3	cloudy	
Sandy Hook, New Jersey	29.92	760.0	29.96	761.0	40.0	4 4	100	e.	14	6.3			10 n		calm	1.25	31.7	light rain	
San Francisco, California	30.18	766 6	30.25	768.3	43	6.1	47	nw.	16	7.2		3 cs	0	nw.		0	0	clear	
Santa Fé, New Mexico	23.10	586.7	30.12	765.0	16	— 8.9	70	calm	0	0		0	0			0	0	clear	
Savannah, Georgia	30.08	764.0	30.18	766.6	61.5	16.4	86	sw.	6	2.7		0	0			0	0	clear	
Shreveport, Louisinna	30.01	762.2	30.26	768.6	45	7.2	93	n.	3	1.3			10 s		calm	0.74	18.8	cloudy	
Silver City, New Mexico	24.17	613.9	30.03	762 7	16	— 8.9	70	n.	2	0.9		0	0			0	0	clear	
Sitka, Alaska	30.08	764.0	30.15	765.8	37.1	2.8	77	e.	16	7.2			10 ks		e.	0.02	0.5	cloudy	
Smithville, North Carolina	30.10	764.5	30.14	765.5	49	9.4	100	w.	3	1.3		0	fg			0.14	3.6	clear	
Spokane Falls, Wash. Ter.	28.03	711.9	30.17	766.3	24	— 4.4	76	ne.	3	1.3			10 s		ne.	0.16	4.1	cloudy	
Springfield, Illinois	29.52	749.8	30.25	768 3	39	3.9	82	w.	7	3.1			10 s		w.	0.40	10.2	cloudy	
Springfield, Massachusetts	29.91	759.7	30.05	763.3	27.7	— 2.4	92	ne.	1	0.4			10 n			0.45	11.4	light snow	
Springfield, Mo.	28.79	731.3	30.37	771.4	32	0.0	83	nw.	4	1.8		0	0			0.27	6.9	clear	
Stockton, Texas	27.06	687.3	30.20	767.1	33.2	0.7	88	sw.	8	3.6			10 s		sw.	0	0	cloudy	
Thatcher's Island, Mass.	29.95	760 7	30.01	762.2	30.4	— 0.9	100	se.	24	10.7			10 n		se.	0.01	0.3	heavy snow	
Toledo, Ohio	29.28	743.7	30.02	762.5	37	2.8	82	sw.	14	6.3			10 s		sw	0.09	2.3	cloudy	
Tucson, Arizona	27.49	698.2	29.99	761.7	30	— 1.1	52	s.	6	2.7		0	0			0	0	clear	
Umatilla, Oregon	29.86	758.4	30.25	768.3	32.0	0.0	92	w.	2	0.9			10 s			0.03	0.8	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.98	761.5	30.25	768.3	49	9.4	80	nw.	7	3.1			10 s		n.	0.31	7.9	cloudy	
Visalia, California	29.71	754.6	30.10	764.5	34	1.1	74	n.	6	2.7		0	0			0.06	1.5	clear	
Washington, D. C.	29.83	757.7	29.95	760 7	30	2.2	100	w.	2	0.9			10s;fg			0.63	16.0	cloudy	
West Los Animas, Colorado	26.13	663.7	30.27	768.8	5	—15.0	91	nw.	3	1.3		0	0			0	0	clear	
Wickenburg, Arizona					20	— 6.7	80	calm			0	0	0			0	0	clear	
Williamsport, Pa.	29.25	742.9	29.88	758.9	37.5	3.1	81	s.	5	2.2			10 n			0.40	10.2	light rain	
Wilmington, N. Carolina	30.07	763.8	30.13	765 3	51	10.6	93	sw.	4	1.8			fg		calm	0 07	1.8	dense fog	
Winnemucca, Nevada	25.58	649.7	30.12	765.0	19	— 7.2	70	s.	8	3.6		5 ck	0	sw.		0.02	0.5	fair	
Wood's Holl, Mass.	30.01	762.2	30.05	763 3	35	1.7	79	se.	22	9.8			10 n		se.	0.20	5.1	heavy snow	
Yankton, Dakota	28.89	733.8	30.31	769.9	17	— 8.3	67	sw.	9	4.0		0	0			0.01	0.3	clear	
Yuma, Arizona																			
Sub-Series.	29.80	756.9	29.95	760.7	33.7	0.9	75	calm	0	0		0	0			0	0	clear	
Bogota, U. S. Columbia	22.04	559.8			51.5	10.8	78	calm	0	0		0	2 s			0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.01	762.2	30.02	762.5	78	25.6	77	e.				5 k	5 ks	e.	e.	0.09	2.3	fair	J. A. Racker.
Buenaventura, U. S. C.	29.92	760 0	29.94	760.5	77	25.0	90	se.	4	1.8			10 n		se.			drizzling	J. I. Plume.
Guadeloupe, W. I.	30.02	762.5	30.04	763.0	74	23.3	90	e.				2 k	0			0.1	3.	clear	B. Bigar.
Havana, Cuba, W. I.	30.15	765.8	30.20	767.1	71	21.7	94	calm	0	0		0	2 ks		calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	69.0	20.6	85	calm	0	0		0	3 s		e.	0	0	fair	Robert Johnstone
Navassa, W. I.	29.95	760 7	30.03	762.7	77	25.0	65	ne.	5	2.2		5 k	2 s	e.	ne.	0	0	fair	F. M. Everett.
Paramuribo, S. A.	30.06	763.5	30.06	763.5	78	25.6	86	e.			3		8 ps	e.	e.	0.600	15.2	cloudy	Dr. G. J. Hering
Puerto Berrio, U. S. Col'mba	29.41	747.0	29.96	761.0	81	27.2	85	s.			1	1 c	0	calm		c	0	clear	Miss Flora A. Nichols.
Rivas, Nicaragua					73.4	23.0	91	ne.			4	0	1 ks		ne.	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.13	765.3	30.16	766.1	74	23.3	76	n.	7.2	3.2		0	3 s		e.	0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.16	766.1	30.22	767.6	—34.0	—36.7		ne.	15	6.7		0	0			0	0	clear	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India.	29.97	761.2				n.			2		3							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 39° 20′, E. 20° 12′	30.30	769.6	58.5	14.7	69	nnw.			1		1							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.09	764.3	69	20.6	60	wsw.			2		3	s.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.88	758.9	67	19.4	94	sse.			1		10	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey.	30.20	767.1	45	7.2		nne.			2		5							d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.37	771.4	70	21.1		ene.			1		2	ene.				1	wsw.	d. clouds	Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.23	767.8	40.5	4.7	83	sw.			1		10							overcast	Capt. S. Long.
H. M. S. Diamond, S. 23° 17′, W. 28° 02′	30.12	765.0	79	26.1	78	ene.			3		2					2	e.	d. clouds	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.20	767.1	66	18.9	87	ene.			1		8	ene.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 23′, W. 84° 12′	30.17	766.3	76.5	24.7	98	ese.			1–2		2	e.				1	e.	d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 43′, W. 61° 18′	29.40	746.7	55	12.8	70	calm			0		5					sm'h		d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.92	760.0	83	28.3		nne.			2		3	wnw.				1	wsw.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.10	764.5	39	3.9		nw.			3–4		0							blue sky	Capt. G. Robinson.
H. M. S. Espiegle, N. 1° 14′, W. 23° 12′	29.93	760.2	79	26.1	90	se.			1		5	se.				1	sse.	d. clouds	Capt. C. A. P Bridge.
H. M. S. Euryalus.																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.86	758.4	78.5	25.8	78	s.			7		1					4	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.21	767.3	39	3.9	81	wnw.			1		7							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.96	761.0	63	17.2	88	calm			0		10							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 43° 19′, W. 60° 15′	29.55	750.6	58	14.4	81	sw.			6		6					5	sw.	d. clouds	Capt. L. Jones.
H. M. S. Iris, Off Jaffa, Palestine	29.97	761.2	65	18.3	68	sw.			3		1					4	sw.	blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.34	770.6	54	12.2	86	calm			0		1	e.						blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	30.29	769.4	61	16.1	77	ne.			2–3		0					2–3	nne.	misty	Capt. A. Carpenter.
H. M. S. Malabar, Bombay, India	30.00	762.0	76	24.4	90	nw.			3		3.	nw.						d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, N. 15° 55′, W. 61° 50′	30.08	764.0	79	26.1	76	ene.			6		3	ene.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 22° 45′, E. 52° 00′	29.92	760.0	83	28.3	70	nne.			2		0					3	ene.	blue sky	Capt. R. Kinahan.
H. M. S. Pelican, S. 30° 31′, W. 10° 38′	30.19	766.8	79	26.1	97	calm			0		10							misty	Capt. F. R. Dickens.
H. M. S. Phœnix																			Capt. H. H. Grentel.
H. M. S. Ready, Muscat, Arabia	30.17	766.3	68.1	20.1		nnw.			1									d. clouds	Capt. W. H Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.16	766.1	33	0.6	89	n.			1		6							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.05	763.3	81.5	27.5	74	nne.			2		6	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 32° 20′ E. 24° 46′	30.14	765.5	59	15.0	87	n.			4		6	n.				4	nne.	d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Triumph, N. 2° 34′, W. 86° 30′	29.90	759.4	77	25.0	95	wsw.			1		10	calm				4	s.	squally	Capt. A. H. Markham.
H. M. S. Tyne, Guerin Station, Suez Canal	30.00	762.0	77	25.0	93	ssw.			2		4	ssw.						d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W I.	30.10	764.5	81	27.2		n.			2		3							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.17	766.3	64.5	18.1	94	ese.			2–3		4	wnw.						d. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 35° 00′, E. 139° 35′	29.89	759.2	50	10.0	93	w.			5		4	w.				6	sw.	d clouds	Capt. G. N. A. Pollard.
PORTUGESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	29.94	760.5	75.2	24.0	75	ne.			3		8		sw.			2	ne.	overcast	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 14° 45′, W. 61° 11′	30.08	764.0	76.3	24.6	88	ene.			3		5							showery	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.13	765.3	67	19.4	95	ssw.	2	0.9	.....	.....	2	.....	ssw.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	30.13	765.3	31	— 0.6	.....	e.	15	6.7	.....	.....	10?	.....	.....	0	0	.....	.....	clear?	
Naval Hospital Yokohama, Japan	29.85	758.2	38	3.3	63	n.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	clear	
Adams, Mollendo, Peru	29.74	755.4	68	20.0	79	calm	.....	.....	0	.....	5	.....	.....	.....	.....	light	sse.	fair	
Alaska, S. 16° 36′, W. 73° 02′	29.91	759.7	70	21.1	95	se.	.....	.....	2	.....	5	.....	s.	c	0	long	s.	fair	
Alert, Hong Kong, China*	30.20	767.1	58	14.4	70	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	hazy	
Alliance, Boston, Mass.*†	30.14	765.5	33	0.6	70	ese.	.....	.....	2	.....	10	.....	.....	snow	snow	.....	.....	snowing	
Ashnelot, Tientsin, China	30.17	766.3	28	— 2.2	100	wnw.	.....	.....	1	.....	5?	.....	calm	.....	.....	.....	.....	cloudy.?	
Brooklyn, S. 9° 01′, W. 34° 08′	29.95	760.7	82	27.8	79	se.	12	5.4	.....	.....	5	.....	se	0	0	mod.	se.	fair	
Colorado, New York, N. Y.	29.96	761.0	37	2.8	100	calm	0	0	.....	.....	10	.....	calm	0.45	11.4	.....	.....	rain & snow	
Essex, N. 37° 17′, W. 73° 10′	29.97	761.2	60	15.6	94	sw	.....	.....	2	.....	8	.....	sw.	.....	.....	.....	.....	misty	
Franklin, Norfolk, Va.	30.02	762.5	47	8.3	85	ssw.	12	5.4	.....	.....	10	.....	ssw.	0.04	1.0	.....	.....	cloudy	
Galena, N. 6° 57′, W. 12° 40′	29.90	759.4	80	26.7	96	n.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	hazy	
Independence, N. Yard, Mare I'd, Cal.	30.12	765.0	39	3.9	64	nw.	4.8	2.1	.....	.....	2	.....	.....	0	0	.....	.....	fair	
Kearsarge, New Orleans, La.	30.11	764.8	66	18.9	89	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	rain & fog	
Lackawanna, Valparaiso, Chili†	30.07	763.8	63	17.2	94	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Lancaster, Villafranca, France	30.31	769.9	59	15.0	70	calm	.....	.....	0	.....	2	.....	s.	0	0	.....	.....	fair	
Michigan, Erie, Pa.	29.76	755.9	35	1.7	.....	w.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I.	30.04	763.0	35	1.7	100	ese.	7	3.1	.....	.....	10	.....	.....	.....	.....	sm'h	.....	foggy	
Monocacy, Yokohama, Japan	30.02	762.5	40	4.4	82	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Nipsic, Naples, Italy	30.38	771.6	55	12.8	62	sw.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.07	763.8	66	18.9	100	se.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	foggy	
Palos, Hong Kong, China	30.36	771.1	50	10.0	86	ssw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C.	29.95	760.7	36	2.2	90	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	fair	
Pensacola, S. 13° 47′, W. 76° 49′	29.96	761.0	70	21.1	90	sse.	.....	.....	1	.....	8	.....	ese.	0	0	sm'h	sw.	cloudy	
Powhatan, Boston, Mass.	30.07	763.8	31	— 0.6	100	ene.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	snowing	
Quinnebaug, Villafranca, France	30.32	770.1	57	13.9	81	calm	.....	.....	0	.....	8	.....	calm	.....	.....	.....	.....	cloudy	
Ranger, N. 18° 00′, W. 102° 34′*	29.90	759.4	74	23.3	86	nnw.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, Pago Pago, Samoa Islands*	29.76	755.9	76	24.4	95	calm	.....	.....	0	.....	2	.....	.....	0	0	.....	.....	clear	
Shenandoah, Montevideo, Uruguay*.	29.74	755.4	72	22.2	80	w.	.....	.....	4-5	.....	2	.....	.....	.....	.....	mod.	w.	clear	
St Louis, Lengue Island, Pa	30.19	766.8	36	2.2	90	nnw.	1	0.4	.....	.....	10	.....	.....	0 70	17.8	.....	.....	drizzling	
Swatara, N. 34° 06′, E 134° 59′*	30.00	762.0	44	6.7	60	nnw.	.....	.....	5	.....	2	.....	n.	.....	.....	long	n.	fair	
Tennessee, New York, N. Y	29.85	758.2	37	2.8	100	ese.	3	1.3	.....	.....	10	.....	calm	0.6	15.	.....	.....	foggy	
Vandalia, Port Castre Lt. Lucia, W. I	30.08	764.0	78	25.6	82	ese.	.....	.....	2	.....	8	.....	ene.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass.	30.12	765.0	32	0.0	89	ese.	2	0.9	.....	.....	10	.....	.....	0	0	.....	.....	snowing	
Wachusetts, Sitka, Alaska	30.15	765.8	35	1.7	90	e.	.....	.....	2	.....	10	.....	e.	.....	.....	sm'h	s.	cloudy	
Wyoming, Port Royal, S. C.	30.15	765.8	56	13.3	100	sw.	4	1.8	.....	.....	2	.....	.....	0	0	.....	.....	clear	
Yantic, N. 17° 53′, W. 76° 47′*	30.08	764.0	77	25.0	91	nne.	.....	.....	4	.....	5	.....	.....	.....	.....	mod	.....	fair	

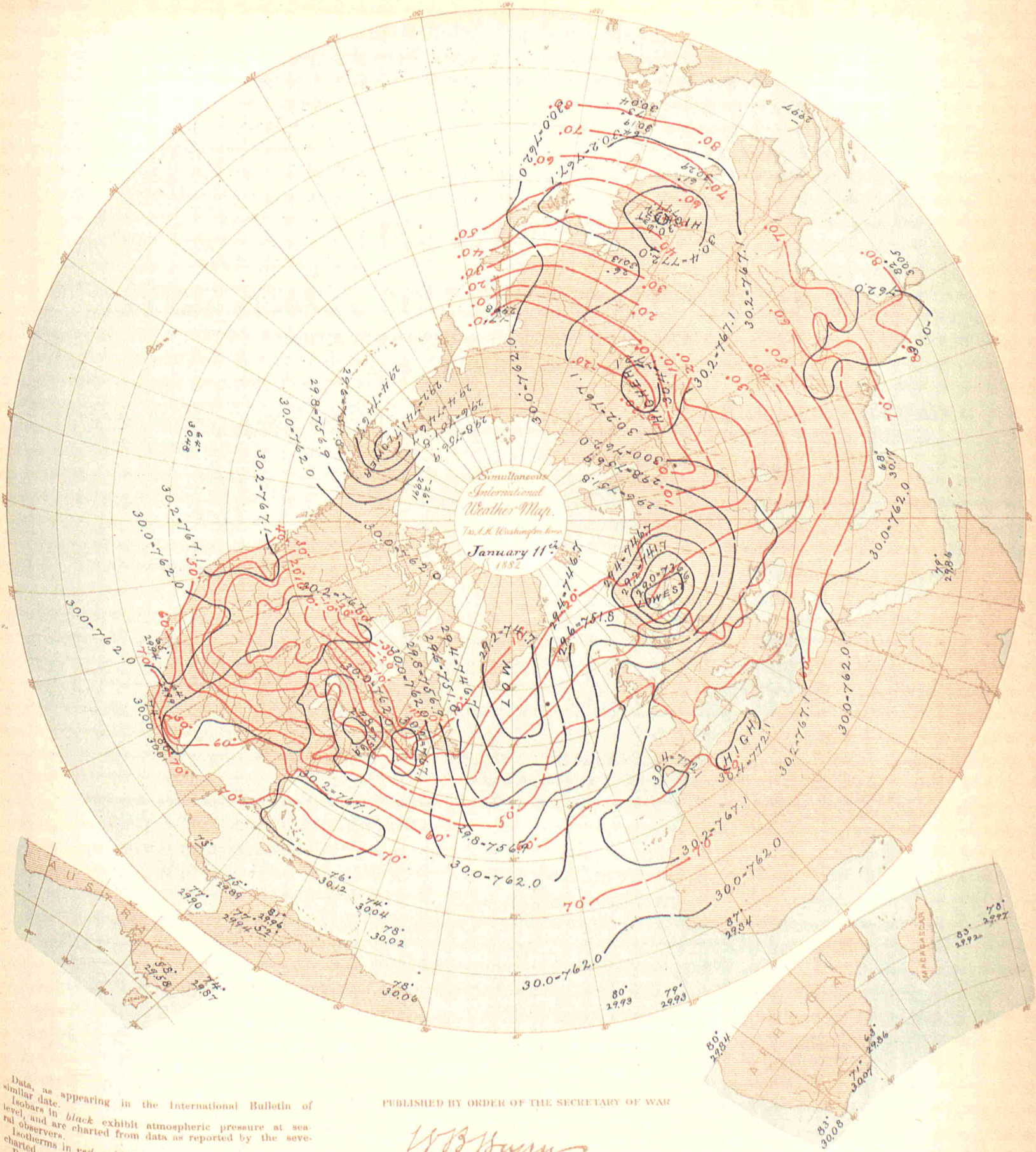
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Polynesian, Capt. Robt. Brown, N. 42° 32′, W. 69° 18′*	29.91	759.7	31	—0.6	.....	se.	2	.....	10	.....	se.	7 h'r	snow	sm'h	se.	cloudy	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. N. 50° 19′, W. 40° 05′*	29.27	764.3	40	4.4	.....	wsw.	6	.....	8	.....	wsw.	.....	.....	h'vy	wsw.	snowy	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, N. 42° 25′, W. 67° 15′*	30.25	768.3	28	—2.2	.....	e.	2	.....	.....	.....	.....	24 h'r	snow	sm'h	nne.	snowing	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, N. 46° 02′, W. 42° 19′	29.24	742.7	42	5.6	91	s.	6	.....	10	.....	nw.	.....	.....	sm'h	nw.	squally.	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	30.07	763.8	49	9.4	37	wsw.	3	.....	8	.....	w.	h'vy	h'vy	.....	.....	rainy	C. W. Walker, 2d Off
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†	30.22	767.6	54	12.2	86	nne.	3	.....	8	.....	n.	.....	.....	.....	.....	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 49° —′, W. 31° —′†	29.36	745.7	51	10.6	93	sw.	6	.....	5	.....	sw.	.....	.....	mod.	ssw.	d. clouds	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Utopia, Capt. A. McRitchie, N. 45° 00′, W. 39° 19′*†	29.52	749.8	50	10.0	86	wsw.	4	.....	7	.....	w.	0	0	mod.	w.	cloudy	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 17° 55′, W. 76° 49*†	30.23	767.8	79	26.1	78	calm	0	.....	2	.....	calm	0	0	sm'h	ene.	fair	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 15° 23′, W. 76° 06′*	30.06	763.5	81	27.2	.....	ene.	6	.....	3	.....	se.	½ h'r	½ h'r	r'gh	ese.	fine	J. Sandberg.
S. S. Arden, Capt. R. de Echevarrieta, N. 38° 00′, W. 73° 50′	.....	.....	60	15.6	.....	var.	2	.....	.....	.....	.....	light	light	.....	.....	fine	W. H. Bennett.
S. S. Athos, Capt. C. G. Pearse, N. 18° —′, W. 77° —′	29.81	757.2	.....	.....	.....	e.	4	.....	1	.....	e.	0	0	mod.	e.	clear	R de Echevarrieta.
BOSTON & HALIFAX. *E. W Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, N. 43° 13′, W. 65° 43′*†	30.15	765.8	32	0.0	?	ese.	.....	.....	10	.....	.....	light	light	.....	ne.	light snow	Fisher & Welden.
BRITISH METEOROLOGIC'L OFFICE.																	
British Merchant, Capt. E. J. Molony S. 4° 21′, E. 92° 09′	29.90	759.4	81.8	27.7	87	w.	4	.....	3	.....	.....	.....	.....	.....	.....	squally	.....
Caldew, Capt. W. Peterson, S. 20° 46′, W. 72° 02′	30.04	763.0	70.5	21.4	.....	ese.	2	.....	9	.....	.....	.....	.....	.....	.....	misty	.....
S. S. Cipero, Capt. W. N. Lailey, Off Wicklow Head, Ireland	30.08	764.0	48.5	9.2	92	wsw.	3	.....	10	.....	.....	.....	.....	3	sw.	overcast	.....
S. City of Agra, Capt. Thos. Young, S. 17° 36′, W. 21° 56′	30.06	763.5	79.5	26.4	.....	ese.	5	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Glaramara, Capt. R. Morton, N. 16° 18′, W. 36° 57′	30.16	766.1	73.5	23.1	81	ne.	3	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Glencairn, Capt. R. S. Tannock, S. 39° 00′, E. 0° 10′	29.84	757.9	61	16.1	94	wnw.	6	.....	9	.....	.....	.....	.....	.....	.....	drizzling	.....
S. S. Gordon Castle, Capt. W. Waring, N. 36° 59′, W. 1° 30′	30.36	771.1	59.5	15.3	70	var.	1	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bg. Hermine, Capt. G. G. Jones, S. 27° 24′, W. 78° 33′	30.13	765.3	66.1	18.9	90	ese.	2	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Humboldt, Capt. A. W. Jeffery, S. 18° 45, W. 37° 50′	30.04	763.0	82	27.8	78	nne.	3	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 4° 00′, E. 86° 31′	29.92	760.0	82.3	27.9	83	sw.	4	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, S. 6° 08′, W. 33° 14′	29.93	760.2	81	27.2	91	se.	4	.....	2	.....	.....	.....	.....	.....	.....	blue sky	.....
Minho, Capt. J. Lawson, N. 23° 18′ W. 19° 11′	30.17	766.3	67.5	19.7	60	ene.	5	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
Naiad, Capt. John Smith, S. 19° 47′. W. 22° 27	30.10	764.5	76.9	24.9	81	ne.	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 42° 57′, W. 59° 27′	29.44	747.8	61.4	16.3	94	wsw.	5	.....	8	.....	.....	.....	.....	.....	.....	squally	.....
Queen of Cambria, Capt. M. Parry, S. 40° 05′, W. 9° 38′	29.97	761.2	56.4	13.6	82	sw.	5	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. J. W. Pearson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge N. 4° 20′, W. 27° 14′	29.93	760.2	79.5	26.4	91	nne.	3	.....	10	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents New York.*																	
S. S. Brooklyn City, Capt. S. Windham, N. 51° 10′, W. 4° 00′*†	30.10	764.5	56	13.3	.....	s.	5	.....	10	.....	ssw.	0	0	sm'h	.....	hazy	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent, San Francisco*																	
S. S. Newbern, Capt. E. Y. Rogers, N. 23° 46′, W. 111° 08′†	29.94	760.5	65	18.3	68	ne.	3	.....	10	.....	w.	0	0	small	nw.	cloudy	.....
CROMWELL LINE. *Clark & Seaman, Agents, New York*																	
S. S. Hudson, Capt. H. R. Freeman, N. 33° 06′, W. 78° 20′†*	30.28	769.1	.....	.....	.....	sw.	3	.....	0	.....	.....	6 h'r	6 h'r	mod.	ene.	clear	Crowell & Henry.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Haine, N. 50° 43′, W. 20° 20′*	29.75	755.6	51	10.6	.....	s.	4	.....	5	.....	sw.	0	0	sm'h	.....	fine	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, N. 49° 38′, W. 30° 08′	29.47	748.6	48.2	9.0	.....	s.	5	.....	4	.....	sw.	sh'rs	sh'rs	sm'h	w.	clear	.....
S. S. St. Laurent, Capt. A. Servan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. Kuhlewein, N. 50° 07′, W. 26° 03′*	29.42	747.3	54	12.2	86	nw.	3	.....	8	.....	w.	4 h'r	hv'y	r'gh	nw.	cloudy	P. Froehlich, 3d Off.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, N. 21° —′, W. 24° —′*†	30.25	768.3	72	22.2	.....	ene	3	.....	1	.....	ene.	0	0	.....	n.	clear	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.* S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.* S. S. England, Capt. T. P. Heeley N. 47° 40′, W. 34° 15′*	29.28	743.7				w.	1		10		ssw.	9 h'r	9h'r	hv'y	ssw.	overcast	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.* S. S. Niagara, Capt. J. B. Baker, N. 26° 25′, W. 80° 05′†*	30.38	771.6	74	23.3		sse.	2		0			0	0	sm'h		clear	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips, N. 19° 50′, W. 78° 00′†	30.20	767.1	74	23.3		ne.	3		0			0	0	mod.	se.	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE. S. S. Alsa, Capt. J. W. Sanson,																	
S. S. Bothnia, Capt. W. McMickan																	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Timmerman, Havana, Cuba†*	30.31	769.9	74	23.3		ene.	3								e.	clear	
S. S. City of Washington, Capt. J. W. Reynolds																	
S. S. Maas, Capt. T. H. Bonjer																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier, N. 50° 02′, W. 7° 56′*	29.94	760.5	54	12.2		ssw.	4								sw.		
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.* S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander.																	G. H. Lose, 3d Off.
S. S. Leipzig, Capt. F. Pfeiffer, N. 49° 23′, W. 12° 26′	30.07	763.8	54	12.2	100	ssw.	6		5		sw.	6 h'r	6 h'r	mod.	wsw; ssw.	fair	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, N. 49° 53′, W. 8° 05′*	30.17	766.3	52.0	11.1		sw.	3		6		sw.	0	0	r'gh	ssw.		
S. S. Mosel, Capt. J. Hesse, N. 44° 22′, W. 48° 55′	29.62	752.3	27.5	—2.5		wnw.	6		5		wnw.	5 h'r	snow	long r'gh	wnw.	clearing	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. Undeutsch																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.* S. S. Belgic, Capt. H. Davison, San Francisco, Cal†	30.21	767.3	42	5.6	58	nw.	5		2		nw.	0	0			clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Hong Kong, China*†	30.52	775.2	59	15.0	70	calm	0		2		ne.					clear	
S. S. Oceanic, Capt. J. Metcalf, N. 34° 12′, E. 143° 00′*	29.81	757.2	55	12.8	50	nnw.	6		7		nw.			6	nnw.	squally	
OCEAN S. S. CO. *George Young, Agent, New York.* S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.63	752.6				nnw.	2		10							rain and fog.	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Boston, Mass†	29.57	751.1	36	2.2	80	ese.	3		10			4 h'r	snow			snowing	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.* S. S. Mississippi, Capt. E. W. Holmes, N. 44° 22′, W. 124° 45′†	30.32	770.1	47	8.3	62	nnw.	6		10		nnw.			h'vy	nw.	stormy	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer, Seattle, Wash. Ter*	30.26	768.6	39	3.9	71	nw.	2		4		nw.	½h'r	½h'r			clear	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.* S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d Offi.
S. S. Columbia, Capt. F. Bolles,																	W. Irving.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	30.21	767.3	35	1.7	90	e.	1		2		e.					clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.* S. S. Ancon, Capt. J. W. Ingalls, N. 35° 53′, W. 121° 35′†	30.11	764.8	46	7.8	69	nnw.	6		2		nnw.			r'gh	nw.	fair	
S. S. G. W. Elder, Capt. H. G. Morse, N. 45° 27′, W. 124° 47′†	30.23	767.8	42	5.6		w.	4		8		nw.	0	0	long	w.	clear	
S. S. Idaho, Capt. E. Alexander, N. 38° 34′, W. 123° 28′†	30.25	768.3	47	8.3	85	nw.	7		0							clear	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 35° 09′, W. 120° 43′†	30.08	764.0	44	6.7	24	nw.	8		8		nw.	0	0	r'gh	wnw.	cloudy	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.43	772.9	44	6.7	92	nnw.	3		8			0	0			fair	T. Wallace.
S. S. State of California, Capt. G. Debney, N. 44° 33′, W. 124° 10′†	30.31	769.9	43	6.1	67	nw.	6		6		nw.	0	0	h'vy	w.	squally	
S. S. Victoria, Capt. H. M. Hayward, San Francisco, Cal†	30.14	765.5	43	6.1	58	nw.	5		0					h'vy	nw.	clear	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.* S. S. Australia, Capt. —— S. 2° 07′, W. 166° 36′	29.77	756.1	78	25.6	86	n.	3		2		ne.			mod.	n.	clear	A. Bannerman, 2d Offi.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.87	758.7	74	23.3	81	sse.	4		8			sq 'lls	sq 'lls			raining	W. H. Hawes, 2d Offi.
S. S. City of Rio de Janeiro, Capt. Cavarly, Hong Kong, China†	30.54	775.7	57	13.9	53	e.	3		0			0	0			clear	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn,																	E. Le Saik.
S. S. City of Tokio, Com. J. Manry, N. 30° 03′, W. 145° 36′†	30.48	774.2	64	17.8	73	ese.	3		8		ese.	1 h'r	light	mod.	e.	threatening	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, Panama, Panama..†	29.89	759.2	75	23.9	95	w.	1		3		w.	0	0	sm'h		clear	
S. S. Grenada, Capt. M. Connolly, N. 21° 30′, W. 166° 06′†	30.06	763.5	71	21.7	80	nne.	3		5?		nne.	0	0	small	wnw.	clear.†	
S. S. South Carolina, Capt. W. J. Russell, N. 16° 15′, W. 99° 12′*†	29.91	759.7	80	26.7	82	nw.	3		0			0	0	sm'h		fine	
S. S. Zelandia, Capt. H. Webber, Aukland, New Zealand	29.85	758.2	72	22.2	85	s.	3		0					mod.	s.	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
								Amount and kind.		Direction.							
						Direction.	Force	Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co.																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke Antigua, W. I.	.....	.....	.....	.....	.....	ene.	3	.....	0	.....	.....	0	0	sm'h	.....	clear	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, Off Beachy Head, Eng*	30.37	771.4	51	10.6	78	sw.	2	.....	10	.....	sw.	0	0	light	sw.	cloudy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 44° 42′, W. 49° 45′*†	29.84	757.9	28	—2.2	?	nw.	7	.....	10	.....	nw.	snow	snow	r'gh	nw.	overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 49° 36′, W. 18° 41′*	29.73	755.1	52	11.1	.....	s.	4	.....	10	.....	wsw.	3 h'r	light	mod.	wsw.	overcast	.....
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
THINGVALLA LINE																	
Funch, Edye & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub N. 57° 31′, W. 16° 14′†.	29.86	758.4	46.4	8.0	.....	se.	3	.....	5?	.....	e.	0	0	mod.	se.	clear?	J. T. Uiberling
WARREN LINE.																	
Warren & Co, Agents, Boston.																	
S. S. Iowa, Capt. S. Walters. N. 49° 48′. W. 19° 28′*†	30.00	762.0	50	10.0	.....	ssw.	5	.....	10	.....	sw.	2 h'r	light	mod.	wsw.	misty	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent.																	
S. S. Adriatic, Capt. J. W. Jennings, Queenstown, Ireland*†	30.18	766.6	50	10.0	.....	ssw.	4	.....	5	.....	sw.	sh'rs	shr's	sm'h	.....	showery	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 47° 54′, W. 41° 50′*†	29.20	741.7	37	2.8	.....	wsw.	6	.....	8	.....	wsw.	shr's	shr's	h'vy	nw.	snowing	W. Thomas.
S. S. Celtic, Capt. B. Gleadell New York, N. Y.*†	29.78	756.4	40	4.4	82	nne.	2	.....	10?	.....	ne.	0	0	.....	.....	clear.?	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. Liverpool, Eng.*†	30.33	770.4	47	8.3	100	ssw.	3	.....	5	.....	sw.	0	0	.....	.....	d. clouds	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th Officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 25° 58′, W. 76° 03′†	30.44	773.2	72	22.2	85	ene.	3	0	8 k	.....	e.	0.14	3.6	mod.	ese.	cloudy	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Alpha, Capt. Ole Grönn,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin S. 23° 14′, W. 42° 04′*†	28.40	721.3	.....	.....	.....	nw.	.....	.....	.....	.....	.....	.....	.....	light	e.	clear	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.12	765.0	.....	.....	.....	sw.	3	.....	.....	.....	w.	0	0	.....	.....	cloudy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Enoch Train, Capt. H. D. Chapman. N. 48° 10′, W. 17° 00′*	29.90	759.4	.....	.....	.....	ssw.	3	.....	10	.....	sw.	0	0	light	sw.	fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 40° 30′, W. 45° 31′*	29.58	751.3	.....	.....	.....	wnw.	7	.....	10	.....	w.	6 h'r	h'vy	h'vy	wsw.	light rain	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C.†	30.07	763.8	44	6.7	75	sw.	2	.....	10	.....	sw.	.....	.....	sm'h	.....	rainy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S. 41° 44′, W. 57° 24′†	29.78	756.4	56	13.3	.....	ssw.	6	.....	8	.....	ssw	1 h'r	1 h'r	mod.	ssw.	.....	G. D. Morrison.
Bk. Freya, Capt. Blaauw, Limerick, Ireland	.....	.....	47	8.3	.....	s.	4	.....	5	.....	ssw.	0	0	.....	.....	fair	.....
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.08	738.6	.....	.....	.....	wsw.	3	.....	5	.....	wsw.	0	0	.....	.....	.....	.....
Bk. Geo. Booth, Capt. D. Williams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 49° 31′, W. 9° 15′*	29.86	758.5	53.2	11.8	93	s.	5	.....	6	.....	s.	8 hr	8 hr	long	nw.	fair	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 6° 16′, W. 33° 38′*	29.81	757.2	.....	.....	.....	se.	3	.....	7	.....	ese. sw.	0	0	mod.	ese.	cloudy	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 38° 49′, W. 18° 44′*†	30.45	773.4	.....	.....	.....	sw.	3	.....	.....	.....	ssw.	0	0	mod.	sw.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.23	767.8	50	10.0	71	n.	1	.....	0	.....	.....	.....	.....	.....	.....	clear	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly N. 40° 13′. W. 54° 40′*†	29.90	759.4	.....	.....	.....	s.	.....	.....	2	.....	s.	1 h'r	sleet	.....	.....	squally	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 31° 36′, W. 33° 30′*	29.94	760.5	62.2	16.8	98	sse.	1	.....	4	.....	sw.	.....	.....	mod.	.....	.....	.....
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.39	771.9	54	12.2	100	ese.	4	.....	10	.....	nw.	0	0	.....	.....	cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 14° 45′, W. 34° 21′ *†	30.10	764.5	.....	.....	.....	e.	5	.....	7	.....	e.	.....	.....	mod.	e.	.....	I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR

W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

Heliotype Printing Co. Boston

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 12, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrumental error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.33	770.3	63.3	17.4	65	w.			3		1			0	0	fair	Moiroud.
Algiers			30.34	770.6	55.4	13.0	82	sw.			2		10			0	0	covered	Nicolas.
La Calle			30.36	771.2	62.2	16.8	74	nw.			1		2			0	0	fair	Fonfrède.
Tunis			30.38	771.6															Jacques.
Sfax																			Gau.
Saida			30.41	772.3	60.8	16.0	32	sw.			1		0			0	0	clear	Perès.
Tebessa			30.41	772.4	51.1	10.6	38	sw.			1		1			0	0	fair	Derché.
Geriville					57.6	14.2	43	s.			1		2			0	0	fair	Lonchamp.
Laghouat			30.43	773.0	57.2	14.0	51	s.			1		0			0	0	clear	Herbin.
Biskra			30.41	772.5	59.0	15.0	49	nw.			1		0			0	0	clear	Malan.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.85	758.2	29.94	760.5	60.3	15.7	75	ssw.	4				2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.77	756.1	30.34	770.6	42.1	5.6	70	e.			2		3			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.46	748.3	30.23	768.6	36.5	2.5	67	nw.	12.5	5.6			5			0.028	0.7		Dr. Wierzbiski.
Eperies	29.20	741.7	30.11	764.9	37.8	3.2	54	nw.			5	2cs	0			0	0		Julius Mikolik.
Gratz	29.02	737.1	30.30	769.6	45.9	7.7	49	nw.			3		5			0	0		Andreas Rospini.
Hermannstadt	28.60	726.4	30.09	764.3	34.2	1.2	98	nw.			4		10			0.024	0.6		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.04	737.7	30.45	773.4	37.6	3.1	91	nw.			2		10			0.059	1.5	raining	The Staff.
Lemberg	28.92	734.6	29.95	760.7	34.2	1.2	75	nw.			5		9			0.059	1.5		Dr. T. Stanecki.
Pola	30.19	766.9	30.31	769.9	46.4	8.0	78	w.			1		0			0	0		I. R. Hydrographic Office
Szathmar	29.62	752.4	30.08	764.1	38.5	3.6	62	nw.			2		1			0	0		Joseph Midlinszky, S. J.
Szegedin	29.89	759.2	30.18	766.6	43.9	6.6	84	w.			4		0			0	0		Karl Stancel.
Trieste	30.24	768.1	30.34	770.7	45.7	7.6	77	calm			0		0			0	0		Rieder.
Vienna	29.61	752.2	30.35	770.9	44.6	7.0	53	nw.			2		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	30.15	765.8	30.25	768.3	45.4	7.4	90	s.	11	4.9			9			0	0	misty	W. Boswell.
Armagh, Observatory	29.96	761.0	30.21	767.3	48.7	9.3	89	s.	14	6.3			10					overcast	S. Call.
Bidston, Liverpool Obs'y			30.31	769.9	47.0	8.3	85	se.	11	4.9			6					d. clouds	John Hartnup.
Bolton, Sharples	29.78	756.4	30.33	770.4	45.0	7.2	84	sse.	3	1.3			9					misty	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.92	760.0	30.32	770.1	47.7	8.7	69	w.			1		4			0	0	d clouds	J. McLandsborough, F.R.
Bridgetown, Barbadoes	30.04	763.0	30.06	763.5	80.0	26.7	69	ne.			2		2					d. clouds	Pvt. J. Surgenor.
Cardington			30.37	771.4	47.6	8.7	97	s.			0.2		10					foggy	John McLaren.
Chatham, School M. E.	30.30	769.6	30.43	772.9	47.1	8.4	94	sw.			1		10			blank	blank	gloomy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.08	764 0	30.31	769.0	51.9	11.1	90	s.					9					overcast	The Staff.
Fort Napier, Natal	27.59	700.8	29.81	757.2	73.2	22.9	75	e.			1		3					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.86	758.4	88.0	31.1	69	nw.			1		3					d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.05	763.3	52	11.1	86	s.			2		3			0	0	blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.30	769.6	30.36	771.1	60.3	15.7	88	e.			4		7					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.04	763.0	30.24	768.1	48.7	9.3	89	s.			2							misty	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.24	768 1	30.41	772.4	47.1	8.4	99	ssw.			1		10					foggy	The Staff.
Guernsey	30.14	765.5	30.45	773.4	47.0	8.3	96	ssw.			1		10			blank	blank	misty	A. Collenette, F. M. S.
Kew, Observatory	30.38	771.6	30.42	772.7	47.8	8.8	100	s.	10	4.5			10					misty	The Staff.
Leicester, Museum	30.13	765 3	30.39	771.9	43.6	6 4	98	se.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.17	766.3	30.24	768.1	61.8	16.6	55	nw.			1		9					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.28	769.1	30.32	770.1	73.5	23.1	71	e.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.84	757.9	30.38	771.6	42.0	5 6	100	se.			1		10					foggy	John Mac Email.
Oxford, Radcliffe Obs'y	30.16	766.1	30.39	771.9	46.5	8.1	98	se.			1		10					foggy	The Staff.
Plymouth	30.26	768.6	30.33	770.4	51.3	10.7	93	se.			2		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.12	765.0	44.2	6.8	92	s.	14	6.3			10					misty	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.01	762.2	30.07	763.8	47.0	8.3	66	sw.			2		3					d. clouds	W. H. Lyne.
Sheffield	30.07	763 8	30.36	771.1	46.9	8.3	89	ssw.			1		4			0	0	misty	W. F. Cooper.
Stilloth Rectory	30.26	768.6	30.29	769.4	49.0	9.4	93	ssw.			2		8			0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.33	770.4	46.1	7.8	80	s.	10	4.5			6					d. clouds	Rev. S. J. Perry.
Stratfield Turgiss	30.18	766.6	30.40	772.1	48.6	9.2	97	s.			1		10					drizzling	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.24	768.1	30.29	769.4	52	11.1	86	s.			3		10					gloomy	W. Newcombe.
Valencia, Observatory	30.00	762.0	30.03	762.7	50.9	10.5	93	se.	32	14.3			10					misty	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.78	756.4	29.83	757.7	18	— 7.8	92	w.	5	2.2			10 n			0.050	1.3	threatening.	H. J. Cundall, C. E.
Chatham, N. B*	29.83	757.7	29.90	759.4	8	—13.3	91	calm	0	0		2 cs	8 s	calm	calm	0.21	5.3	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.98	761.5	30.00	762.0	11	—11.7	91	nw.	15	6.7			10 n		calm	0.14	3.6	light snow	J. McWilliams.
Fort Garry, Manitoba*	29.38	746.2	30.30	769.6	3	—16.1	100	se.	6	2.7			hz.			0	0	hazy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	29.71	754.6	29.85	758.2	19	— 7.2	100	w.	8	3.6			10 n			0.34	8.6	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.03	762.7	30.39	771.9	26	— 3.3	80	nw.	1	0.4		0	0			0	0	clear	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.09	764.3	30.30	769.6	19	— 7.2	84.	w.	12	5.4			10 s			0.83	21.1	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.69	754.1	30.44	773.2	24	— 4.4	88	n.	4	1.8		2 k	5 ks	nw.	nw.	0.04	1.0	fair	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.74	755.4	30.47	773.9	29	— 1.7	89	w.	4	1.8		8 cs	0	sw.		0	0	fair	H. Morgan.
Port Stanley, Ontario	29.79	756.7	30.48	774.2	23	— 5.0	96	nw.	3	1.3			8 k		w.	Inap.	Inap.	cloudy	M. Payne.
Quebec, Quebec*	29.78	756.4	30.14	765.5	9	—12.8	91	nw.			5	0	5 s		w.	1.10	27.9	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.91	759.7	30.41	772.4	18	— 7.8	83	nw.	7	3.1			10 ks		nw.	0.35	8.9	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.65	753.1	30.41	772.4	30	— 1.1	92	n.	9	4 0			10 ks			Inap.	Inap.	cloudy	K. Stewart.
St. Andrews, N. B.	29.93	760.2	29.99	761.7	12	—11.1	75	nw.	6	2.7		0	0			0.45	11.4	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.71	754.6	29.78	756.4	19	— 7.2	84	nw.	8	3.6			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.06	763.5	30.48	774 2	25	— 3.9	84	w.	4	1.8		5 cs	0	w.		Inap.	Inap.	fair	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.90	759.4	29.97	761.2	22	— 5.6	76	nw.	18	8.0		8 c	2 k			0.28	7.1	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.61	752.1	29.88	758.9	19	— 7.2		ne.					10			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Cape St. Francis Lt. House	29.92	760.0	29.95	760.7	75.6	24.2	77	se.	8.4	3.8		6 c	0			0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.96	761.0	30.00	762.0	82.8	28.2	54	sse.	22	9.8		0	4			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Sub-Series.																			
Hankow	30.22	767.6	30.51	774.9	41.9	5.5	82	se.			1		0			0	0	clear	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.06?	763.5?	30.09?	764.2?	35.4	1.9	71	w.	2.7	1.2		0	0			0	0	clear	M. Marc Dechevrens, S. J.

JANUARY 12, 1882.

Stations.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.36	771.1	30.41	772.3	37.2	2.9	71	nne.	9	4			2						Oversergent Fischer.
Fanö	30.43	772.8	30.45	773.3	40.8	4.9	90	wnw.			2		3						Overloerer Lauridsen.
Godthaab, Greenland	29.17	740.9	29.21	742.0	4.8	—15.1	87	ene.			4		7						S. Kleinschmidt.
Stykkisholm, Iceland	29.16	740.6	29.20	741.7	33.4	0.8		s.			4		10					raining	A. O. Thorlacius.
Thorshavn	29.72	754.9	29.76	755.8	46.4	8.0	93	s.	20	9			10					raining	Overloerer Bergh.
Vestervig	30.34	770.7	30.43	773.0	38.1	3.4	83	calm			0		1						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.76	755.8	30.43	773.0	44.2	6.8	94	se.			1	0	8 n			0	0	very cloudy	M. Labroue, Director.
Alençon, Normal School	29.91	759.6	30.46	773.6	42.4	5.8	97	sw.			3		fg			0	0	foggy	M. Nicot, Director.
Arras, Engineer School	30.19	766.7	30.45	773.6	43.2	6.2	100	ssw.			1		10			0	0	foggy	M. Klein, Commandant.
Avignon, Normal School	30.28	769.0	30.35	771.0	42.8	6	70	n.			2		0			0	0	clear	M. Girand, Director.
Bar-sur-Seine	29.89	759.1	30.47	774.0	39.6	4.2	96	se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.22	767.7	30.50	774.8	46.9	8.3	89	s.			1		10			0	0	covered	M. Frère Eugène Marie.
Besançon, Normal School			30.54	775.6	39.4	4.1	87	se.			1		8		sw.	0	0		M. Gobin, Director.
Bordeaux, Observatory	30.14	765.5	30.41	772.4	39.7	4.3	99	e.			1		10			0.008	0.2	covered	M. Rayet, Director.
Bourges, Normal School	29.89	759.1	30.49	774.5	40.1	4.5	100	ne.			1		n		ne.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.10	764.5	30.31	770.7	55.0	12.8	87	ssw.			1		6		ssw.	0.008	0.2		M. de Kennaree, Dir.
Caen, Normal School	30.34	770.7	30.42	772.7	47.8	8.8	86	s.			1		10		ssw.	0	0	covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.13	765.2	30.46	773.7	41.0	5.0	90	calm			0		10			0.039	1.0	covered	M. Jadot, Director.
Charleville, Normal School	29.97	761.2	30.50	774.8	39.9	4.4	87	se.			1		10			0.094	2.4	raining	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.00	738.0	30.48	774.3	36.3	2.4	91	nw.			1		10			0	0	foggy	M. Allnard, Director.
Cluny, Normal School	29.59	751.6	30.47	773.8	35.6	2	80	sw.			2		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.61	752.0	30.51	775.0	38.7	3.7	98	sw.			1		10	sw.	sw.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	27.80	706.0	30.41	772.5	42.1	5.6	61	sw.			1	1 c	0	sw.		0	0		M. Jeangirard, Director.
Grésque, du. Rhone	29.15	740.4	30.30	769.0	50.9	10.5	64	ne.			1		2		n.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.64	752.9	30.46	773.6	33.1	0.6	93	ssw.			1		kn			0	0		M. Ablard, Director.
Guéret, Normal School	28.80	731.4	30.44	773.1	41.9	5.5	84	se.			1		2		se.	0	0	slightly cl'dy	M. Rivoire, Director.
Lamballe, Normal School	30.19	766.7	30.46	773.7	45.5	7.5	93	s.			1		10		s.	0	0	misty	M. Ollitrault, Director.
Lescar, Normal School	29.83	757.6	30.41	772.4	50.4	10.2	72	e.			1		1	w.		0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.35	770.9	30.45	773.5	49.1	9.5	100	se.			2		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.36	745.7	30.48	774.1	33.8	1.0	94	ne			1		10		s.	0	0	covered	M. André, Director.
Mans, Normal School	30.18	766.5	30.59	774.7	39.2	4	98	s.			1		10			0.004	0.1	covered	M. Piboen, Director.
Marseille, Observatory	29.99	761.7	30.29	768.7	52.5	11.4	67	wnw.			1		1		ne.	0	0		M. Stephan, Director.
Montdouis l'Instituteur	25.03	635.7	29.87	758.7	42.4	5.8	46	nw.	5.6	2.5			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.21	767.3	30.32	770.2	45.0	7.2	72	w.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.71	754.7	30.50	774.7	37.0	2.8	97	sw.			1		fg			0	0	dense fog	M. Hasse, Director
Nantes, Observatory	30.32	770.0	30.48	774.2	47.1	8.4	85	ese.			0-1	0	9 kn;k	ese.	ese.	0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.21	767.2	30.32	770.0	56.8	13.8	59	s.	7.4	3.3			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.38	543.1			25.7	—3.5		e.			2		0			0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.31	744.5	30.44	773.1	36.0	2.2	96						fg			0	0	foggy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.37	644.3			36.3	2.4	52	nne.			4		0			0.031	0.8	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.43	773.0	30.47	773.8	40.5	4.7	93	e.			1		10			0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.22	767.6	30.45	773.3	45.0	7.2	94	w.			1		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.11	714.0	30.37	771.3	34.2	1.2	93	sw.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.44	773.1	30.48	774.3	46.0	7.8	91	sw.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.30	769.5	30.45	773.5	46.6	8.1	84	ssw.			1		2		sse.	0	0	slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.32	770.2	30.49	774.4	43.0	6.1	97	s.			1		10			0.008	0.2	covered	M. Renou, Director.
Toulouse, Observatory	29.70	754.4	30.43	773.0	46.0	7.8	94	nw.			1		10		nw.	0	0	covered	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.98	761.4	30.47	773.9	43.2	6.2	94	sw.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Hamberg	29.57	751.1	30.44	773.1	38.1	3.4	82	s.			1	0	8 ks			0	0	foggy	Prof. Dr. Hoh.
Berlin	30.24	768.2	30.43	772.9	36.3	2.4	72	nw.			2		7			0.059	1.5		Prof. Dr. Arndt.
Breslau	29.80	757.0	30.34	770.6	36.7	2.6	74	wnw.			4		5			0.003	1.0		Royal University Obs'y.
Carlsruhe	30.04	763.0	30.50	774.8	38.5	3.6	87	s.			1		10	nw.		0	0		Albert Senz.
Cassel	29.70	754.4	30.42	772.6	41.0	5.0	81	nw.			1		5	w.		0.205	5.2		Dr. H. Möhl.
Frankfort on the Main	30.10	764.4	30.48	774.1	40.5	4.7	86	sw.			1		10			0	0		Physical Society.
Friedrichshafen	29.00	736.5	30.52	775.1	33.8	1.0	92	e.			1		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.39	771.8	30.48	774.2	37.6	3.1	98	w.			2		5			0.043	1.1	foggy	E. Preller.
Kiel	30.43	772.8	30.44	773.2	39.0	3.9	81	calm			0		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.04	763.1	30.48	774.3	35.2	1.8	93	nnw.			2		10			0.059	1.5	foggy	H. Leppig, Asst.
Magdeburg	30.26	768.7	30.47	773.8	37.9	3.3	87	nw.			2		10 ks		nw.	0.031	0.8		Dr. Assmann.
Memel	30.15	765.9	30.20	767.1	32.5	0.3	71	n.			7		10 s			0	0		Issermann.
Munich	28.59	726.2	30.48	774.2	37.9	3.3	87	n.			2		8	nw.		0.024	0.6		Central Station.
Neufahrwasser	30.27	768.9	30.29	769.3	36.0	2.2	68	nnw.			5		10			0	0		A. Lothes.
Neustadt, Palatinate	29.92	760.0	30.46	773.0	39.9	4.4	85	nw.			2		10			0	0		Dickaether.
Stuttgart	29.56	749.4	30.44	773.2	38.7	3.7	92	e.			1		8			0	0		Prof. Dr. Schoder.
Wustrow	30.43	772.9	30.45	773.5	39.0	3.9	88	n.			3	0	3 s			0	0		Profs. Brandes & Reimer.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.77	756.1	30.17	766.2	51.1	10.6		n.			0.5		0			0	0	clear	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.04	763.1	30.10	764.4	69.1	20.6	65	sw.					2			0	0	d. clouds	
Deesa	29.60	751.9	30.09	764.4	69.1	20.6	41	n.	7.7	3.4			3	nw.		0	0	d. clouds	
Bombay	29.99	761.8	30.03	762.8	75.2	24.0	54	nnw.	21	9.4			0			0	0	blue sky	
Poona, Yarrowda	28.10	713.8	29.96	761.0	79.8	26.6	34	w.	16	7.2			1			0	0	d. clouds	
Belgaum	27.41	696.2	29.94	760.4	79.8	26.6	36	ne.	4	1.8			0			0	0	blue sky	
Lahore	29.39	746.6	30.18	766.6	57.6	14.2	81	e.	3.0	1.3			2			1.00	25.4	blue sky	
Roorkee	29.20	741.8	30.16	765.9	57.4	14.1	78	n.	2.6	1.2			4			1.62	41.1		
Agra	29.56	750.8	30.16	765.9	62.2	16.8	62	w.	3.4	1.5						0	0		
Nagpur	28.95	735.4	30.01	762.2	76.5	24.7	52	calm	2.5	1.1			7		w.	0	0	d. clouds	
Jubbulpore	28.70	729.1	30.11	764.7	66.0	18.9	57	ne.	2.3	1.0			8			0	0	overcast	
Lucknow	29.70	754.4	30.09	764.3	66.3	19.1	62	wsw.	4.4	2.0			2	w.		0.03	0.8	d. clouds	
Allahabad	29.76	755.9	30.08	764.1	67.0	19.4	63	nnw.	2.9	1.3			5		w.	0	0	d. clouds	
Patna	29.86	758.4	30.05	763.3	70.3	21.3	68	w.	3.4	1.5			6	w.	w.	0	0	d. clouds	
Hazaribagh	27.97	710.4	30.01	762.3	72.0	22.2	45	w.	4.0	1.8			5		w.	0	0		
Cuttack	29.96	760.8	30.05	763.2	75.1	23.9	62	calm	0.2	0.1			0			0	0	blue sky	
Calcutta, Alipore	30.00	762.0	30.02	762.5	72.7	22.6	79						1			0	0	d. clouds	
Dhubri	29.92	760.0	30.04	763.1	70.7	21.5	60	calm	1.8	0.8			0			0	0	blue sky	
Chittagong	29.96	761.0	30.05	763.3	73.1	22.8	75	wnw.	1.6	0.7			5			0	0	blue sky	
Sibsagar	29.71	754.7	30.06	763.6	61.7	16.5	83	s.	1.1	0.5			0			0	0	blue sky	
Jeypore	28.68	728.4	30.21	767.2	54.9	12.7	81	nw.	5.8	2.6			3		nw.	0.54	13.7	d. clouds	
Zanzibar, Africa	29.88	758.9			86.6	30.3	62	nne.	7.8	3.5		c	4 fk		ne.	0.03	0.8	d. clouds	
Trichinopoly	29.74	755.4			78.3	25.7	48	e.	2	0.9			0			0	0	blue sky	
Bellary	28.48	723.4			84.0	28.9	34	se.	2.7	1.2			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.91	759.7	30.34	770.5	45.1	7.3	56	calm	0	0			0			0	0		Prof. Giovanni Clodig.
Milan	29.82	757.3	30.37	771.3	40.1	4.5	76	ese.	0	0			1			0	0		Prof. Schiaparelli.
Padua	30.22	767.6	30.34	770.6	40.5	4.7	67	calm	0	0			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.39	746.4	30.35	770.8	36.5	2.5	79	ene.	1.3	0.6			0			0	0		Prof. P. F. Denza.
Genoa	30.11	764.9	30.32	770.0	54.3	12.4	66	calm	0	0			8			0	0		Prof. G. M. Garibaldi.
Mondovi	28.36	720.4	30.37	771.4	40.6	4.8	42	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.28	769.0	30.33	770.4	42.8	6.0	68	n.	3.1	1.4			1			0	0		Prof. Luigi Guidi.
Florence	30.06	763.5	30.33	770.3	48.2	9.0	71	se.			2		1	nne.		0	0		Prof. Costantino Pitter.
Leghorn	30.22	767.6	30.31	769.9	52.5	11.4	72	ne.	3.1	1.4			8			0	0		Prof. P. Monte.
Rome	30.12	765.0	30.30	769.6	51.4	10.8	59	n.	3.1	1.4			9			0	0		Prof. P. S. Ferrari.
Lecce	29.98	761.5	30.24	768.2	53.8	12.1	75	wnw.	13.0	5.8			3	w.		0	0		Prof. C. de Giorgi.
Cosenza	29.37	746.1	30.30	769.7	52.2	11.2	75	sse.	3.1	1.4			4	se.		0	0		Prof. D. Conti.
Cagliari	30.05	763.3	30.25	768.4	55.6	13.1	67	nw.			2		6	nw.		0	0		Prof. A. Pacinotti.
Palermo	30.03	762.7	30.29	769.3	58.8	14.9	46	calm	0	0			10			0	0		Prof. G. Cincciatore.
Syracuse	30.22	767.5	30.26	768.7	55.4	13.0	74	e.	4.2	1.9			7	wnw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.75	755.6	30.28	769.2	52.0	11.1	71	nnw.	2.5	1.1			1	ssw.		0	0		Prof. T. Brioschi.
Stelvio	22.29	566.1			24.8	— 4.0	31	ne.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.36	567.9			30.4	— 0.9	41	se.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.16	766.0	30.20	767.1	23.2	— 4.9	89	s.	4.4	2.0		0	8ks;s			0	0	cloudy	
Hakodate	30.15	765.8	30.16	766.0	28.5	— 1.9	80	ne.	6.0	2.7			10			0.297	7.5	snowing	
Hiroshima, I. M. Obs'y †	30.07	763.8	30.09	764.3	38.2	3.4	83	nne.	2.6	1.2		ck	10 s			0	0	covered	K. Sasaki.
Kanazawa	30.15	765.8	30.26	768.6	31.6	— 0.2	72					0	0					clear	S. Endo.
Kioto	29.97	761.2	30.15	765.8	34.6	1.4	83	nnw.	0.3	0.1			10 s			0.050	1.3	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.94	760.5	30.15	765.8	37.4	3.0	95	ne.	0.5	0.2			10 n			0.370	9.4	raining	S. Takehayashi.
Niigata	30.10	764.5	30.14	765.5	30.2	— 1.0	83	ese.	2.1	0.9		0	0			0	0	clear	
Nobiru	30.19	766.8	30.21	767.3	31.3	— 0.4	87	n.	5.7	2.5			10 s			0.040	1.0	cloudy	H. Midzushina.
Sapporo					24.4	— 4.2	74	ese.	4.8	2.1			10			0.500	12.7	covered	
Tokei Obs'y, Yeddo	30.14	765.5	30.21	767.3	38.5	3.6	80	n.	4.9	2.2			10 n			0.045	1.1	light rain	The Staff.
Wakayama	30.06	763.5	30.12	765.0	39.5	4.2	78	ne.	2.8	1.3			10 s;n			0.004	0.1	cloudy	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.75	755.6	29.93	760.2	81.9	27.7	70	ene.	13.5	6.0		6ck;0s	3k;n	ene.	ese.	0.28	7.1	cloudy	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.67	601.2	29.89	759.2	50.9	10.5	89	calm	0	0		f	1			0	0	fine	Vicente Fernandez.
Leon	24.42	620.3	30.18	766.5	53.6	12.0	86	n.			1	f c	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.74	755.5	30.01	762.2	65.8	18.7	89	wnw.			5		10 n			0.039	1.0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.08	586.3	30.26	768.8	43.5	6.4	75	calm	0	0		0	0		sw.	0	0		The Staff.
Morelia	24.30	617.3	30.56	776.3	46.9	8.3	84	n.			3	0	0		sw.	0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	23.91	607.2	29.99	761.8	51.3	10.7	81	calm			0	0	1 s			0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.3	30.27	768.8	46.0	7.8	73	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.17	613.9	30.16	766.0	58.2	14.6	62	sw.			1	3	0	w.		0	0	clear	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.48	774.1	30.48	774.1	46.4	8.0		wsw.			3					0	0		
Groningen	30.44	773.1	30.49	774.5	37.6	3.1		e.			1					0.016	0.4		
Helder	30.46	773.6	30.46	773.6	44.2	6.8		se'			1					0	0		
Hellevoetsluis	30.45	773.4	30.45	773.4	45.7	7.6	97	calm			0					0.016	0.4		
Utrecht	30.43	773.0	30.48	774.2	44.2	6.8	99	sse.			1		10			0	0	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.31	769.8	30.37	771.4	34.2	1.2	68	s.	2	1			0			0.055	1.4		
Brono	30.25	768.3	30.29	769.3	28.0	— 2.2	63	calm	0	0			8			0.165	4.2		
Christiania	30.30	769.5	30.45	773.5	30.7	— 0.7	88	nne.	0	0			10			0	0		
Gjæsvær	29.65	753.2	29.68	753.8	24.3	— 4.3		wnw.			7		8						
Lodingen	30.06	763.6	30.11	764.8	32.7	0.4	71	w.			6		9			0.122	3.1		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					55.8	13.2	66	w.	19.9	8.9			4			0.551	14.0		Dr. J. A. Sampaio.
Campo Major	29.30	744.1	30.19	766.9	54.5	12.5	63	ne.	3.8	1.7			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.13	765.2	30.21	767.4	64.6	18.1	56	calm	0	0			2			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.98	761.6	30.35	770.9	53.6	12.0	88	nne.	7.4	3.3			6	ssw.		0	0		The Staff.
Ponta Delgada, Azores	29.61	752.1	29.68	753.9	54.7	12.6	88	wnw.	28.0	12.5			10			0.661	16.8	raining	
Saint Paul de Loando	29.69	754.1	29.89	759.2	76.6	24.8	97	sw.	2.5	1.1			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.75	730.3	29.90	759.5	17.1	— 8.3		sse.	11	5			10 n			0	0		Major K. Lasarew.
Archangel	29.72	754.8	29.74	755.3	13.6	—10.2	90	n.	13	6			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.04	762.9	29.95	760.8	36.9	2.7	74	wsw.	10	7		0	4 s			0	0		Capt. Wisganow.
Barnaul	29.78	756.3	30.34	770.7	— 2.0	—18.9	72	calm	0	0			5			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.62	752.3	29.87	758.8	28.8	— 1.8	84	nne.	16	7			10 n			0	0		Observatory.
Ekaterinburg	28.68	728.4	29.68	753.9	18.1	— 7.7	95	calm	0	0			10					light clouds.	Meteorological Obs'y.
Kasan	29.14	740.2	29.42	747.3	23.5	— 4.7	93	se.	13	6			10			0.028	0.7		Observatory.
Kertch	29.80	757.0	29.82	757.5	42.3	5.7	83	wsw.	4	2			10 n			0	0	heavy cl'ds.	Lagorio & Sastyrea.
Kieff	28.87	733.3	29.52	749.9	32.9	0.5	78	wnw.	16	7			toks;n					snowing	Observatory.
Lugan	29.39	746.5	29.60	751.8	35.1	1.7	78	wsw.	22	10			9			0.012	0.3		Meteorological Obs'y.
Moscow	28.59	726.2	29.08	738.5	34.2	1.2	91	sw.	7.8	3.5			10 s			0.083	2.1		Meteorological Obs'y
Nikolaiev	29.76	756.0	29.84	757.8	41.4	5.2	63	w.	13	6		0	4 kn			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.94	760.5	30.03	762.7	— 8.0	—22.2	78	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.15	765.8	30.29	769.4	29.1	— 1.6	35	nw.	7	3		0	0			0	0		Physical Observatory.
St. Petersburg	29.74	755.4	29.76	755.8	26.2	— 3.2	74	nne.	25	11			10 n			0.020	0.5	light snow	Central Physical Obs'y.
Tashkend, Laboratory	28.59	726.2	30.23	767.9	36.5	2.5	62	calm	0	0			10			0	0		Teich, A. M.
Tiflis	28.74	730.0	30.20	767.1	43.0	6.1	48	nw.	13	6			0			0	0		Physical Observatory.
Warsaw	29.67	753.6	30.11	764.8	35.8	2.1	80	nw.	22	10			10 ks						Astronomical Obs'y.
Wilna	29.35	745.5	29.79	756.6	31.3	— 0.4	79	nnw.	13	6			10			blank	blank	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.87	758.8	30.19	766.8	8.1	—13.3	81	se.	16	7			6			0.154	3.9		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.04	763.0	51	10.6	93	s.			4		10			0	0	overcast	J. Youngclause.
North Unst, Shetland Pds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Oos'y	30.21	767.4	30.31	769.9	53.6	12	75	sw.	3.6	1.6			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.33	770.4	30.39	771.9	51.3	10.7	81	se.	2.2	1.0		2	0	w.		0	0	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.34	694.3	30.47	773.8	36.1	2.3	80	sw.	3.1	1.4		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.08	713.3	30.37	771.4	49.6	9.8	56	ne.	5.4	2.4		1	0			0	0	light clouds	The Staff.
Murcia, Met. Obs'y	30.21	767.3	30.36	771.2	54.7	12.6	74	sw.	1.6	0.7		0	4			0	0	clouds	Olayo Diax, Director.
Santiago, Met. Obs'y	29.37	745.9	30.27	768.9	56.5	13.6	80	calm	0	0		0	1			0	0	almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.11	764.8	30.18	766.5	69.3	20.7	90	e.	5.6	2.5		c	k	wsw.	e.	0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.98	761.5	30.04	762.9	71.9	22.2	74	ne.	2.2	1.0		1 c	1 s			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.19	766.9	30.29	769.4	57.0	13.9	70	ne.	4.9	2.2		0	0			0	0		Capt. O. Pujazon, R. N.
San Juan de Porto Rico, W. I.	30.07	763.7	30.16	766.0	75.2	24.0	76	se.	15.7	7.0		3 s	5 k	e.	se.	0	0		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.98	761.5	30.11	764.8	67.2	19.6	85	nw.	5.2	2.3		0	4 ks	nnw.		inap.	inap.	cloudy	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.21	767.3	30.25	768.3	— 3.6	—19.8	100	n.			2		5			0	0		
Umea	30.31	769.8	30.36	771.1	2.1	—16.6	80	nw.			2		5			0	0		
Hernosand	30.38	771.6	30.43	772.9	16.7	— 8.5	79	calm			0		3			0.012	0.3		
Stockholm	30.15	765.9	30.33	770.4	27.0	— 2.8	62	nne.			7		10			0.008	0.2		
Wisby	30.13	765.2	30.19	766.7	31.6	— 0.2	85	ne.			7		10			0	0		
Sub Series.																			
Upsala	30.25	768.4	30.34	770.6	25.3	— 3.7	69	nnw.	15.2	6.8			8		nne.	0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.97	735.7	30.45	773.5	34.5	1.4	89	nnw.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.12	765.0	45.9	7.7	66	sw.	9	4.0			3		sw.	0	0		The Observatory.
Valona			30.22	767.7	54.7	12.6		nw.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.03	762.8	64.0	17.8	78	w.			1	0	3 ks		sw.	0.10	2.5		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.20	767.1	30.29	769.4	39	3.9	73	nw.	10	4.5		0	0			0.01	0.3	clear	
Alpena, Michigan	29.77	756.1	30.48	774.2	21	— 6.1	84	w.	6	2.7			10 s			0.05	1.3	cloudy	
Atlanta, Georgia	29.09	738.9	30.32	770.1	49.0	9.4	96	e.	11	4.9			10 n		calm	0.48	12.2	light rain	
Atlantic City, New Jersey	30.44	773.2	30.44	773.2	34	1.1	78	w.	7	3.1		6 c	0			0.09	2.3	fair	
Augusta, Georgia	30.10	765.1	30.36	771.1	56.4	13.6	93	ne.	8	3.6			10 n			0.04	1.0	light rain	
Baltimore, Maryland	30.45	773.4	30.50	774.7	37	2.8	82	nw.	3	1.3		9 cs	fg.			0	0	cloudy	
Barnegat, New Jersey	30.40	772.1	30.42	772.7	32.5	0.3	83	w.	10	4.5		4 k	4 k	w.	w.	0.06	1.5	fair	
Bismarck, Dakota	28.23	717.0	30.23	767.8	17	— 8.3	83	e.	8	3.6			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.20	690.9	30.13	765.3	12	—11.1	91	se.	3	1.3		0	0			0	0	clear	
Boston, Massachusetts	30.00	762.0	30.17	766.3	32.0	0.0	78	w.	13	5.8		0	0			0.51	13.0	clear	
Brownsville, Texas	29.99	761.7	30.04	763.0	52	11.1	100	calm	0				10 s			0.09	2.3	cloudy	
Buffalo, New York	29.69	754.1	30.49	774.4	31.9	— 0.1	89	w.	12	5.4		0	7 s		w.	0.04	1.0	fair	
Burlington, Vermont	30.00	762.0	30.31	769.9	25.0	— 3.9	70	n.	17	7.6		0	7 s		nw.	0.02	0.5	fair	
Cairo, Illinois	29.90	759.4	30.32	770.1	36.8	2.7	81	n.	8	3.6			10 s		calm	0	0	cloudy	
Campo, California	27.22	691.4	29.85	758.2	24	— 4.4	88	nw.	4	1.8			10 s		w.	0	0	threatening	
Camp Thomas, Arizona	27.18	690.4	30.01	762.2	33.5	0.8	87	nw.			1	3 cs	5 ks			0	0	cloudy	
Cape Henry, Virginia	30.47	773.9	30.49	774.4	40	4.4	65	n.	10	4.5		0	0			0	0	clear	
Cape May, New Jersey	30.43	772.9	30.46	773.7	37	2.8	72	nw.	21	9.4		3 cs	2 s	w.	w.	0.28	7.1	fair	
Castroville, Texas	29.19	741.4	30.04	763.0	50	10.0	93	e.	2	0.9			10 n			0.15	3.8	light rain	
Cedar Keys Florida	30.23	767.8	30.25	768.3	66	18.9	84	se.	5	2.2		4 cs	0			0	0	fair	
Champaign, Illinois	29.52	749.8	30.39	771.9	26.8	— 2.9	77	e.	7	3.1			8 s		e.	0	0	cloudy	
Charleston, S. Carolina	30.28	769.1	30.34	770.6	58	14.4	80	ne.	12	5.4			10 s		ne.	0.02	0.5	threatening	
Charlotte, N. Carolina	29.52	749.8	30.41	772.4	45.0	7.2	60	ne.	10	4.5			10 n		ne.	0	0	cloudy	
Chattanooga, Tennessee	29.49	749.0	30.35	770.9	44.0	6.7	93	ne.	8	3.6			10 n		calm	0.01	0.3	light rain	
Cheyenne, Wyoming	23.66	601.5	29.93	760.2	11.3	—11.5	82	n.	14	6.3		0	0			0	0	clear	
Chicago, Illinois	29.68	753.9	30.44	773.2	23.8	— 4.6	81	nw.	1	0.4		2 c	fg.			0	0	clear	
Chincoteague, Virginia	30.47	773.9	30.49	774.4	37	2.8	72	nw.	13	5.8		0	2 s		nw.	inap.	inap.	clear	
Cincinnati, Ohio	29.78	756.4	30.46	773.7	38	3.3	61	ne.	5	2.2		0	5 s			0	0	fair	
Cleveland, Ohio	29.74	755.4	30.52	775.2	30	— 1.1	90	w.	4	1.8		hz.	1 s			0	0	clear	
Coleman City, Texas	28.17	715.5			43	6.1	93	e.	9	4.0			10 n			0.41	10.4	light rain	
Columbus, Ohio	29.61	752.1	30.51	774.9	35	1.7	69	ne.	4	1.8			10 ks		se.	0	0	cloudy	
Concho, Texas	27.97	710.4	29.99	761.7	43	6.1	100	e.	10	4.5			10 s			0.29	7.4	cloudy	
Davenport, Iowa	29.73	755.1	30.44	773.2	23	— 5.0	73	e.	6	2.7		hz.	7 s	calm	calm	0	0	fair	
Dayton, Washington T'y	28.50	723.9	30.30	769.6	20.3	— 6.5	84	sw.	5	2.2		0	0			0.06	1.5	clear	
Deadwood, Dakota	25.15	638.8	30.10	764.5	4.1	—15.5	57	calm	0	0			10 s			0.01	0.3	cloudy	
Decatur, Texas					44	6.7	100	se.	13	5.8			10 n			0.70	17.8	light rain	
Delaware Breakwater, Del.	30.44	773.2	30.46	773.7	37	2.8	82	nw.	14	6.3		3 c;cs	4 s	w.		0.02	0.5	fair	
Denison, Texas	29.20	743.2	30.10	764.5	43.4	6.3	100	e.	6	2.7			10 n			0.23	5.8	light rain	
Denver, Colorado	24.43	620.5	29.95	760.7	9.0	—12.8	80	s.	5	2.2		0	0			0	0	clear	
Des Moines, Iowa	29.42	747.3	30.39	771.9	24	— 4.4	88	e.	4	1.8		0	5 s			0	0	fair	
Detroit, Michigan	29.74	755.4	30.50	774.7	30.0	— 1.1	78	w.	4	1.8		0	0			0	0	clear	
Dodge City, Kansas	27.35	694.7	30.10	764.5	28.5	— 1.9	86	s.	12	5.4			10 s			0	0	cloudy	
Dubuque, Iowa	29.09	754.1	30.46	773.7	13.5	—10.3	80	w.	1	0.4		6 k	fg.	w.	calm	0	0	fair	
Duluth, Minnesota	29.67	753.6	30.43	772.9	12	—11.1	80	sw.	2	0.9			10 s		calm	0	0	cloudy	
Eagle Pass, Texas	29.20	741.7	30.04	763.0	48.1	8.9	93	se.	6	2.7			10 s			0.15	3.8	cloudy	
Eagle Rock, Idaho	25.14	638.5	30.10	764.5	—14	—25.6	56	calm	0	0			fg			0	0	dense fog	
Eastport, Maine	29.94	760.5	30.01	762.2	12.5	—10.8	80	nw.	14	6.3			10 s		nw.	0.24	6.1	cloudy	
El Paso, Texas	26.04	661.4	29.92	760.0	40.3	4.6	50	nw.	6	2.7			10 s		w.	0	0	cloudy	
Erie, Pennsylvania	29.73	755.1	30.50	774.7	34	1.1	78	nw.	7	3.1		8 k	0	w.		0	0	cloudy	
Escanaba, Michigan	29.70	755.9	30.48	774.2	19	— 7.2	84	nw.	4	1.8		0	3 s			0	0	clear	
Florence, Arizona																			
Fort Apache, Arizona	24.74	628.4	29.86	758.4	26	— 3.3	80	se.	4	1.8			10 n		calm	0.01	0.3	light snow	
Fort Assinnaboine, Montana	27.31	693.7	30.35	770.9	10	—12.2	61	sw.	3	1.3			10 s			0	0	cloudy	
Fort Bennett, Dakota	28.36	720.3	30.10	764.5	29	— 1.7	88	se.	20	8.9			10 n			0.12	3.0	light snow	
Fort Benton, Montana	27.33	694.2	30.31	769.9	10	—12.2	61	w.	8	3.6		10 k	0	w.		0.01	0.3	cloudy	
Fort Buford, Dakota	28.17	715.5	30.37	771.4	2	—16.7	75	n.	7	3.1		4 c	0	calm		0	0	fair	
Fort Custer, Montana	26.88	682.7	30.26	768.6	12	—11.1	91	n.	10	4.5			10 n		calm	inap.	inap.	light snow	
Fort Davis, Texas	24.96	634.0	29.94	760.5	45	7.2	71	s.	6	2.7			fg.			c	0	dense fog	
Fort Elliott, Texas	27.15	689.6	30.08	764.0	29	— 1.7	67	se.	8	3.6			10 n		se.	inap.	inap.	light snow	
Fort Gibson, Indian T'y	29.54	750.3	30.14	765.5	42.2	5.7	92	se.	8	3.6			10 n			inap.	inap.	light rain	
Fort Grant, Arizona	25.07	636.8	29.97	761.2	28	— 2.2	61	ne.	5	2.2		5 cs	0			0	0	fair	
Fort Griffin, Texas	28.71	729.2	30.09	764.3	45	7.2	93	e.	4	1.8			10 s		calm	0.15	3.8	cloudy	
Fort Keogh, Montana	27.55	699.8	30.24	768.1	12	—11.1	83	w.	10	4.5		7 cs	0			0	0	fair	
Fort Macon, North Carolina	30.43	772.9	30.44	773.2	47	8.3	66	ne.	17	7.6		10 cs	0	sw.		0.01	0.3	cloudy	
Fort McKavett, Texas	27.71	703.8	30.10	764.5	45	7.2	93	ne.	2	0.9			10 s			0.27	6.9	cloudy	
Fort Missoula, Montana	26.83	681.5	30.29	769.4	— 8	—22.2	100	calm	0	0		0	0			0.23	5.8	clear	
Fort St. Michaels, Alaska	29.06	738.1	29.10	739.1	10	—12.2	79	sw.	42	18.8		0	8 s		sw.	0.13	3.3	fair	
Fort Shaw, Montana	26.45	671.8	30.31	769.9	— 5	—20.6	65	w.	6	2.7		0	0			0	0	clear	
Fort Sill, Indian Territory	28.79	731.3	30.12	765.0	42.2	5.7	85	se.	14	6.3			10 n			inap.	inap.	light rain	
Fort Stevenson, Dakota	28.22	716.8	30.28	769.1	16	— 8.9	87	n.	4	1.8			10 n		calm	inap.	inap.	light snow	
Fort Verde, Arizona					22.3	— 5.4	73	ne.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.22	716.8	30.04	763.0	46	7.8	93	calm	0	0			10 n			1.65	41.9	light rain	
Galveston, Texas	29.98	761.5	30.02	762.5	58	14.4	100	e.	12	5.4			10 n		ne.	0.08	2.0	light rain	
Grand Haven, Michigan	29.75	755.6	30.46	773.7	23.0	— 5.0	94	n.	1	0.4		0	0			0	0	clear	
Hatteras, North Carolina	30.40	772.1	30.42	772.7	47	8.3	77	ne.	20	8.9			9 k		e.	0	0	cloudy	
Helena, Montana	25.81	655.6	30.24	768.1	9	—12.8	60	calm	0	0			10 s		calm	0.04	1.0	cloudy	
Henrietta, Texas	29.05	737.9	30.12	765.0	40	4.4	100	e.	6	2.7			10 n			0.09	2.3	heavy rain	
Huron, Dakota	28.72	729.5	30.26	768.6	27.8	— 2.3	70	se.	16	7.2			10 s		s.	0	0	cloudy	
Indianapolis, Indiana	29.56	750.8	30.40	772.1	31	— 0.6	85	e.	4	1.8		9 cs	fg.	calm	calm	0	0	cloudy	
Indianola, Texas	29.95	760.7	29.98	761.5	57.6	14.2	96	ne.	17	7.6			10 n			0.24	6.1	light rain	
Jacksboro, Texas	28.83	732.3	30.07	763.8	44	6.7	100	e.	9	4.0			10 n			0.26	6.6	light rain	
Jacksonville, Florida	30.21	767.3	30.26	768.6	64	17.8	90	s.	1	0.4			10 s		s.	0	0	cloudy	
Keokuk, Iowa	29.66	753.4	30.36	771.1	24.5	— 4.2	75	e.	9	4.0		8 cs	0			0	0	cloudy	
Key West, Florida	30.18	766.6	30.21	767.3	71.0	21.7	79	e.	9	4.0		2 c	3 s;k	w.	e.	0	0	fair	
Kittyhawk, North Carolina	30.44	773.2	30.46	773.7	45	7.2	68	ne.	32	14.3		0	4 s		w.	0	0	fair	
Knoxville, Tennessee	29.28	743.7	30.36	771.1	40.7	4.8	80	ne.	8	3.6			10 s		w.	0	0	cloudy	
La Crosse, Wisconsin	29.59	751.6	30.43	772.9	12	—11.1	80	calm	0	0			10 n			0	0	cloudy	
La Mesilla, New Mexico	25.86	656.8	29.89	759.2	43.0	6.1	32	w.	9	4.0			10 s			0	0	cloudy	
Leavenworth, Kansas	29.33	745.0	30.29	769.4	34	1.1	78	se.	8	3.6			10 s			0	0	cloudy	
Lewiston, Idaho	29.40	746.7	30.28	769.1	28.5	— 1.9	57	s.	2	0.9		7 k	0	s.		0.02	0.5	cloudy	
Little Rock, Arkansas	29.85	758.2	30.18	766.6	41	5.0	100	ne.	5	2.2			10 n			0.27	6.9	light rain	
Los Angeles, California	29.60	751.8	30.00	762.0	36.2	2.3	69	ne.	8	3.6		0	3 s		e.	0	0	clear	
Louisville, Kentucky	29.78	756.4	30.37	771.4	37.0	2.8	82	ne.	8	3.6			10 s		calm	0	0	cloudy	
Lynchburg, Virginia	29.74	755.4	30.46	773.7	41.8	5.4	65	calm	0	0		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.37	746.0	30.46	773.7	11	—11.7	80	w.	2	0.9		0	fg.		calm	0	0	fair	
Marquette, Michigan	29.68	753.9	30.46	773.7	11	—11.7	80	w.	4	1.8		0	0			inap.	inap.	clear	
Mason, Texas	28.31	719.1	30.05	763.3	46	7.8	93	se.	5	2.2			10 n		se.	1.57	39.9	light rain	
Memphis, Tennessee	29.90	759.4	30.26	768.6	39	3.9	100	n.	6	2.7			10 n			0.06	1.5	light rain	
Milwaukee, Wisconsin	29.66	753.4	30.46	773.7	22	— 5.6	88	nw.	4	1.8		0	1 s;fg			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.13	765.3	30.17	766.3	61.0	16.1	93	ne.	2	0.9			10 s			0.24	6.1	threatening.	
Montgomery, Alabama	29.99	761.7	30.23	767.8	56.4	13.6	82	e.	6	2.7			10 s		se.	0.10	2.5	cloudy	
Moorhead, Minnesota	29.23	742.4	30.34	770.6	13.2	—10.4	80	se.	6	2.7			10 s			inap.	inap.	cloudy	
Morgantown, W. Virginia	29.43	747.5	30.49	774.4	40.0	4.4	59	n.	2	0.9			10 s		n.	0.01	0.3	cloudy	
Mt. Washington, N. H.	23.44	595.4	30.07	763.8	2.0	—16.7	100	nw.	54	24.1			10n;fg		nw.	0.91	23.1	light snow	
Nashville, Tennessee	29.77	756.1	30.33	770.4	39.0	3.9	78	ne.	4	1.8		10 cs	0			0	0	cloudy	
New Haven, Connecticut	30.17	766.3	30.29	769.4	35.5	1.9	65	sw.	8	3.6		7 c	2 k	w.	w.	0.13	3.3	cloudy	
New London, Connecticut	30.24	768.1	30.28	769.1	36	2.2	69	w	10	4.5		4 cs	0	calm		0.05	1.3	fair	
New Orleans, Louisiana	30.05	763.3	30.11	764.8	63.0	17.2	93	e.	8	3.6			fg			0.07	1.8	dense fog	
Newport, Rhode Island	30.20	767.1	30.25	768.3	36.2	2.3	66	sw.	15	6.7		3 c	1 s	nw.	calm	0.33	8.4	fair	
New River, N. Carolina					45	7.2	68	n.			1	3 ck	5 s	w.		0	0	cloudy	
New Shoreham, Rhode I'd.	30.24	768.1	30.27	768.8	39.2	4.0	65	nw.	27	12.1		2 c	2 s	sw.	sw.	1.07	27.2	fair	
New York, New York	30.19	766.8	30.38	771.6	37	2.8	61	nw.	12	5.4		4 cs	4 s	nw.	nw.	0.09	2.3	cloudy	
Norfolk, Virginia	30.47	773.9	30.50	774.7	40	4.4	73	ne.	8	3.6		0	0			0	0	clear	
North Platte, Nebraska	26.95	684.5	30.07	763.8	28.6	— 1.9	69	se.	32	14.3			10 s			0	0	cloudy	
Olympia, Washington T'y	30.28	769.1	30.32	770.1	29.5	— 1.4	94	calm	0	0		10 ck	0	n.		0	0	cloudy	
Omaha, Nebraska	29.04	737.6	30.30	769.6	27.0	— 2.8	84	se.	9	4.0		2 k	8 s			0	0	cloudy	
Ooglaamie, Pt. Barrow, Alas-	28.49	723.6	28.51	724.4	2.5	—16.4	92	e.	24	10.7			10 n			0.11	2.8	light snow	
Oswego, New York	30.03	762.7	30.38	771.6	35.0	1.7	69	nw.	17	7.6		0	8 ks		nw.	0.05	1.3	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.17	766.3	30.20	767.1	65.8	18.8	97	e.	6	2.7			10 s			0	0	cloudy	
Philadelphia, Pa.	30.38	771.6	30.44	773.2	38	3.3	61	nw.	8	3.6		5 ck	hz	nw.		0.04	1.0	fair	
Pike's Peak, Colorado	17.16	435.9	29.86	758.4	—3	—19.4	100	se.	22	9.8			10 n		se.	0.10	2.5	light snow	
Ploche, Nevada	23.75	603.2	29.95	760.7	8	—13.3	76	nw.	6	2.7		2 k	0	calm		0.03	0.8	clear	
Pittsburg, Pennsylvania	29.67	753.6	30.52	775.2	36.0	2.2	61	nw.	4	1.8			10 s		w.	inap.	inap.	cloudy	
Port Eads, Louisiana	30.13	765.3	30.14	765.5	64.0	17.8	100	se.	8	3.6			fg			0	0	dense fog	
Port Huron, Michigan	29.76	755.9	30.49	774.4	22.6	— 5.2	91	sw.	2	0.9		4 cs	sk	calm	calm	0	0	fair	
Portland, Maine	30.03	762.7	30.08	764.0	21	— 6.1	84	nw.	1	0.4			fg			0.50	12.7	clear	
Portland, Oregon	30.27	768.8	30.34	770.6	30.0	— 1.1	88	nw.	2	0.9		0	0			0	0	clear	
Portsmouth, N. Carolina					48	8.9	71	ne.	12	5.4		0	6 ks		n.	0	0	fair	
Prescott, Arizona	24.48	621.8	29.86	758.4	16	— 8.9	58	s.	4	1.8		0	0			inap.	inap.	clear	
Punta Rassa, Florida	30.21	767.3	30.22	767.6	65	18.3	92	e.	8	3.6		6 cs	1 s	e.	calm	0	0	fair	
Red Bluff, California	29.70	754.4	30.08	764.0	36.0	2.2	53	n.	16	7.2		0	0			0	0	clear	
Rio Grande City, Texas	29.75	755.6	30.00	762.0	52	11.1	93	n.	1	0.4		10 cs	0	calm		0.11	2.8	cloudy	
Rochester, New York	29.75	755.6	30.46	773.7	31	— 0.6	88	w.	11	4.9		2 cs	2 s	nw.	w.	0.02	0.5	fair	
Roseburg, Oregon	29.71	754.6	30.28	769.1	31.1	— 0.5	88	e.	3	1.3			10 ks		ne.	0.09	2.3	cloudy	
Sacramento, California	29.90	759.4	29.98	761.5	34.5	1.4	72	n.	8	3.6		0	0			0	0	clear	
St. Louis, Missouri	29.74	755.4	30.38	771.6	31.9	— 0.1	88	ne.	7	3.1			10 s			0	0	cloudy	
St. Paul, Minnesota	29.47	748.5	30.42	772.7	13.2	—10.4	87	ne.	6	2.7		8 k	0	n.		0	0	cloudy	
St. Vincent, Minnesota	29.36	745.7	30.34	770.6	8	—13.3	100	s.	5	2.2			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.34	643.6	29.91	759.7	18	— 7.8	58	calm	0	0			10 s			inap.	inap.	threatening.	
San Antonio, Texas	29.28	743.7	30.02	762.5	48.6	9.2	93	ne.	8	3.6			10 s			0.18	4.6	cloudy	
San Diego, California	29.83	757.7	29.90	759.4	38.2	3.4	41	e.	8	3.6		5 ck	0	nw.		0	0	fair	
Sandusky, Ohio	29.79	756.7	30.51	774.9	31	— 0.6	78	sw.	6	2.7		0	0			0	0	clear	
Sandy Hook, New Jersey	30.35	770.9	30.39	771.9	37.0	2.8	70	w.	16	7.2		5 k	0	w.		0.12	3.0	fair	
San Francisco, California	29.89	759.2	29.96	761.0	42	5.6	42	nw.	22	9.8		0	0			0	0	clear	
Santa Fé, New Mexico	22.94	582.7	29.95	760.7	20.5	— 6.4	82	calm	0	0		0	2 s		calm	0	0	clear	
Savannah, Georgia	30.20	767.1	30.30	769.6	59	15.0	80	e.	8	3.6			10 ks		se.	0	0	cloudy	
Shreveport, Louisiana	29.86	758.4	30.11	764.8	45	7.2	100	ne.	5	2.2			10 n		calm	0.29	7.4	light rain	
Silver City, New Mexico	23.97	608.8	29.83	757.7	23	— 5.0	67	calm	0	0		0	0			0	0	clear	
Sitka, Alaska	29.93	760.2	30.00	762.0	42.2	5.7	88	se.	7	3.1			10 n		calm	0.73	18.5	light rain	
Smithville, North Carolina	30.36	771.1	30.40	772.1	50	10.0	77	n.	16	7.2			10 s		nw.	0	0	cloudy	
Spokane Falls, Wash. Ter.	28.19	716.0	30.33	770.4	1	—17.2	83	calm	0	0		5 cs	0	calm		0	0	fair	
Springfield, Illinois	29.66	753.4	30.39	771.9	30	— 1.1	72	e.	8	3.6		hz	2 s			0	0	dense haze	
Springfield, Massachusetts	30.13	765.3	30.27	768.8	38.6	3.6	59	nw.	10	4.5		3 k	0	nw.		0.14	3.6	clear	
Springfield, Mo.	28.72	729.5	30.30	769.6	36.5	2.5	85	se.	16	7.2			10 s		se.	0	0	cloudy	
Stockton, Texas	26.78	680.2	29.92	760.0	45.0	7.2	93	se.	4	1.8			10 s		se.	0.02	0.5	cloudy	
Thatcher's Island, Mass.	30.08	764.0	30.14	765.5	33.0	0.6	78	w.	22	9.8		0	0			0.11	2.8	clear	
Toledo, Ohio	29.76	755.9	30.50	774.7	33	0.6	78	sw.	4	1.8		2 c	0			0	0	clear	
Tucson, Arizona	27.44	697.0	29.94	760.5	39	3.9	82	s.	4	1.8			10 s			0	0	threatening.	
Umatilla, Oregon	30.01	762.2	30.40	772.1	28.0	— 2.2	77	e.	2	0.9		5 cs	0	ne.		0.01	0.3	fair	
Uvalde, Texas																			
Vicksburg, Mississippi	29.85	758.2	30.12	765.0	50	10.0	93	e.	4	1.8			10 s		calm	0.11	2.8	cloudy	
Visalia, California	29.48	748.8	29.87	758.7	30.5	— 0.8	68	se.	4	1.8		4 c	0			0	0	fair	
Washington, D. C.	30.39	771.9	30.51	774.9	36.0	2.2	79	nw.	2	0.9		7 cs	sk	nw.		inap.	inap.	fair	
West Los Animas, Colorado	25.77	654.5	29.91	759.7	22	— 5.6	87	se.	14	6.3		2 cs	0	se.		0	0	clear	
Wickenburg, Arizona					19	— 7.2	67	calm			0	0	1 s			0	0	clear	
Williamsport, Pa.	29.80	756.9	30.43	772.9	35	1.7	69	nw.	9	4.0			10 ks		nw.	0.10	2.5	cloudy	
Wilmington, N. Carolina	30.35	770.9	30.41	772.4	50	10.0	71	e.	7	3.1		10 k	0	w		0	0	cloudy	
Winnemucca, Nevada	25.49	647.4	30.03	762.7	11	—11.7	83	calm	0	0			10 ks		ne.	0.09	2.3	cloudy	
Wood's Holl, Mass.	30.18	766.6	30.22	767.6	37	2.8	72	nw.	28	12.5		2 cs	0	nw.		0.38	9.7	clear	
Yankton, Dakota	28.84	732.5	30.26	768.6	27	— 2.8	64	se.	11	4.9		0	6 s		s.	0	0	fair	
Yuma, Arizona	29.81	757.2	29.96	761.0	31.0	— 0.6	74	n.	1	0.4		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.04	559.8			51.0	10.6	72	calm	0	0		1 cs	1 s			0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.12	765.0	30.13	765.3	79	26.1	73	e.				2 k	5 ks	e.	e.	0.60	15.2	fair	J. A. Racker.
Buenaventura, U. S. C.	29.93	760.2	29.95	760.7	78	25.6	86	s.	8	3.6			10 ks		s.	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.05	763.3	30.07	763.8	78	25.6	95	e.				0	5 ks			0.1	3.	cloudy	B. Bigar.
Havana, Cuba, W. I.	30.17	766.3	30.22	767.6	72	22.2	97	calm	0	0		1 cs	2 ks	calm	calm	0	0	fair	A. Van Cuneghem, Ass't
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	68.8	20.4	79	calm	0	0		0	8 s		e.	0	0	cloudy	Robert Johnstone
Navassa, W. I.	30.02	762.5	30.10	764.5	76	24.4	69	ne.	9	4.0		0	0			0	0	clear	F. M. Everett.
Paramaribo, S. A.	30.05	763.3	30.05	763.3	77.5	25.3	93	e.			2		10 n	e.	e.	1.00	25.4	rainy	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mbia	29.40	746.7	29.95	760.7	81	27.2	85	e.			1	3 c	0	calm		blank	blank	clear	Miss Flora A. Nichols.
Rivas, Nicaragua					73.7	23.2	90	ne.			3	0	6 ks		ne.	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.12	765.0	30.15	765.8	76	24.4	72	n.	6	2.7		3 ck	0			0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.28	769.1	30.34	770.6	—29.0	—33.9		n.	18	8.0		0	0			0	0	clear	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India	29.95	760.7	77.8	25.4	79	n.			3		7							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.19	766.8	55	12.8	73	calm			0		0							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.95	760.7	70	21.1	58	se.			2		3	sse.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.86	758.4	69	20.6	90	sse.			1		9	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.21	767.3	45	7.2	92	ssw.			2–3		6							d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.25	768.3	62	16.7		ene.			1		3	ene.				1	wsw.	d. clouds	Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.26	768.6	47.5	8.6	85	calm			0		0							misty	Capt. S. Long.
H. M. S. Diamond, S. 25° 20′, W. 25° 52′	30.10	764.5	78.5	25.8	75	ene.			4–5		6	calm				3	ene.	d. clouds	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.10	764.5	65	18.3	83	wnw.			3–4		6	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 15′, W. 82° 21′	30.19	766.8	74.5	23.6	100	e.			4–5		1					3		blue sky	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 06′, W. 61° 06′	29.63	752.6	50.5	10.3	81	nnw.			1–2							2	nnw.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.86	758.4	85	29.4		nne.			3		4	nnw.				2	w.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	29.98	761.5	49	9.4		nnw.			1–2		10							overcast	Capt. G. Robinson.
H. M. S. Espiegle, S. 0° 10′, W. 23° 00′	29.94	760.5	78	25.6	95	sse.			1		7	sse.				2	sse.	d. clouds	Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.12	765.0	41.5	5.3	83	ene.			1		8							raining	Capt. R. F. Moskyn.
H. M. S. Gannet, Coquimbo, Chili	29.94	760.5	61	16.1	88	nw.			2		10							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 43° 37′, W. 60° 11′	29.81	757.2	54	12.2	79	sw.			5		4					3	sw.	d. clouds	Capt. L. Jones.
H. M. S. Iris, Beirut, Syria	30.05	763.3	64	17.8	78	nw.			1–2		6					4	n.	d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.26	768.6	50	10.0	100	ese.			1		3	e.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	30.23	767.8	59.8	15.4	68	ne.			1–2		0					2	nne.	misty	Capt. A. Carpenter.
H. M. S. Malabar, Bombay, India	30.00	762.0	73	22.8	90	nw.			2–3		2	nw.						d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, Dominica, West Indies	30.09	764.3	73	22.8	81	ene.			2		1	ene.						blue sky	Capt. E. Drummond.
H. M. S. Orontes, S. 20° 35′, E. 55° 30′	29.94	760.5	81	27.2	74	ene.			2		2					2	ene.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 28° 49′, W. 8° 23′	30.20	767.1	77	25.0	95	ene.			1		2					1	ssw.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, N. 25° 40′, E. 57° 43′	30.15	765.8	72.1	22.3		w.			3									d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.31	769.9	33	0.6	89	nnw.			1		3							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.07	763.8	79.5	26.4	78	nne.			2		7	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 32° 08′, E. 28° 58′	30.03	762.7	59	15.0	100	var.			2		7	nne.				3	nne.	d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Triumph, S. 4° 20′, W. 80° 01′	29.89	759.2	78	25.6	90	n.			4		10	n.				4	n.	squally	Capt. A. H. Markham.
H. M. S. Tyne, Suez, Egypt	30.04	763.0	82	27.8	95	wsw.			1		2	ssw.						d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.12	765.0	74	23.3		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.14	765.5	63.5	17.5	88	e.			2		8	wnw.						squally	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 34° 22′, E. 137° 40′	30.13	765.3	46	7.8	92	sse.			1		10	sse.				4	ene.	overcast	Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis
Quanza, Santiago, Cape Verd Ids	29.97	761.3	77.9	25.5	70	ne.			3		6	sw.				2	ne.	d. clouds	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stocknoim.																			
H. M. Corvette Balder, N. 14° 45′, W. 61° 11	30.10	764.5	75.6	24.2	88	ne.			1		6							showery	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.

N. Yard, Pensacola, Fla.	30.11	764.8	76	24.4	82	ese.	2	0.9			2		se.	0	0			fair	
N. Yard, Portsmouth, N. H.	30.14	765.5	32	0.0		nw.	15	6.7			0			0	0			clear	
Naval Hospital Yokohama, Japan	30.00	762.0	38.5	3.7	81	calm			0		8		w.	sl't	sl't			clearing	
Adams, S. 16° 32′, W. 73° 16′	29.70	754.4	68	20.0	90	ene.			2		0					light	s.	clear	
Alaska, S. 18° 48′, W. 71° 35′	29.88	758.9	71	21.7	95	ese.			1		8			0	0	long	s.	fair	
Alert, Hong Kong, China*	30.10	764.5	61	16.1	71	calm			0		0			0	0			hazy	
Alliance, Boston, Mass.*†	30.10	764.5	35	1.7	70	wnw.			2		0			0	0			clear	
Ashuelot Tientsin, China	30.22	767.6	31	— 0.6	100	nw.			4		1		calm					clear	
Brooklyn, S. 10° 55′, W. 34° 59′	29.99	761.7	81	27.2	87	ese.	10	4.5			2		se.	0	0	light	se.	fair	
Colorado, New York, N. Y.			37	2.8	71	w.	2	0.9			8		nw.	0	0			misty	
Essex, N. 37° 22′, W. 69° 17′	30.23	767.8	56	13.3	69	nnw.			7		8		nw.			long	nw.	fair	
Franklin, Norfolk, Va.	30.47	773.9	40	4.4	73	ne.	6	2.7			2			0	0			fair	
Galena, N. 8° 31′, W. 14° 59′	29.92	760.0	82	27.8	87	nw.			1		2					sm'h		fair	
Independence, N. Yard, Mare I'd, Cal.	29.83	757.7	40	4.4	73	nw.	10.8	4.8			0			0	0			clear	
Kearsarge, New Orleans, La.	30.12	765.0	62	16.7	94	ese.			2		10							foggy	
Lackawanna, Valparaiso, Chili†	30.01	762.2	61	16.1	?	nne.			1		0							hazy	
Lancaster, Villafranca, France	30.27	768.8	59	15.0	70	ese.			0–1		2		se.	0	0	sm'h		fair	
Michigan, Erie, Pa.	30.42	772.7	33	0.6		nw.			2		10							cloudy	
Minnesota, Newport, R. I.	30.27	768.8	36	2.2	90	wsw.	8	3.6			5?					sm'h		cloudy?	
Monocacy, Yokohama, Japan	30.22	767.6	42	5.6	83	nnw.			2		10		nnw.					rainy	
Nipsic, Naples, Italy	30.30	769.6	55	12.8	68	nne.			2		2					sm'h		clear	
Onward, Callao, Peru†	30.05	763.3	68	20.0	100	se.			2		10		n.			long	w.	cloudy	
Palos, Hong Kong, China	30.27	768.8	55	12.8	68	s.			1		0							clear	
Passaic, Washington, D. C.	30.53	775.4	36	2.2	90	sw.			1		5?		calm					cloudy?	
Pensacola, S. 15° 38′, W. 76° 17′	29.95	760.7	73	22.8	90	se.			2		10		se.	light	light	long	s.	cloudy	
Powhatan, Boston, Mass.	30.12	765.0	32	0.0	79	sse.			2		0							clear	
Quinnebaug, Villafranca, France	30.28	769.1	57	13.9	69	ese.			2		5		calm			sm'h		fair	
Ranger, N. 17° 59′, W. 102° 25′*	29.89	759.2	71	21.7	85	nw.			1		0			0	0	gr'd	w.	clear	
Richmond, Pago Pago, Samoa Islands*	29.82	757.4	81	27.2	91	calm			0		5			0	0			fair	
Shenandoah, Montevideo, Uruguay*.	29.99	761.7	68	20.0	47	s.			3		1					sm'h		clear	
St. Louis, League Island, Pa.	30.66	778.7	35	1.7	70	w.	6	2.7			10		nw.	0.05	1.3			cloudy	
Swatara, Kobe, Japan*	30.04	763.0	43	6.1	67	ene.			2		10					sm'h		drizzling	
Tennessee, New York, N. Y.	30.33	770.4	37	2.8	71	wnw.	7	3.1			10		nnw.	0.10	2.5			cloudy	
Vandalia, N. 12° 06′, W. 61° 50′	30.07	763.8	79	26.1	78	ene.			2		2		e.					fair	
Wabash, Boston, Mass.	30.15	765.8	32	0.0	69	nw.	4	1.8			0			0.20	5.1			clear	
Wachusetts, N. 56° 20′, W. 135° 00′	30.11	764.8	41	5.0	100	se.			5		10					mod.	se.	raining	
Wyoming, Port Royal, S. C.	30.29	769.4	58	14.4	88	ne.	14	6.3			10		sw.	0	0			cloudy	
Yantic, Port Royal, Jamaica, W. I*	30.03	762.7	73	22.8	85	nw.			1		5							fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Polynesian, Capt. Robt. Brown, Boston, Mass*	29.95	760.7	28	—2.2	.....	wnw.	4	.....	1	.....	nnw.	0	0	.....	.....	clear	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, N. 49° 25′, W. 45° 07′*	29.64	752.8	33	0.6	.....	nnw.	6	.....	4	.....	nnw.	.....	.....	h'vy	nnw.	fair	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, N. 42° 46′, W. 62° 19′*	29.75	755.6	32	0.0	.....	ne.	3	.....	.....	.....	.....	24 h'r	snow	mod.	ese.	snowing	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, N. 44° 00′, W. 47° 36′	29.51	749.5	36	2.2	90	wsw.	5	.....	10	.....	ne.	.....	.....	mod.	n.	overcast	Chauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Queenstown, Ireland†	30.12	765.0	51	10.6	86	sse.	6	.....	8	.....	se.	0	0	sm'h	se.	cloudy	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England†*	30.26	768.6	48	8.9	93	e.	3	.....	2	.....	e.	.....	.....	.....	.....	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 50° —′, W. 24° —′†	29.47	748.5	53	11.7	86	s.	7	.....	4	.....	sw.	.....	.....	mod.	.....	.....	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Utopia, Capt. A. McRitchie, N. 46° 20′, W. 34° 18′*†	29.30	744.2	45	7.2	76	nw.	5	.....	10	.....	nw.	16 h'r	h'vy	cf'd	.....	heavy rain	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 18° 26′, W. 74° 57′†*	30.26	768.6	79	26.1	78	ene.	4	.....	1	.....	calm	0	0	long	ene.	fair	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 11° 39′, W. 75° 39′*	29.97	761.2	77	25.0	.....	ene.	7	.....	1	.....	e.	0	0	r'gh	e.	hazy	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta New York, N. Y	.....	.....	39	3.9	.....	nw.	1	.....	.....	.....	.....	light	light	.....	.....	fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse, N. 18° —′, W. 77° —′	29.83	757.7	.....	.....	.....	e.	4	.....	1	.....	e.	0	0	mod.	e.	clear	Fisher & Welden.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S.	.....	.....	29	—1.7	68	n.	.....	.....	.....	.....	nnw.	0	0	.....	s;e	.....	.....
BRITISH METEOROLOGICAL OFFICE.																	
British Merchant, Capt. E. J. Molony, S. 0° 12′, E. 92° 50′	29.87	758.7	82.6	28.1	87	nw.	4	.....	5	.....	.....	.....	.....	.....	.....	showery	.....
Bk. Caldew, Capt. W. Peterson S. 21° 31′, W. 72° 50′	30.02	762.5	67.5	19.7	.....	sse.	3	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Cipero, Capt. W. N. Lailey N. 50° 42′, W. 7° 59′	30.16	766.1	51.5	10.8	96	ssw.	5	.....	10	.....	.....	.....	.....	3	s.	drizzling	.....
S. City of Agra, Capt. Thos. Young. S. 14° 38′, W. 23° 04′	30.07	763.8	77.5	25.3	.....	e.	3	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Glaramara, Capt. R. Morton, N. 18° 20′, W. 38° 08′	30.17	766.3	73.5	23.1	76	ne.	4	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Glencairn, Capt. R. S. Tannock, S. 40° 06′, E. 4° 45′	30.14	765.5	55	12.8	68	sw.	4	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Gordon Castle, Capt. W. Waring, N. 36° 14′, W. 6° 53′	30.28	769.1	65.0	18.3	68	ene.	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery, S. 22° 26′, W. 39° 55′	29.91	759.7	79.2	26.2	90	nne.	5	.....	9	.....	.....	.....	.....	.....	.....	showery	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 7° 05′, W. 87° 28′	29.89	759.2	81	27.2	87	sw.	6	.....	4	.....	.....	.....	.....	.....	.....	showery	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 7° 17′, W. 33° 50′	29.98	761.5	80	26.7	91	sse.	1	.....	10	.....	.....	.....	.....	.....	.....	drizzling	.....
Minho, Capt. J. Lawson, N. 19° 43′, W. 21° 25′	30.10	764.5	69.5	20.8	66	ene.	4	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. J. Smith, S. 17° 43′, W. 23° 36′	30.10	764.5	77.0	25.0	77	ne.	4	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 42° 24′, W. 60° 30′	29.83	757.7	.....	.....	.....	ssw.	3	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Queen of Cambria, Capt. M. Parry. S. 40° 29′, W. 7° 42′	30.14	765.5	58.5	14.7	81	nnw.	5	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. C. W. Pearson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge. N. 5° 39′, W. 29° 14′	29.97	761.2	78.8	26.0	95	nne.	5	.....	10	.....	.....	.....	.....	.....	.....	squally	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham Bristol, England†*	30.30	769.6	58	14.4	.....	s.	3	.....	10	.....	.....	0	0	sm'h	.....	foggy	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent San Francisco.*																	
S. S. Newbern, Capt. E. Y. Rogers, N. 23° 04′, W. 107° 10′†	29.92	760.0	70	21.1	84	nw.	5	.....	1	.....	nw.	light	light	small	nw.	clear	.....
CROMWELL LINE. *Clark & Seaman, Agents, New York.*																	
S. S. Hudson, Capt. H. R. Freeman, N. 29° 10′, W. 80° 18′*†	30.33	770.4	72	22.2	.....	ese.	5	.....	10	.....	sse.	0	0	.....	se.	cloudy	Crowell & Henry.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains, N. 51° 22′, W. 11° 00′*	29.78	756.4	52	11.1	.....	s.	6	.....	8	.....	s.	sh'rs	sh'rs	sm'h	.....	showery	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, N. 50° 05′, W. 21° 14′	29.63	752.6	48.2	9.0	.....	s.	5	.....	2	.....	s.	0	0	sm'h	w.	.....	.....
S. S. St. Laurent, Capt. A. Servan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein N. 49° 55′, W. 34° 07′*	28.99	736.3	50	10.0	78	e.	4	.....	4	.....	w.	5 h'r	h'vy	mod.	w.	raining	P. Froehlich, 3d Off.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson.
LAMPERT & HOLT S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, N. 17° —′, W. 26° —′*†	30.21	767.3	74	23.3	.....	ne.	2	.....	1	.....	ne.	0	0	sm'h	wsw.	clear	J. Carroll.

MERCHANT-MARINE SERIES.

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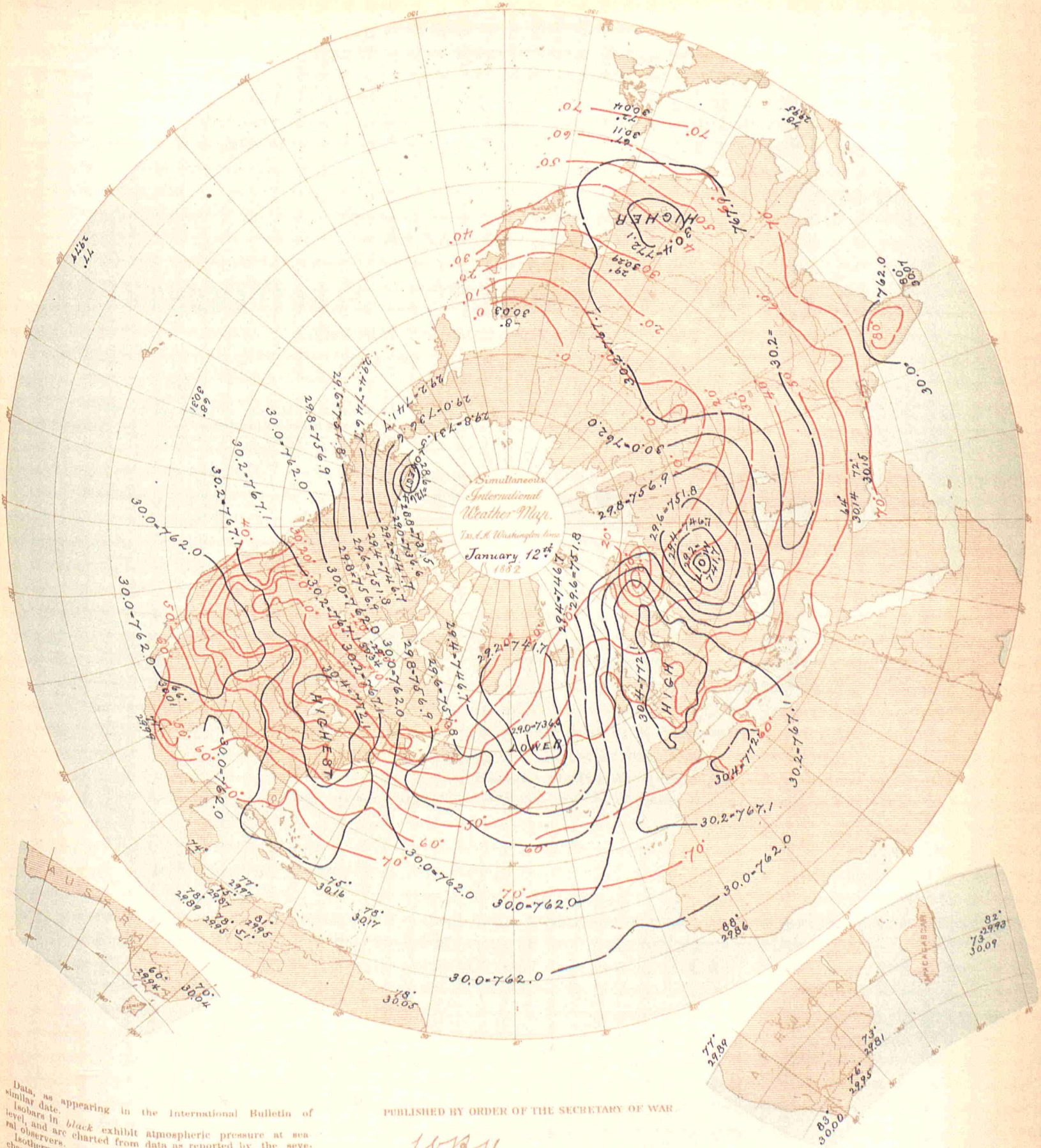
Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.				Character.	Direction.		
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 49° 26′, W. 28° 07′*																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley, N. 49° 26′, W. 28° 07′*	28.88	733.5				sse.	6		10		sse.	7 h'r	7h'r	h'vy	se; ssw.	stormy	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, Havana, Cuba, W. I*†	30.36	771.1	77	25.0		calm	0		0			0	0			clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, Cienfuegos, Cuba, W. I†	30.26	768.6	70	21.1		nne.	1		0			0	0			clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom,																	
S. S. Bothnia, Capt. MacMackan																	E. F. Stembridge, 3d off
S. S. City of Alexandria, Capt. L. F. Timmer-man																	
S. S. Progress Roads, C. A.*†	30.22	767.6	74	23.3		ese.	4								e.		
S. S. City of Washington, Capt. J. W. Rey-nolds																	
S. S. Maas, Capt. T. N. Bonjer																	
S. S. New York, Capt. R. B. Quick, N. 37° 50′, W. 74° 40′*†	30.60	777.2	42	5.6		n.	3								n.	clear	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier, N. 50° 15′, W. 2° 20′*	30.38	771.6	50	10.0		s.	3									cloudy	
4. NORTH GERMAN LLOYD. *Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander																	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer,																	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, N. 50° 38′, W. 16° —′*	29.84	757.9	59.0	15.0		ssw.	4-5		8		sw.	0	0	r'gh	ssw.		
S. S. Mosel, Capt. J. Hesse, N. 46° 03′, W. 41° 53′	29.42	747.3	38.8	3.8		nw.	6		9		nnw.	6 snow	hour hail	long r'gh	nnw.	cloudy	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. C. Undeutsch																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal†	29.92	760.0	41	5.0	48	nw.	6		0			0	0			clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Hong Kong, China*†	30.43	772.9	65	18.3	68	calm	0		2		ne.					clear	
S. S. Oceanic, Capt. J. Metcalf, N. 34° 45′, E. 139° 30′*	30.14	765.5	46	7.8	85	nw.	6		9		nw.			sm'h		cloudy	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.95	760.7				nnw.	3		5†		nw.					clear.†	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Boston, Mass†	29.92	760.0	38	3.3	63	nw.	3		1		nw.	10 h'r	snow			clear	H. K. Hallett.
OREGON IMROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 47° 21′, W. 124° 37′†	30.31	770.6	42	5.6	75	n.	1		2		nw.			mod.	nw.	clear	E. W. Holmes.
S. S. Willamotta, Capt. L. Meyer, Seattle, Wash. Ter*	30.35	770.9	34	1.1	90	calm	0		3		e.	0	0			foggy	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *R. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d officer
S. S. Columbia, Capt. Fred Bolles																	W. Irvine.
S. S. Oregon, Capt. E. Poleman, Columbia River, Oregon†	30.27	768.8	34	1.1	79	ne.	1		2		ne.					clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 37° 45′, W. 122° 31′†	29.85	758.2	42	5.6	48	nne.	6		0					r'gh	nw.	clear	
S. S. Geo. W. Elder, Capt. H. G. Morse, N. 41° 09′, W. 124° 40′†	30.23	767.8	43	6.1		nw.	5		2		nw.			long	nw.	clear	
S. S. Idaho, Capt. E. Alexander, N. 41° 16′, W. 124° 23′†	30.11	764.8	45	7.2	60	n.	6		0					very h'vy	nw.	clear	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 42′, W. 118° 14′†	29.84	757.9	52	11.1	48	ne.	8		10		ne.	o h'r and	rain snow	r'gh	ne.	sleeting	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, San Simion, Calf†	30.00	762.0	41	5.0	74	e.	2		10		nw.			sm'h		sprinkling	T. Wallace.
S. S. State of California, Capt. G. Debney, N. 46° 16′, W. 124° 10′†	30.29	769.4	38	3.3	63	ne.	3		3		nw.	0	0	sm'h	wnw.	fair	
S. S. Victoria, H. M. Hayward, San Francisco, Calf†	29.94	760.5	40	4.4	32	nw.	6		0							clear	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Fran-cisco, and H. J. Bulley, Supt. New York.*																	
S. S. Australia, Capt. ——, N. 2° 21′, W. 165° 09′	29.79	756.7	77	25.0	90	ene.	3		5		ene.			mod.	ne.	fine	A. Bauuerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	30.04	763.0	70	21.1	79	calm	0		0			0	0			clear	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 22° 18′, E. 115° 17′†	30.49	774.4	60	15.6	30	ne.	2		0			0	0	long	nw.	clear	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn,																	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 30° 09′, W. 150° 38′†	30.31	769.9	68	20.0	69	sse.	6		5		se.	2 h'r	2 h'r	mod.	e.	squally	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, Panama, Panama..†	29.87	758.7	75	23.9	85	nw.	1		4		n.	0	0	sm'h		clear	
S. S. Granada, Capt. M. Connolly, N. 18° 18′, W. 103° 22′†	29.92	760.0	76	24.4	72	e.	1		0			0	0			clear	
S. S. South Carolina, Capt. W. J. Russell, N. 17° 30′, W. 101° 20′*†	29.86	758.4	78	25.6	90	nnw.	1		0			0	0	sm'h		fair	
S. S. Zelandia, Capt. H. Webber, Auckland, New Zealand	29.95	760.7	64	17.8	89	se.	2		0					mod.	sw.	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke, Dominica, W. I.						ene.	3		0			0	0	sm'h		clear	G. S. Locke
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen.
S. S. Rhyniand, Capt. W. G. Randle, Flushing, Netherlands*	30.51	774.9	45	7.2	84	calm	0					0	0	sm'h		foggy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A Beynon, N. 45° 59′, W. 43° 37′*†	29.76	755.9	35	1.7	80	n.	6		8		nne.	0	0	high	nnw.	cloudy	M. Eymond.
S. S. Waesland, Capt. H. Nickels. N. 49° 22′, W. 25° 35′*	29.19	741.4	53	11.7		s.	6		10		sw.	0	0	r'gh	sw.	cloudy	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis																	
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub, N. 58° 48′, W. 10° 44′†	29.92	760.0	50.0	10.0		s.	3		10		s.	4 h'r	4 h'r	cross	s.	covered	J. T. Ulberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 48° 36′, W. 25° 26′*†	29.36	745.7	52	11.1		s.	6		10		s.	0	0	r'gh	s.	threatening	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 51° 25′, W. 14° 30′*†	30.00	762.0	46	7.8		s.	5		8		ssw.	mist	mist	mod.	sw.	misty	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 46° 02′, W. 48° 30′*†	29.53	750.0	28	—2.2		n.	3		5		nne.	0	0	h'vy	n.	d. clouds	W. Thomas.
S. S. Celtic, Capt. B. Gleadell New York, N. Y*†	30.21	767.3	39	3.9	71	wsw.	5		0?			10 h'r	sh'rs			raining ?	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. Liverpool, Eng.*†	30.47	773.9	46	7.8	92	s.	3		5		s.	0	0			d. clouds	W. A. Ward. H. Goulden, 4th Officer.
S. S. Republic, Capt. P. J. Irving,																	
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, N. 25° 54′, W. 77° 54′†	30.49	774.4	73	22.8	67	e.	3	2 c	2 s		ne.	0.12	3.0	sm'h		fair	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona																	
Bk. Alpha, Capt. Ole Grönn, Naples Bay, Italy*†	30.28	769.1	64	17.8		ene	3		5		e.	0	0	sm'h		fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis																	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin, N. 23° 12′, W. 41° 54′*†	29.50	749.3				w.								light	e.	cloudy	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.22	767.6				sse	3		hz.		sw.	0	0			hazy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 12° 03′, W. 32° 42′†	30.00	762.0				ene.	4		8		ene.	0	0	mod.	ene.	cloudy	
S. Enoch Train, Capt. H. D. Chapman. N. 48° 30′ W. 13° 10′*	29.90	759.4				ssw.	3		3		sw.	0	0	light	wsw.	fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 40° 34′, W. 41° 27′*	29.63	752.6				nw.	6–8		3		nw.	2 h'r	h'vy	long	nw.	fair	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.53	775.4	45	7.2	60	se.	1		5?		se.			sm'h		cloudy?	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 41° 11′, W. 57° 17′†	29.90	759.4	58.5	14.7		ne.	3		1		sw.	0	0	mod.	e.	clear	G. D. Morrison.
Bk. Freya, Capt. Blaouw, Limerick, Ireland			50	10.0		s.	6		5		s.	0	0			fair	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.07	738.4				wnw.	4		0			0	0			clear	D. Williams.
Bk. Geo. Booth, Capt D. Williams,																	
S. Hedwig, Capt. T. Minssen. N. 49° 35′, W. 5° 28′*	30.02	762.4	53.1	11.7	95	sse.	6		4		ssw.	3 h'r	3 h'r	short	sw.	fair	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 6° 25′, W. 33° 24′*	29.81	757.2				ese.	3		4		ese.	1 h'r	light	long	ese.	hazy	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 47′, W. 15° 39′*†	30.30	769.6				s.	3				s.	0	0	long	s.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.26	768.6	51	10.6	64	ne.	1		0							clear	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 39° 20′, W. 52° 00′*†	29.80	756.9				w.			5		w.	1 h'r	hail			squally	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 29° 41′, W. 32° 45′*	29.90	759.4	67.1	19.5	95	wsw.	6		5		wsw.			r'gh	w.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.31	769.9	54	12.2	100	ne.	4		2		se.	0	0			fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 16° 49′, W. 33° 34′*†	30.10	764.5				ne.	6		8		ne.			mod.	e.		I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton,																	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 13, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.40	772.2	64.0	17.8	78	w.			2		0			0	0	clear	Moroud.
Algiers			30.44	773.1	55.0	12.8	70	ne.			1		0			0	0	clear	Nicolas.
La Calle			30.41	772.5	59.4	15.2	74	ene.			1		3			0	0	pretty fair	Foufréde.
Tunis			30.42	772.7															Jacques.
Sfax																			Gau.
Saida			30.46	773.6	45.0	7.2	83	n.			1		1			0	0	fair	Perès.
Tebessa			30.44	773.2	46.4	8.0	64	sw.			1		1			0	0	fair	Derché.
Geriville					55.8	13.2	45	nw.			1		0			0	0	clear	Lonchamp.
Laghouat			30.48	774.3	55.4	13.0	51	e.					0			0	0	clear	Herbin.
Biskra			30.44	773.2	56.5	13.0	56	nw.			1		0			0	0	clear	Malan.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.91	759.7	30.00	762.0	56.7	13.7	82	se.	4	1.8			1			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.08	764.0	30.66	778.8	38.3	3.5	58	ne.			2		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.89	759.1	30.71	779.9	32.4	0.2	100	nne.	0.7	0.3			8			0	0		Dr. Wierzbiski.
Eperies	29.69	754.0	30.63	777.9	32.5	0.3	56	n.			4	0	7 ks		s.	0	0		Julius Mikolik.
Gratz	29.30	744.3	30.63	778.1	34.2	1.2	71	s.			1		8			0	0		Andreas Rospini.
Hermannstadt	28.97	735.9	30.50	774.7	29.8	—1.2	61	n.			5		5			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.19	741.3	30.61	777.6	32.2	0.1	87	e.			3		5			0	0	fair	The Staff.
Lemberg	29.49	749.1	30.56	776.1	27.7	—2.4	73	ne.			3		1			0	0		Dr. T. Stanecki.
Pola	30.43	772.9	30.55	775.9	44.6	7.0	53	e.			2		4			0	0		I. R. Hydrographic Office
Szathmar	30.05	763.3	30.52	775.3	33.8	1.0	55	nw.			2		1			0	0		Joseph Midlinszky, S. J.
Szegedin	30.32	770.0	30.61	777.0	36.0	2.2	85	n.			3		3			0	0		Karl Stancel.
Trieste	30.50	774.7	30.60	777.3	45.0	7.2	50	e.			2		0			0	0		Rieder.
Vienna	29.94	760.4	30.70	779.8	33.4	0.8	58	nw.			1		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	30.12	765.0	30.22	767.6	44.9	7.2	89	sse.	16	7.2			9			0	0	misty	W. Boswell.
Armagh, Observatory	29.83	757.7	30.08	764.0	49.3	9.6	87	sse.	22	9.8			10					squally	S. Call.
Bidston, Liverpool Obs'y			30.26	768.6	47.0	8.3	74	se.	22	9.8			9					overcast	John Hartnup.
Bolton, Sharples	29.76	755.9	30.31	769.9	45.5	7.5	79	sse.	9	4.0			9					misty	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.89	759.2	30.29	769.4	47.1	8.4	77	sw.			1		7			0	0	d. clouds	J. McLandsborough, F.R.
Bridgetown, Barbadoes	30.04	763.0	30.06	763.5	80.0	26.7	78	ne.			3		2					d. clouds	Pvt. J. Surgenor.
Cardington			30.38	771.6	46.6	8.1	89	s.			0.4		6					d. clouds	John McLaren.
Chatham, School M. E.	30.32	770.1	30.45	773.4	46.9	8.3	81	s.			3		6					d. clouds	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.06	763.5	30.30	769.6	45.1	7.3	86	sse.					10					overcast	The Staff.
Fort Napier, Natal	27.44	697.0	29.66	753.4	86.3	30.2	47	ne.			2		1					blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.66	753.4	29.89	759.2	88.0	31.1	66	nw.			1		3					d. clouds	Sergt. John Robinson.
Galway, Queen's College			29.89	759.2	52	11.1	86	s.			3		4			0	0	blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.37	771.4	30.42	772.7	58.6	14.8	84	e.			6		9					overcast	Cpl. O. Baldwin.
Glasgow, Observatory	29.96	761.0	30.16	766.1	47.0	8.3	85	s.			2		10 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.24	768.1	30.42	772.7	48.1	8.9	76	sse.			1		3					d. clouds	The Staff.
Guernsey	30.05	763.3	30.36	771.1	41.0	5.0	96	sse.			1		10					overcast	A. Collenette, F. M. S.
Kew, Observatory	30.38	771.6	30.42	772.7	46.4	8.0	80	sse.	14	6.3			5					misty	The Staff.
Leicester, Museum	30.10	764.5	30.37	771.4	45.0	7.2	84	s.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.23	767.8	30.30	769.6	58.0	14.4	76	ne.			2		8					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.26	768.6	30.30	769.6	73.5	23.1	73	ne.			2		3					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.83	757.7	30.37	771.4	43.0	6.1	90	sse.			2		6					d. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.16	766.1	30.39	771.9	45.7	7.6	82	sse.			3		5					d. clouds	The Staff.
Plymouth	30.25	768.3	30.33	770.4	43.8	6.6	88	se.			2		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.08	764.0	44	6.7	93	sse.	24	10.7			0					blue sky	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.14	765.5	30.21	767.3	39.4	4.1	63	n.			3		8			blank	blank	d. clouds	W. H. Lyne
Sheffield	30.06	763.5	30.35	770.9	47.3	8.5	88	ssw.			3		6			0	0	d. clouds	W. F. Cooper.
Silloth Rectory	30.19	766.8	30.22	767.6	47.8	8.8	82	s.			1		8			0.045	1.2	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.29	769.4	45.8	8.2	73	s.	20	8.9			10					overcast	Rev. S. J. Perry.
Stratfield Turgiss	30.18	766.6	30.40	772.1	45.0	7.2	82	se.			2		7					d. clouds	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.24	768.1	30.29	769.4	48	8.9	85	se.			6		10					gloomy	W. Newcombe.
Valencia, Observatory	29.88	758.9	29.90	759.4	52.6	11.4	79	se.	46	20.6			10			blank	blank	gloomy	The Met'g'l Office

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.28	769.1	30.33	770.4	5	—15.0	95	w.	7	3.1		0	8 s			0.025	0.6	fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.31	769.9	30.37	771.4	— 3	—19.4	100	calm	0	0		0	0			0	0	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.26	768.6	30.29	769.4	— 3	—19.4	96	sw.	5	2.2		0	5 s		calm	0	0	fair	J. McWilliams.
Fort Garry, Manitoba*	29.31	744.5	30.26	768.6	—11	—23.9	?	nw.	7	3.1		0	5 s		nw.	0	0	fair	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.24	768.1	30.39	771.9	5	—15.0	87	w.	3	1.3		0	0			inap.	inap.	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.66	753.4	30.02	762.5	24	— 4.4	92	e.	5	2.2			10 s			0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.95	760.7	30.18	766.6	3	—16.1	96	e.	8	3.6			10 n			0	0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.18	741.2	29.91	759.7	25	— 3.9	88	e.	12	5.4			10 n		ne.	0	0	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.16	740.7	29.87	758.7	33	0.6	89	e.	5	2.2			10 n			inap.	inap.	threatening.	H. Morgan.
Port Stanley, Ontario	29.19	741.4	29.86	758.4	33	0.6	88	e.	20	8.9			10 n		e.	0.10	2.5	light sleet	M. Payne.
Quebec, Quebec*	29.92	760.0	30.28	769.1	5	—15.0	96	calm			0		fg.			0	0	foggy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.54	750.3	30.04	763.0	10	—12.2	76	e.	6	2.7			hz.			0	0	threatening.	W. H. McIntyre.
Saugeen, Ontario*	29.11	739.4	29.85	758.2	28	— 2.2	92	se.	6	2.7			10 s			inap.	inap.	light snow	K. Stewart.
St. Andrews, N. B.	30.33	770.4	30.38	771.6	8	—13.3	71	n.	2	0.9		0	0			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.15	765.8	30.21	767.3	11	—11.7	80	nw.	22	9.8		0	2 k		nw.	0	0	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.51	749.5	29.90	759.4	33	0.6	96	se.	8	3.6			10 n			0.01	0.3	light snow	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.32	770.1	30.39	771.9	14	—10.0	83	e.	2	0.9		8 c	2 s	w.	ne.	0	0	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.71	754.6	29.99	761.7	16	— 8.9		nw.					10			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Cape St. Francis Lt. House	29.96	761.0	29.99	761.7	71.0	21.7	69	w.	14.7	6.6			10 k			0.040	1.0	stormy	John Duthie.
Cape Town, C. G. H. Obs'y	30.00	762.0	30.04	763.0	77.0	25.0	59	s.	23	10.3		0	6			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Sub-Series.																			
Hankow	30.36	771.1	30.65	778.5	42.6	5.9	87									0	0		N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.47	773.8	30.49	774.4	38.3	3.5	83	ne.	2.5	1.1		0	0			0	0	clear	M. Marc Dechevrens, S.J.

Stations.	Barometer. Corrected for instrument al error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.65	778.4	30.69	779.6	35.2	1.8	77	ssw.	13	6	.....	.....	1	.....	.....	.....	.....	.....	Oversergent Fischer.
Fanöe	30.61	777.4	30.63	777.9	30.4	— 0.9	100	s.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.10	739.1	29.14	740.2	5.9	—14.5	82	nne.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	S. Kleinschmidt.
Stykkisholm, Iceland	28.67	728.2	28.71	729.3	47.8	8.8	.....	s.	.....	.....	8	.....	10	.....	.....	.....	.....	raining	A. O. Thorlacius.
Thorshavn	29.78	756.3	29.81	757.2	48.6	9.2	80	ssw.	22	10	.....	.....	10	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	30.50	774.7	30.59	777.0	30.7	— 0.7	98	s.	.....	.....	2	.....	10	.....	.....	.....	.....	foggy	Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.74	755.4	30.41	772.3	48.2	9	76	sse.	.....	.....	1	0	0	.....	.....	0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.90	759.4	30.45	773.4	41.0	5	97	s.	.....	.....	2	.....	fg	.....	s.	0	0	foggy	M. Nicot, Director.
Arras, Engineer School	30.19	766.8	30.46	773.7	38.5	3.6	97	s.	.....	.....	2	.....	n	.....	.....	0	0	light fog	M. Klein, Commandant.
Avignon, Normal School	30.41	772.5	30.49	774.5	44.6	7	71	n.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.89	759.1	30.47	774.0	38.3	3.5	80	se.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.21	767.2	30.49	774.4	40.8	4.9	79	se.	.....	.....	1	.....	10	.....	.....	0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School	.....	.....	30.43	772.9	37.8	3.2	86	se.	.....	.....	1	.....	8	.....	sw.	0	0	.....	M. Goblin, Director.
Bordeaux, Observatory	30.07	763.7	30.34	770.5	47.7	8.7	73	se.	.....	.....	1	.....	0	.....	.....	0.004	0.1	clear	M. Rayet, Director.
Bourges, Normal School	29.87	758.8	30.46	773.6	37.0	2.8	93	e.	.....	.....	1	.....	n	.....	e.	0	0	.....	M. Postel, Director.
Brest, Naval Observatory	30.10	764.4	30.34	770.6	42.1	5.6	91	sse.	.....	.....	2	.....	10	.....	sse.	0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.31	769.9	30.39	771.9	40.6	4.8	84	se.	.....	.....	3	.....	10	.....	ssw.	0	0	covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.13	765.3	30.47	773.8	39.7	4.3	70	se.	.....	.....	1	.....	8	se.	se.	0	0	very cloudy.	M. Jadot, Director.
Charleville, Normal School	29.97	761.1	30.50	774.7	38.5	3.6	70	ese.	.....	.....	3	.....	10	.....	.....	0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.03	737.3	30.43	773.0	44.2	6.8	70	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.55	750.5	30.42	772.7	38.1	3.4	97	se.	.....	.....	6	.....	.....	.....	nw.	.....	.....	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.03	752.5	30.53	775.5	36.5	2.5	91	e.	.....	.....	1	.....	5 kn	e.	e.	0	0	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.91	708.9	30.54	775.8	42.8	6	70	nw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	M. Jeangirard, Director.
Gréasque, du. Rhone	29.34	744.8	30.48	774.1	51.6	10.9	68	n.	.....	.....	2	.....	5	.....	ne.	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.55	750.5	30.35	771.0	34.5	1.4	78	s.	.....	.....	1	.....	kn	.....	ne.	0	0	.....	M. Ablard, Director.
Guéret, Normal School	28.70	730.0	30.41	772.3	41.0	5	80	se.	.....	.....	1	.....	0	.....	.....	0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.10	764.6	30.39	771.8	38.3	3.5	93	se.	.....	.....	2	.....	10	.....	se.	0	0	covered	M. Ollitrault, Director.
Lescar, Normal School	29.74	755.4	30.32	770.0	48.6	9.2	58	s.	.....	.....	1	.....	1	nw.	.....	0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.30	799.7	30.41	772.3	41.0	5.0	100	se.	.....	.....	3	.....	10	.....	.....	0	0	covered	Lt. T. Carre, Director.
Lyon, St. Genis-Laval	29.39	746.5	30.50	774.8	36.1	2.3	91	sse.	.....	.....	1	0	5 n	.....	s.	0	0	cloudy	M. André, Director.
Mans, Normal School	30.12	765.1	30.45	773.3	38.7	3.7	87	s.	.....	.....	3	.....	10	.....	.....	0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.15	765.8	30.42	772.7	57.9	14.4	52	ese.	.....	.....	0.1	.....	5	.....	se.	0	0	.....	M. Stephan, Director.
Montlouis l'Institutteur	25.05	636.3	29.89	759.3	41.0	5.0	47	s.	11.2	5.0	.....	.....	0	.....	.....	.....	.....	.....	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.35	770.9	30.47	773.8	50.7	10.4	65	ne.	.....	.....	3	.....	2	.....	se.	0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.72	754.8	30.58	776.8	37.8	3.2	80	nne.	.....	.....	1	0	5 k	.....	.....	0	0	cloudy	M. Hasse, Director
Nantes, Observatory	30.25	768.3	30.41	772.4	41.9	5.5	81	ese.	.....	.....	2–3	.....	10n; kn	.....	ese.	0	0	.....	M. Larocque, Director.
Nice	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Boissière, Director.
Perpignan, Observatory	30.35	770.9	30.46	773.7	47.8	8.8	84	se.	3.8	1.7	.....	.....	8	.....	e.	0	0	.....	Dr. Fines, Director.
Pic-du-Midi, Summit	21.42	544.1	.....	.....	35.6	2.0	.....	wsw.	.....	.....	1	.....	0	.....	.....	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.[illegible]9	743.9	30.40	772.2	40.6	4.8	77	n.	.....	.....	1	.....	en	n.	n.	0	0	foggy	M. Talhieu.
Puy de Dôme Obs'y, Summit	25.43	645.8	.....	.....	45.9	7.7	26	s.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.36	771.2	30.39	772.0	38.8	3.8	100	sse.	.....	.....	1	.....	10	.....	.....	0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.13	765.2	30.36	771.1	41.0	5	84	se.	.....	.....	1	.....	5	.....	ne.	0	0	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.17	715.0	30.37	771.5	45.7	7.6	66	e.	.....	.....	2	.....	0	.....	.....	0	0	clear	M. Coltrat, Director.
Rouen, Normal School	30.41	772.3	30.45	773.5	39.9	4.4	83	ese.	.....	.....	3	.....	8	.....	.....	0	0	very cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.26	768.7	30.42	772.7	40.1	4.5	86	sw.	.....	.....	1	.....	10	.....	se	0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.31	769.8	30.47	774.0	37.0	2.8	87	sse.	.....	.....	2	.....	10	.....	ese.	0	0	covered.	M. Renou, Director.
Toulouse, Observatory	29.64	752.9	30.37	771.5	52.2	11.2	68	se.	.....	.....	3	.....	1	w.	.....	0	0	clear	M Bailland, Director.
Tours	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. de Tastes.
Versailles, Observatory	29.95	760.7	30.44	773.2	36.0	2.2	89	se.	.....	.....	2	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.72	754.8	30.59	776.9	35.6	2.0	55	s.	.....	.....	2	3 cs	0	.....	.....	0	0	foggy	Prof. Dr. Hoh.
Berlin	30.51	775.0	30.70	779.7	34.2	1.2	78	se.	.....	.....	1	.....	3	.....	.....	0	0	foggy	Prof. Dr. Arndt.
Breslau	30.20	767.0	30.74	780.8	31.8	—0.1	56	one.	.....	.....	1	.....	10	.....	.....	0	0	.....	Royal University Obs'y.
Carlsruhe	30.08	763.9	30.54	775.7	40.6	4.8	68	e.	.....	.....	2	.....	9	se.	.....	0	0	foggy	Albert Senz.
Cassel	29.83	757.6	30.54	775.8	37.0	2.8	55	se.	.....	.....	1	.....	0	.....	.....	0	0	.....	Dr. H. Möhl.
Frankfort on the Main	30.19	766.8	30.56	776.7	35.2	1.8	77	se.	.....	.....	1	.....	4	.....	.....	0	0	.....	Physical Society.
Friedrichshafen	29.03	737.3	30.54	775.8	34.9	1.6	89	sw.	.....	.....	1	.....	6	.....	.....	0	0	foggy	Wilhelm, Chief Tel.
Hamburg	30.59	776.9	30.08	779.3	32.4	0.2	92	sse.	.....	.....	3	.....	10	.....	.....	0	0	.....	E. Preller.
Kiel	30.64	778.2	30.65	778.6	32.7	0.4	90	s.	.....	.....	1	.....	10	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.23	767.9	30.68	779.3	33.1	0.6	75	e.	.....	.....	2	.....	3	ne.	.....	0	0	.....	H. Leppig, Asst.
Magdeburg	30.47	774.0	30.68	779.2	31.8	—0.1	85	se.	.....	.....	2	.....	10 ks	.....	se.	0	0	.....	Dr. Assmann.
Memel	30.66	778.8	30.71	780.0	31.5	—0.3	85	wnw.	.....	.....	2	8 cs	0	.....	.....	.....	.....	.....	Issermann.
Munich	28.65	727.7	30.54	775.8	32.2	0.1	90	se.	.....	.....	2	.....	7	se.	.....	0	0	.....	Central Station.
Neufahrwasser	30.73	780.5	30.74	780.9	34.7	1.5	62	nw.	.....	.....	1	.....	1	.....	.....	0	0	.....	A. Lothes.
Neustadt, Palatinate	30.01	762.2	30.54	775.8	36.3	2.4	84	nne.	.....	.....	1	.....	10	.....	.....	0	0	.....	Dicknether.
Stuttgart	29.54	750.3	30.48	774.1	38.8	3.8	73	e.	.....	.....	1	.....	3	e.	.....	0	0	.....	Prof. Dr. Schoder.
Wustrow	30.69	779.6	30.72	780.2	33.6	0.9	96	sse.	.....	.....	2	0	1 s	.....	.....	0	0	.....	Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.86	758.4	30.26	768.6	48.0	8.9	.....	n.	.....	.....	3.0	.....	1	.....	.....	0	0	misty	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.07	763.8	30.12	765.1	71.5	21.9	45	sw.					2			0	0	d. clouds	
Deesa	29.61	752.1	30.09	764.4	73.5	23.1	37	nnw.	9.0	4.0			0			0	0	blue sky	
Bombay	29.95	760.8	29.99	761.8	78.3	25.7	70	nnw.	20	8.9			1	nw.		0	0	d. clouds	
Poona, Yarrowda.	28.13	714.4	29.98	761.6	80.6	27.0	29	e.	4	1.8			1			0	0	d. clouds	
Belgaum	27.42	696.5	29.95	760.8	79.7	26.5	30	ne.	5	2.2			0			0	0	blue sky	
Lahore	29.39	746.4	30.17	766.3	60.2	15.7	74	w.	1.4	0.6			10			0	0	overcast	
Roorkee	29.17	740.9	30.12	764.9	58.4	14.7	76	nw.	3.2	1.4			2			0	0		
Agra	29.58	751.2	30.17	766.3	62.2	16.8	74	w.	3.9	1.7						0	0		
Nagpur	28.98	736.1	30.04	762.9	76.5	24.7	40	calm	3.5	1.6			0			0	0	blue sky	
Jubbulpore	28.74	729.9	30.14	765.5	65.8	18.8	47	calm	2.3	1.0			0			0	0	blue sky	
Lucknow	29.71	754.6	30.10	764.6	64.3	17.9	55	wsw.	6.2	2.8			0			0	0	blue sky	
Allahabad	29.79	756.6	30.12	765.0	61.3	16.3	59	nw.	3.3	1.5			0			0	0	blue sky	
Patna	29.90	759.5	30.10	764.4	63.2	17.3	58	w.	5.3	2.4			0			0	0	blue sky	
Hazaribagh	28.01	711.4	30.08	764.1	64.8	18.2	48	nnw.	4.3	1.9			1			0	0		
Cuttack	29.96	760.9	30.05	763.3	76.4	24.7	57	w.	0.2	0.1			0			0	0	blue sky	
Calcutta, Alipore	30.00	762.0	30.02	762.5	73.6	23.1	64						0			0	0	blue sky	
Dhubri	29.91	759.8	30.04	763.0	64.4	18.0	74	nw.	0.7	0.3			0			0.06	1.5	blue sky	
Chittagong	29.96	761.0	30.05	763.3	73.2	22.9	72	w.	2.2	1.0			1			0	0	blue sky	
Sibsagar	29.71	754.5	30.06	763.4	64.9	18.3	78	ne.	1.7	0.8			10	w.	w.	0	0	overcast	
Jeypore	28.67	728.2	30.18	766.6	60.7	15.9	67	nnw.	2.7	1.2			7		n.	0	0	d. clouds	
Zanzibar, Africa	29.87	758.7			86.7	30.4	65	nne.	8.9	4.0			3			0.08	2.0	d. clouds	
Trichinopoly	29.75	755.6			79.3	26.3	52	nne.	1	0.4			0			0	0	blue sky	
Bellary	28.49	723.6			83.0	28.3	34	se.	3.9	1.7			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.17	766.3	30.60	777.1	45.1	7.3	57	e.	0.7	0.3			3			0	0		Prof. Giovanni Clodig.
Milan	30.06	763.5	30.61	777.5	41.5	5.3	73	se.	1.3	0.6			1			0	0		Prof. Schiaparelli.
Padua	30.49	774.4	30.61	777.4	43.2	6.2	69	nne.	5.6	2.5			3	e.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.61	752.2	30.58	776.6	36.5	2.5	81	ne.	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	30.32	770.0	30.52	775.1	51.6	10.9	45	ne.	3.1	1.4			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.59	726.1	30.60	777.1	40.3	4.6	42	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.49	774.5	30.55	775.9	43.3	6.3	80	nnw.	10.5	4.7			7	ne.		0	0		Prof. Luigi Guidi.
Florence	30.24	768.0	30.50	774.8	50.0	10.0	56	ne.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.41	772.4	30.50	774.7	50.0	10.0	63	ne.	5.6	2.5			0			0	0		Prof. P. Monte.
Rome	30.26	768.5	30.44	773.1	51.8	11.0	52	n.	3.8	1.7			6			0	0		Prof. P. S. Ferrari.
Lecce	30.15	765.8	30.41	772.5	49.3	9.6	46	n.	18.6	8.3			1			0	0		Prof. C. de Giorgi.
Cosenza	29.48	748.8	30.41	772.4	50.0	10.0	74	wnw.	13.0	5.8			2	nw.		0	0		Prof. D. Conti.
Cagliari	30.15	765.8	30.35	770.9	58.6	14.8	57	calm			0		4			0	0		Prof. A. Pacinotti.
Palermo	30.10	764.6	30.36	771.2	58.3	14.6	55	calm	0	0			10			0	0		Prof. G. Ciacciatore.
Syracuse	30.29	769.3	30.34	770.5	56.3	13.5	60	ese.	8.7	3.9			9	nne.		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.85	758.3	30.39	772.0	52.9	11.6	40	ne.	12.5	5.6			1	n.		0	0		Prof. T. Brioschi.
Stelvio	22.31	566.6			24.6	— 4.1	52	se.			1		0			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.45	570.3			27.9	— 2.3	51	e.			2		1			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.78	756.4	29.82	757.5	33.5	0.8	91	s.	5.6	2.5			10 n			0.106	2.7	light rain	
Hakodate	29.79	756.6	29.80	756.9	39.5	4.2	73	w.	6.0	2.7			10			0.150	3.8	rain & snow.	
Hiroshima, I. M. Obs'y.....†	30.13	765.3	30.16	766.0	37.6	3.1	80	w.	5.2	2.3		ck	10 s			0	0	fair	K. Sasaki.
Kanazawa	30.15	765.8	30.26	768.6	37.1	2.8	84					0	9 n					light snow	S. Endo.
Kioto	29.90	759.4	30.08	764.0	36.1	2.3	92	nw.	0.5	0.2		0	9 n			0.008	0.2	light rain	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.08	764.0	30.30	769.6	41.5	5.3	76	nw.	6.0	2.7		0	9 n			0.050	1.3	raining	S. Takehayashi.
Niigata	29.87	758.7	29.91	759.7	39.5	4.2	85	wsw.	28.7	12.8			10 n			0.555	14.1	raining	
Nobiru	29.83	757.7	29.85	758.2	33.1	0.6	98	wsw.	3.9	1.7			9			0	0	foggy	H. Midzushina.
Sapporo					31.5	— 0.3	94	ese.	12.0	5.4			10			0.012	0.3	covered	
Tokei Obs'y, Yeddo	29.84	757.9	29.91	759.7	33.3	0.7	94	nw.	1.8	0.8		0	0			0.085	2.2	clear	The Staff.
Wakayama	30.06	763.5	30.12	765.0	43.4	6.3	62	wnw.	6.2	2.8		ck	10 ks			inap.	inap.	light rain	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.74	755.4	29.92	760.0	81.9	27.7	64	ene.	11.5	5.1		0	4 k;ks			0	0	fair	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.69	601.7	29.91	759.7	50.9	10.5	77	calm	0	0		0	0			0	0		Vicente Fernandez.
Leon	24.45	621.0	30.23	767.9	52.0	11.1	88	n.			1	1 c	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.74	755.5	30.01	762.2	62.5	16.9	88	nne.			1		10 n		sw.	0.354	9.0	raining	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.7	30.26	768.7	46.8	8.2	69	calm	0	0		0	0			0	0		The Staff.
Morelia	24.31	617.4	30.56	776.4	47.1	8.4	82	ne.			4	0	0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	23.94	608.1	30.04	763.0	48.2	9.0	81	calm			0	0	1 s		sw.	0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.35	593.2	30.24	768.0	42.8	6.0	76	calm	0	0		0	0			0	0	fair	Prof. P. Spina.
San Luis Potosi	24.21	615.0	30.22	767.8	52.3	11.3	58	wsw.			1	0	0			0	0		G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.50	774.8	30.50	774.8	42.8	6.0		se.			3					0.024	0.6		
Groningen	30.52	775.3	30.58	776.7	34.6	1.2		se.			1					0	0		
Helder	30.54	775.6	30.54	775.6	36.3	2.4		se.			1					0	0		
Hellevoetsluis	30.51	775.0	30.51	775.0	37.2	2.9	99	ese.			1					0	0		
Utrecht	30.50	774.6	30.54	775.8	36.5	2.5	93	se.			2		10			0	0	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen																			
Brono	30.37	771.5	30.44	773.1	41.4	5.2	84	sse.	18	8			9			0	0		
Christiania	30.11	764.8	30.15	765.8	41.2	5.1	90	sw.	9	4			10			0.244	6.2	raining	
Gjesvær	30.35	770.8	30.50	774.8	31.5	— 0.3	98	ene.	0	0			9			0	0	foggy	
Lodingen	29.41	746.9	29.43	747.5	39.9	4.4		wsw.			8		10					raining	
	29.79	756.6	29.84	757.8	38.5	3.6	98	wsw.			7		10			0.461	11.7	raining	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					52.2	11.2	85	ssw.	27.5	12.3			9			0	0		Dr. J. A. Sampaio.
Campo Major	29.34	745.1	30.36	771.2	50.9	10.5	68	ne.	3.1	1.4			4			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.10	764.6	30.19	766.8	67.1	19.5	63	sw.	1.8	0.8			5			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.00	762.0	30.37	771.5	47.7	8.7	80	nne.	8.7	3.9			1	sw.		0	0		The Staff.
Ponta Delgada, Azores	29.66	753.3	29.73	755.1	62.6	17.0	80	s.	35.3	15.8			3	w.		0.020	0.5		
Saint Paul de Loando	29.69	754.1	29.89	759.3	81.0	27.2	86	w.	0.7	0.3			9			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.93	734.9	30.09	764.3	17.1	— 8.3		wsw.	16	7			10 n			0.020	0.5		Major K. Lasarew.
Archangel	30.28	769.0	30.30	769.5	0.1	—17.7	82	se.	4	2			0			0	0		Capt. Sseliwerstow.
Astrakhan	30.03	762.8	29.95	760.7	39.4	4.1	82	sse.	2	1			10 s			0	0		Capt. Wisganow.
Barnaul	29.58	751.2	30.11	764.8	19.0	— 7.2	85	calm	0	0			10			0.016	0.4		Meteorological Obs'y.
Dorpat	30.28	769.2	30.55	775.9	23.2	— 4.9	84	nnw.	7	3		8 c	0			0	0		Observatory.
Ekaterinburg	28.87	730.8	29.78	759.5	14.9	— 9.5	96	calm	0	0			10			0.039	1.0	snowing	Meteorological Obs'y.
Kasan	29.50	749.2	29.79	756.6	15.3	— 9.3	85	nne.	7	3			2			0.016	0.4		Observatory.
Kertch	29.91	759.6	29.93	760.1	34.3	1.3	87	wnw.	7	3			10 n			0	0		Lagorio & Sastyrex.
Kieff	29.55	750.5	30.23	767.8	22.8	— 5.1	68	nnw.	22	10			10 n			0.016	0.4	light snow	Observatory.
Lugan	29.65	753.0	29.86	758.4	33.1	0.6	85	w.	9	4			10			0.004	0.1		Meteorological Obs'y.
Moscow	29.43	747.6	29.96	760.9	12.4	—10.9	72	n.	13	6		0	3 ks			0	0		Meteorological Obs'y
Nikolaiev	30.07	763.7	30.14	765.5	31.6	— 0.2	69	n.	45	20		cs	8 n			0	0	light clouds	Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.08	764.0	30.17	766.2	— 1.8	—18.8	85	calm	0	0			10			0.028	0.7		Lieut. Iwanow.
Pekin, China	30.45	773.4	30.59	777.0	19.6	— 6.9	59	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	30.49	774.5	30.51	774.9	10.0	—12.2	89	nw.	7	3		cs	8 ks;n			0.004	0.1	light snow	Central Physical Obs'y.
Tashkend, Laboratory	28.73	729.8	30.38	771.6	38.3	3.5	83	calm	0	0			2			0	0		Teich, A. M.
Tiflis	28.56	725.4	30.02	762.4	40.3	4.6	36	n.	18	8			5 s			0	0		Physical Observatory.
Warsaw	30.26	768.6	30.72	780.2	28.9	— 1.7	72	nnw.	7	3		9 c;cs	0						Astronomical Obs'y.
Wilna	30.19	766.9	30.65	778.4	24.1	— 4.4	59	nw.	2	1			8			0	0	light clouds	Berg, Assistant.
Yeniseisk	30.09	764.2	30.42	772.6	—9.4	—23.0	79	calm	0	0			3			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park											6		10			0	0	overcast	Andrew Gibb.
Monach Lt. House, Hebrides			29.93	760.2	49	9.4	93	s.											J. Youngclause.
North Unst, Shetland Pds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.38	771.7	30.48	774.2	54.0	12.2	67	se.	1.6	0.7		3 ck	0			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.25	768.4	30.31	769.9	48.2	9.0	95	se.	3.6	1.6		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.34	694.5	30.47	773.8	36.9	2.7	70	nw.	3.4	1.5		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.12	714.3	30.41	772.5	48.9	9.4	49	se.	2.5	1.1		1	0			0	0	light clouds	The Staff.
Murcia, Met. Obs'y	30.30	769.5	30.45	773.5	52.9	11.6	75	wnw.	0.2	0.1		5	5			0	0	covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.34	745.1	30.24	768.2	55.2	12.9	62	s.	9.8	4.4		0	2			0	0	almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.10	764.4	30.16	766.1	70.0	21.1	87	e.	3.6	1.6		3 ck	1 s	ese.		0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	30.01	762.2	30.07	763.7	74.4	23.6	74	ne.	0	0		1 c	4 ck			0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.23	767.8	30.33	770.4	59.7	15.4	55	ese.	22.5	10.1		1	2	se.	ese.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.00	762.1	30.10	764.4	77.0	25.0	77	se.	4.7	2.1		2 c	3 k	se.	se.	0.205	5.2		E. Gadea, Chief Engu'r.
Tuguegarao, Philippine Id's	30.01	762.2	30.14	765.5	66.9	19.4	90	nw.	7.4	3.3		0	2 ks		ne.	0.01	0.3	fair	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.06	763.4	30.10	764.4	24.4	— 4.2	86	se.			2		8			0	0		
Umea	30.17	766.4	30.22	767.7	15.1	— 9.4	87	calm			0		0			0	0		
Hernosand	30.20	768.7	30.32	770.0	26.8	— 2.9	89	n.			2		5			0	0		
Stockholm	30.28	769.2	30.46	773.7	30.9	— 0.6	77	w.			4		10			0	0		
Wisby	30.52	775.1	30.58	776.6	31.3	— 0.4	78	wsw.			6		3			0	0		
Sub Series.																			
Upsala	30.34	770.7	30.43	772.9	30.6	— 0.8	86	wsw.	10.7	4.8			10		w.	0.146	3.7		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.06	738.0	30.54	775.7	35.8	2.1	77	ne.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.30	769.5	39.2	4.0	60	n.	16	7.0			10		n.	0	0		The Observatory.
Valona			30.31	769.8	50.4	10.2		nw.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.99	761.8	57.0	13.9	86	sw.			2		10 n		sw.	0.77	19.6		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.15	765.8	30.24	768.1	28	— 2.2	88	s.	1	0.4			10 n			0.01	0.3	light snow	
Alpena, Michigan	29.10	739.1	29.81	757.2	30	— 1.1	100	se.	10	4.5			10 n			0.01	0.3	light snow	
Atlanta, Georgia	28.94	735.1	30.17	766.3	43.0	6.1	100	e.	12	5.4			10 n		calm	0.13	3.3	light rain	
Atlantic City, New Jersey	30.17	766.3	30.18	766.6	39.2	4.0	89	e.	15	6.7			10 n		calm	0.26	6.6	light rain	
Augusta, Georgia	30.02	762.5	30.22	767.6	49.0	9.4	86	ne.	4	1.8			10 s			0.23	5.8	cloudy	
Baltimore, Maryland	30.11	764.8	30.16	766.1	36	2.2	89	s.	8	3.6			10 n		se.	0.59	15.0	light rain	
Barnegat, New Jersey	30.18	766.6	30.20	767.1	37.0	2.8	96	se.	16	7.2			10 n		e.	0.38	9.6	light rain	
Bismarck, Dakota	28.33	719.6	30.33	770.4	—11	—23.9	100	nw.	12	5.4		4 cs	0	nw.		0.11	2.8	fair	
Block Island, Rhode Island																			
Boise City, Idaho	27.47	697.7	30.40	772.1	9	—12.8	91	ne.	6	2.7		0	0			0	0	clear	
Boston, Massachusetts	30.17	766.3	30.34	770.6	25.0	— 3.9	64	s.	4	1.8			10s;fg			0	0	cloudy	
Brownsville, Texas	29.97	761.2	30.02	762.5	59	15.0	100	calm	0	0			10 s			0.19	4.8	cloudy	
Buffalo, New York	29.13	739.9	29.93	760.2	35	1.7	92	ne.	10	4.5			10 n			0.09	2.3	light snow	
Burlington, Vermont	29.85	758.2	30.16	766.1	19.5	— 6.9	75	s.	9	4.0			10 s		w.	inap.	inap.	cloudy	
Cairo, Illinois	29.55	750.6	29.97	761.2	44.8	7.1	94	sw.	5	2.2			10 s		calm	1.66	42.2	threatening	
Campo, California	27.03	686.5	29.66	753.4	26	— 3.3	100	e.	18	8.0			10 n		e.	0.47	11.9	heavy snow	
Camp Thomas, Arizona	27.11	688.6	29.94	760.5	39	3.9	82	e.			4		10 s			inap.	inap.	cloudy	
Cape Henry, Virginia	30.09	764.3	30.11	764.8	49	9.4	100	se.	10	4.5			10 s		se.	0.06	1.5	cloudy	
Cape May, New Jersey	30.09	764.3	30.12	765.0	41	5.0	86	se.	17	7.6			10 n		se.	0.38	9.7	light rain	
Castroville, Texas	29.15	740.4	30.00	762.0	53	11.7	93	nw.	2	0.9			10 s			0.05	1.3	cloudy	
Cedar Keys Florida	30.16	766.1	30.18	766.6	67	19.4	84	se.	15	6.7		0	5 ks		se.	0	0	fair	
Champaign, Illinois	28.99	736.3	29.86	758.4	35.0	1.7	75	sw.	4	1.8			fg.			0.26	6.6	light fog	
Charleston, S. Carolina	30.15	765.8	30.21	767.3	53	11.7	93	calm	0	0			fg.			0	0	dense fog	
Charlotte, N. Carolina	29.29	744.0	30.18	766.6	39.0	3.9	89	n.	2	0.9			10 s		ne.	0.51	13.0	cloudy	
Chattanooga, Tennessee	29.27	743.4	30.13	765.3	50.0	10.0	86	s.	12	5.4			10 ks		s.	0.94	23.9	cloudy	
Cheyenne, Wyoming	23.90	607.0	30.15	765.8	1.2	—17.1	75	e.	3	1.3		0	0			0.01	0.3	clear	
Chicago, Illinois	29.08	738.6	29.83	757.7	35.3	1.8	100	sw.	6	2.7			10 s			0.24	6.1	cloudy	
Chincoteague, Virginia	30.13	765.3	30.15	765.8	43	6.1	100	se.	10	4.5			10 n		se.	0.30	7.6	heavy rain	
Cincinnati, Ohio	29.15	740.4	29.84	757.9	46.2	7.9	83	s.	2	0.9			10 s			1.06	26.9	cloudy	
Cleveland, Ohio	29.04	737.6	29.82	757.4	36.2	2.3	98	s.	9	4.0			10 s			0.26	6.6	cloudy	
Coleman City, Texas	28.19	716.0			47	8.3	100	n.	4	1.8			10 s			0.27	6.9	cloudy	
Columbus, Ohio	28.94	735.1	29.84	757.9	42	5.6	92	se.	4	1.8			10 n			0.62	15.8	light rain	
Concho, Texas	28.06	712.7	30.08	764.0	49	9.4	93	calm	0	0			10 s			0.14	3.6	cloudy	
Davenport, Iowa	29.17	740.9	29.88	758.9	36	2.2	79	sw.	4	1.8			10 s		calm	0.11	2.8	cloudy	
Dayton, Washington T'y	28.59	726.2	30.39	771.9	16	— 8.9	73	ne.	6	2.7		0	0			0	0	clear	
Deadwood, Dakota	25.30	642.6	30.25	768.3	11	—11.7	83	sw.	2	0.9			10 n			0.04	1.0	light snow	
Decatur, Texas					48	8.9	93	se.	10	4.5			10 s			0.37	9.4	cloudy	
Delaware Breakwater, Del.	30.12	765.0	30.14	765.5	40	4.4	100	se.	21	9.4			10 n		se.	0.21	5.3	light rain	
Denison, Texas	29.20	741.7	30.04	763.0	48.0	8.9	100	nw.	4	1.8			10 n			0.89	22.6	light rain	
Denver, Colorado	24.72	627.9	30.24	768.1	4.0	—15.6	79	s.	4	1.8		0	0			0.03	0.8	clear	
Des Moines, Iowa	28.95	735.3	29.92	760.0	37	2.8	82	w.	6	2.7			10 s		w.	0.07	1.8	threatening	
Detroit, Michigan	29.09	738.9	29.85	758.2	39.1	3.9	89	e.	10	4.5			10n;fg		calm	0.20	5.1	light rain	
Dodge City, Kansas	27.48	698.0	30.23	767.8	20	— 6.7	80	n.	24	10.7		0	0			0	0	clear	
Dubuque, Iowa	29.10	739.1	29.87	758.7	30.8	— 0.7	78	se.	1	0.4			10 s		calm	0.02	0.5	cloudy	
Duluth, Minnesota	29.04	737.6	29.80	756.9	26	— 3.3	88	se.	2	0.9			10 n		se.	0.04	1.0	light snow	
Eagle Pass, Texas	29.21	741.9	30.05	763.3	53.2	11.8	93	ne.	5	2.2			10 s			0.10	2.5	cloudy	
Eagle Rock, Idaho	25.40	645.1	30.36	771.1	—29	—33.9	100	n.	3	1.3			fg.			0	0	dense fog	
Eastport, Maine	30.33	770.4	30.40	772.1	13	—10.0	70	n.	4	1.8		5 cs	0			0	0	fair	
El Paso, Texas	26.24	666.5	30.12	765.0	23.2	— 4.9	73	ne.	2	0.9		0	0			0	0	clear	
Erie, Pennsylvania	29.06	738.1	29.83	757.7	39	3.9	89	se.	14	6.3			10 s			0.10	2.5	cloudy	
Escanaba, Michigan	29.08	738.6	29.80	756.9	27	— 2.8	100	n.	3	1.3			10 n			0.01	0.3	light snow	
Florence, Arizona																			
Fort Apache, Arizona	24.73	628.1	29.85	758.2	37	2.8	66	s.	18	8.0			10 s		s.	0.04	1.0	cloudy	
Fort Assinnaboine, Montana	27.16	689.9	30.20	767.1	— 5	—20.6	65	calm	0	0		0	0		inap.	inap.		clear	
Fort Bennett, Dakota	28.60	726.4	30.34	770.6	— 3	—19.4	65	nw.	6	2.7		0	0			0.80	20.3	clear	
Fort Benton, Montana	27.21	691.1	30.19	766.8	1	—17.2	72	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	28.16	715.3	30.36	771.1	7	—13.9	80	e.	3	1.3			10 s		calm	0	0	cloudy	
Fort Custer, Montana	26.90	683.2	30.28	769.1	— 8	—22.2	100	e.	5	2.2		0	0			0.01	0.3	clear	
Fort Davis, Texas	25.07	636.8	30.05	763.3	33	0.6	91	s.	2	0.9		0	0			0	0	clear	
Fort Elliott, Texas	27.22	691.4	30.15	765.8	20	— 6.7	46	n.	16	7.2		0	0			0.11	2.8	clear	
Fort Gibson, Indian T'y	29.45	748.0	30.05	763.3	45.0	7.2	93	calm	0	0			10 s			0.97	24.6	cloudy	
Fort Grant, Arizona	25.07	636.8	29.97	761.2	28	— 2.2	19	sw.	2	0.9			10 s		ne.	0	0	cloudy	
Fort Griffin, Texas																			
Fort Keogh, Montana	27.62	701.5	30.31	769.9	4	—15.6	76	sw.	3	1.3			10 s			0.02	0.5	cloudy	
Fort Macon, North Carolina	30.12	765.0	30.13	765.3	57	13.9	100	s.	16	7.2			10 s		s.	0.06	1.5	cloudy	
Fort McKavett, Texas	27.76	705.1	30.16	766.1	48.1	8.9	93	ne.	2	0.9			fg.			0.09	2.3	foggy	
Fort Missoula, Montana	26.89	683.0	30.35	770.9	6	—14.4	76	ne.	1	0.4			10 ks			0	0	cloudy	
Fort St. Michaels, Alaska	29.99	761.7	30.02	762.5	0	—17.8	100	se.	18	8.0		0	5 s		se.	0	0	fair	
Fort Shaw, Montana	26.33	668.8	30.19	766.8	15	— 9.4	51	sw.	20	8.9		0	0			0	0	clear	
Fort Sill, Indian Territory	28.80	731.5	30.12	765.0	40.7	4.8	93	n.	2	0.9		7 c	0			0.36	9.1	fair	
Fort Stevenson, Dakota	28.30	718.8	30.36	771.1	— 2	—18.9	68	nw.	9	4.0			10 s		nw.	0.06	1.5	cloudy	
Fort Verde, Arizona					32.1	0.1	81	s.			1		10 n		s.	0.20	5.1	heavy snow	
Fredericksburg, Texas	28.24	717.3	30.06	763.5	53	11.7	93	calm	0	0			10 ks			0.40	10.2	cloudy	
Galveston, Texas	29.96	761.0	30.00	762.0	61	16.1	100	ne.	14	6.3			10 n		n.	0.23	5.8	light rain	
Grand Haven, Michigan	29.08	738.6	29.79	756.7	35.5	1.9	84	se.	1	0.4			10 n			0.05	1.3	light rain	
Hatteras, North Carolina	30.12	765.0	30.14	765.5	60	15.6	93	s.	20	8.9			9 s			0.05	1.3	cloudy	
Helena, Montana	25.84	656.3	30.27	768.8	2	—16.7	75	calm	0	0		0	8 s			0	0	cloudy	
Henrietta, Texas	29.08	738.6	30.15	765.8	43	6.1	100	n.	11	4.9			10 n			1.71	43.4	light rain	
Huron, Dakota	28.70	729.0	30.24	768.1	0	—17.8	54	nw.	27	12.1		3 cs	0			0.05	1.3	clear	
Indianapolis, Indiana	29.00	736.6	29.84	757.9	39	3.9	89	sw.	3	1.3			fg.		calm	0.35	8.9	dense fog	
Indianola, Texas	29.97	761.2	30.00	762.0	61.2	16.2	100	ne.	16	7.2			10 n			0.70	17.8	light rain	
Jacksboro, Texas	28.84	732.5	30.08	764.0	48	8.9	100	w.	3	1.3			fg			0.22	5.6	dense fog	
Jacksonville, Florida	30.17	766.3	30.22	767.6	58	14.4	93	ne.	3	1.3		4 ck	0	w.		0	0	fair	
Keokuk, Iowa	29.19	741.4	29.89	759.2	34.5	1.4	89	s.	4	1.8			fg.			0.31	7.9	dense fog	
Key West, Florida	30.14	765.5	30.17	766.3	73.0	22.8	82	se.	10	4.5		0	2 k;s		se.	0.01	0.3	clear	
Kittyhawk, North Carolina	30.13	765.3	30.15	765.8	51	10.6	100	s.	19	8.5			10n;fog			0.17	4.3	light rain	
Knoxville, Tennessee	29.02	737.1	30.10	764.5	45.7	7.6	98	e.	4	1.8			10s;fg		calm	0.88	22.4	cloudy	
La Crosse, Wisconsin	28.97	735.8	29.81	757.2	30.5	— 0.8	77	s.	3	1.3			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.02	660.9	30.04	763.0	24.5	— 4.2	75	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.06	738.1	30.02	762.5	40	4.4	82	nw.	5	2.2			10 s			0.25	6.3	cloudy	
Lewiston, Idaho	29.66	753.4	30.53	775.4	20	— 6.7	58	e.	1	0.4		0	0			0	0	clear	
Little Rock, Arkansas	29.64	752.8	29.98	761.5	48	8.9	100	sw.	4	1.8			10 n			1.24	31.5	light rain	
Los Angeles, California	29.27	743.4	29.67	753.6	37.0	2.8	82	ne.	24	10.7			10 s		calm	0.06	1.5	cloudy	
Louisville, Kentucky	29.29	744.0	29.88	758.9	51.0	10.6	93	sw.	5	2.2			10 n		w.	1.34	34.0	light rain	
Lynchburg, Virginia	29.43	747.5	30.15	765.8	37.3	2.9	89	calm	0	0			10 n			0.86	21.8	light rain	
Mackinac City, Michigan																			
Madison, Wisconsin	28.76	730.5	29.85	758.2	31	— 0.6	88	s.	3	1.3			10 s		calm	0.05	1.3	cloudy	
Marquette, Michigan	29.04	737.6	29.82	757.4	26	— 3.3	77	w.	1	0.4			10 s		calm	0	0	cloudy	
Mason, Texas	28.34	719.8	30.08	764.0	49.3	9.6	95	w.	2	0.9			10 s		w.	0.27	6.9	cloudy	
Memphis, Tennessee	29.04	752.8	30.00	762.0	50	10.0	100	w.	6	2.7			10 n		w.	2.44	62.0	light rain	
Milwaukee, Wisconsin	29.01	736.8	29.81	757.2	35	1.7	88	sw.	4	1.8			10 s			0.06	1.5	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.04	763.0	30.08	764.0	64.9	18.3	93	s.	5	2.2			10 ks		s.	0.04	1.0	threatening.	
Montgomery, Alabama	29.86	758.4	30.10	764.5	63.6	17.6	91	s.	7	3.1		0	9 s		sw.	0	0	cloudy	
Moorhead, Minnesota	29.02	737.1	30.13	765.3	—10	—23.3	100	n.	28	12.5			10 n		n.	0.21	5.3	heavy snow.	
Morgantown, W. Virginia	28.83	732.3	29.89	759.2	46.0	7.8	93	s.	1	0.4			10 n			0.70	17.8	light rain	
Mt. Washington, N. H.	23.66	601.0	30.29	769.4	20.0	— 6.7	86	w.	50	22.4			10 s		w.	0.07	1.8	cloudy	
Nashville, Tennessee	29.37	746.0	29.93	760.2	59.6	15.3	98	se.	1	0.4			10 n			2.19	55.6	heavy rain.	
New Haven, Connecticut	30.13	765.3	30.25	768.3	30	— 1.1	88	n.	2	0.9			10 n			0.01	0.3	light snow.	
New London, Connecticut	30.25	768.3	30.30	769.6	32	0.0	78	ne.	5	2.2			10 s		calm	0	0	cloudy	
New Orleans, Louisiana	29.98	761.5	30.04	763.0	68.2	20.1	90	s.	8	3.6		0	fg			0	0	fair	
Newport, Rhode Island	30.26	768.6	30.31	769.9	38.0	3.3	64	se.	8	3.6			10 s		s.	0	0	cloudy	
New River, N. Carolina					59	15.0	100	sw.			1		fg			0.05	1.3	dense fog	
New Shoreham, Rhode I'd.	30.28	769.1	30.31	769.9	39.0	3.9	65	se.	10	4.5			10 ks		sw.	0	0	cloudy	
New York, New York	30.07	763.8	30.26	768.6	33	0.6	100	e.	6	2.7			10 n			0.15	3.8	light snow.	
Norfolk, Virginia	30.06	763.5	30.09	764.3	50	10.0	93	s.	10	4.5			10 n		s.	0.05	1.3	light rain	
North Platte, Nebraska	27.15	689.6	30.27	768.8	7.6	—13.6	61	nw.	14	6.3		0	0			0.04	1.0	clear	
Olympia, Washington T'y	30.28	769.1	30.32	770.1	31.5	— 0.3	88	n.	1	0.4		4 cs	0	n.		0	0	fair	
Omaha, Nebraska	28.81	731.8	30.08	764.0	21.9	— 5.6	84	nw.	20	8.9			10 s			0.03	0.8	cloudy	
Ooglaamie, Pt. Barrow, Alas.	29.00	736.6	29.02	737.1	—13.4	—25.2	89	w.	52	23.2			10 n			0.17	4.3	light snow.	
Oswego, New York	29.68	753.9	30.03	762.7	32.0	0.0	88	se.	14	6.3			10 s			0	0	threatening.	
Palestine, Texas																			
Pensacola, Florida	30.08	764.0	30.11	764.8	66.4	19.1	95	se.	5	2.2		0	7 s		sw.	0	0	fair.	
Philadelphia, Pa.	30.11	764.8	30.17	766.3	35	1.7	89	s.	2	0.9			10 n			0.26	6.6	light snow.	
Pike's Peak, Colorado	17.24	437.9	29.94	760.5	—10	—23.3	70	w.	28	12.5		0	0			0.18	4.6	clear	
Ploche, Nevada	23.84	605.5	30.04	763.0	6	—14.4	60	n.	11	4.9		10 k	0	s.		0	0	cloudy	
Pittsburg, Pennsylvania	29.04	737.6	29.89	759.2	41.9	5.5	92	e.	4	1.8			10 n			0.45	11.4	light rain	
Port Eads, Louisiana	30.07	763.8	30.08	764.0	61.2	16.2	96	se.	1	0.4			fg			0.05	1.3	dense fog	
Port Huron, Michigan	29.09	738.9	29.82	757.4	32.0	0.0	100	se.	6	2.7			10 n		calm	0.12	3.0	light sleet	
Portland, Maine	30.25	768.3	30.30	769.6	21.5	— 5.8	84	n.	5	2.2			10 s		calm	0	0	cloudy	
Portland, Oregon	30.28	769.1	30.35	770.9	30.0	— 1.1	88	calm	0	0		6 cs	0	w.		0	0	fair	
Portsmouth, N. Carolina					58	14.4	86	se.	18	8.0			10 ks		s.	0.13	3.3	cloudy	
Prescott, Arizona	24.43	620.5	29.81	757.2	28	— 2.2	80	se.	8	3.6			10 n		s.	0.18	4.6	light snow.	
Punta Rassa, Florida	30.18	766.6	30.19	766.8	69	20.6	87	e.	10	4.5		5 cs	0	calm		0	0	fair	
Red Bluff, California	29.73	755.1	30.11	764.8	33.0	0.6	50	n.	16	7.2		0	0			0	0	clear	
Rio Grande City, Texas	29.83	757.7	30.08	764.0	57	13.9	93	calm	0	0		10 cs	0	calm		0.07	1.8	cloudy	
Rochester, New York	29.25	742.9	29.96	761.0	32	0.0	88	se.	10	4.5			10 n		se.	0.01	0.3	light snow.	
Roseburg, Oregon	29.73	755.1	30.30	769.6	28.5	— 1.9	82	calm	0	0		0	0			0	0	clear	
Sacramento, California	29.82	757.4	29.90	759.4	35.2	1.8	53	n.	24	10.7		0	0			0	0	clear	
St. Louis, Missouri	29.32	744.7	29.96	761.0	37.9	3.3	89	sw.	7	3.1			10 s			0.79	20.1	cloudy	
St. Paul, Minnesota	28.86	733.0	29.81	757.2	27.0	— 2.8	92	se.	3	1.3			10 n			0.09	2.3	light snow.	
St. Vincent, Minnesota	29.24	742.7	30.22	767.6	—15	—26.1	100	n.	28	12.5			10 s		calm	0.15	3.8	cloudy	
Salt Lake City, Utah	25.72	653.3	30.29	769.4	3	—16.1	76	calm	0	0		0	0			0.10	2.5	clear	
San Antonio, Texas	29.25	742.9	29.98	761.5	53.6	12.0	93	ne.	4	1.8			10 s			0.10	2.5	cloudy	
San Diego, California	29.41	747.0	29.48	748.8	39.9	4.4	79	ne.	32	14.3			10 n			2.70	68.6	light rain	
Sandusky, Ohio	29.07	738.4	29.79	756.7	35	1.7	89	e.	10	4.5			10 s			0.22	5.6	cloudy	
Sandy Hook, New Jersey	30.22	767.6	30.26	768.6	35.0	1.7	89	se.	13	5.8			10 n		calm	0.16	4.1	light snow.	
San Francisco, California	29.82	757.4	29.89	759.2	40	4.4	35	nw.	16	7.2		0	0			0	0	clear	
Santa Fé, New Mexico	23.13	587.5	30.14	765.5	17	— 8.3	76	calm	0	0		0	7 s		calm	0	0	fair	
Savannah, Georgia	30.12	765.0	30.22	767.6	55	12.8	93	n.	1	0.4			fg			0	0	dense fog	
Shreveport, Louisiana	29.72	754.9	29.97	761.2	53	11.7	100	calm	0	0			10 n		calm	0.84	21.3	light rain	
Silver City, New Mexico	24.08	611.6	29.94	760.5	36	2.2	72	calm	0	0		0	7 s		calm	0.01	0.3	fair	
Sitka, Alaska	29.59	751.6	29.66	753.4	45.6	7.6	83	s.	25	11.2			10 n		s.	1.02	25.9	light rain	
Smithville, North Carolina	30.13	765.3	30.17	766.3	53	11.7	100	nw.	8	3.6			fg			0.43	10.9	dense fog	
Spokane Falls, Wash. Ter.	28.27	718.0	30.41	772.4	9	—12.8	91	ne.	2	0.9			10 s			0	0	cloudy	
Springfield, Illinois	29.17	740.9	29.90	759.4	38	3.3	89	se.	2	0.9			fg			0.37	9.4	dense fog.	
Springfield, Massachusetts	30.16	766.1	30.30	769.6	26.0	— 3.3	88	calm	0	0			10 n			inap.	inap.	light snow.	
Springfield, Mo.	28.50	723.9	30.08	764.0	42	5.6	96	w.	10	4.5			fg			1.15	29.2	dense fog	
Stockton, Texas	26.95	684.5	30.09	764.3	33.3	0.7	100	calm	0	0		0	6 s		sw.	0	0	fair	
Thatcher's Island, Mass.	30.27	768.8	30.33	770.4	33.0	0.6	78	se.	10	4.5			10 s		se.	0	0	cloudy	
Toledo, Ohio	29.08	738.6	29.82	757.4	36	2.2	89	calm	0	0			10n; fg			0.18	4.6	light rain	
Tucson, Arizona	27.32	693.9	29.82	757.4	50	10.0	41	se.	12	5.4		0	8 s		w.	inap.	inap.	cloudy	
Umatilla, Oregon	30.04	763.0	30.43	772.9	25.5	— 3.6	86	se.	6	2.7			10 s			0	0	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.69	754.1	29.96	761.0	69	20.6	93	w.	13	5.8			10 n		calm	0.13	3.3	heavy rain.	
Visalia, California	29.41	747.0	29.80	756.9	22	— 5.6	80	nw.	3	1.3		3 c	0			0	0	clear	
Washington, D. C.	30.04	763.0	30.16	766.1	35	1.7	100	se.	2	0.9			10n; fg			0.77	19.6	light rain	
West Los Animas, Colorado	26.04	661.4	30.18	766.6	4	—15.6	87												
Wickenburg, Arizona					36	2.2	96	se.			1		fg			0.12	3.0	cloudy	
Williamsport, Pa.	29.45	748.0	30.08	764.0	35	1.7	89	e.	9	4.0			10 n			0.40	10.2	light snow.	
Wilmington, N. Carolina	30.08	764.0	30.14	765.5	50	10.0	93	nw.	3	1.3			fg		calm	0.13	3.3	dense fog	
Winnemucca, Nevada	25.66	651.8	30.20	767.1	2	—16.7	76	ne.	4	1.8		0	0			0	0	clear	
Wood's Holl, Mass.	30.30	769.6	30.34	770.6	36.5	2.5	75	se.	16	7.2			10 s		calm	0	0	cloudy	
Yankton, Dakota	28.66	728.0	30.08	764.0	8	—13.3	76	nw.	19	8.5			10 ks		nw.	inap.	inap	cloudy	
Yuma, Arizona	29.58	751.3	29.73	755.1	33.0	0.6	88	se.	6	2.7			10 s		se.	0.61	15.5	cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1			53.0	11.7	82	calm	0	0		5 k	2 s; n			0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.12	765.0	30.13	765.3	77	25.0	72	e.				5 k	2 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.90	759.4	29.92	760.0	78	25.6	86	calm	0	0		4 ck	6 ks	e.	calm	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.04	763.0	30.06	763.5	75	23.9	90	e.				0	6 ks			0	0		B. Bigar.
Havana, Cuba, W. I.	30.15	765.8	30.20	767.1	72	22.2	97	se.	1.2	0.5		0	5 ks		calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	66.7	19.3	83	n.	1	0.4		0	0			0	0	fine	Robert Johnstone
Navassa, W. I.	30.01	762.2	30.09	764.3	76	24.4	65	e.	15	6.7		5 k	5 s	se.	e.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.05	763.3	30.05	763.3	77	25.0	91	e.			3		8 ps	e.	e.	0.50	12.7	cloudy	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mbia	29.40	746.7	29.95	760.7	82	27.8	80	calm			0	2 c	0	calm		blank	blank	clear	Miss Flora A. Nichols.
Rivas, Nicaragua					74.5	23.6	90	ne.			3	0	0			0	0		Earl Flint.
Santiago de Cuba, W. I.	30.12	765.0	30.15	765.8	76	24.4	69	ne.	4.8	2.1		2 ck	2 s		e.	0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.27	768.8	30.33	770.4	—42.5	—41.4		w.	8	3.6		4 k	3 s	w.	w.	0	0	threatening	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads. India.	29.95	760 7	80	26.7	74	nne.			1		8							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.26	768.6	57.5	14.2	63	calm			0		1							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.03	762.7	69.5	20.8	63	ese.			3		4	sse.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.86	758.4	68	20.0	94	s.			1		9	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.32	770 1	37	2.8	100	n.			2		10	nne.						snowing	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.40	772.1	58	14.4		ene.			3–4		7	ese.				2	wsw.	d. clouds	Lieut. J. L. Burr
H. M. S. Cormorant, S. 32° 52′, E. 153° 25′	30.05	763.3	69	20.6		ese.			3		2	se.				1	e.	d. clouds	Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.25	768.3	39.5	4.2	82	calm			0		0							blue sky	Capt. S. Long.
H. M. S. Diamond, S. 26° 53′, W. 23° 53′	30.11	764.8	77.5	25.3	84	nne.			4		8					3	nne.	d. clouds	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	30.33	770.4	61	16.1	64	nnw.			1–2		6	nnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 69′, W. 82° 21′	30.16	766.1	72	22.2	97	calm			0		1							blue sky	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 20′, W. 60° 40′	29.36	745 7	49	9.4	77	nne.			5–6		9					4–5	nne.	raining	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.96	761.0	83	28.3		n.			1		4					1	w.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.03	762.7	38	3.3		nnw.			5–6		10							raining	Capt. G. Robinson.
H. M. S. Espiegle																			Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′ E. 43° 12′	29.88	758.9	77.5	25.3	69	s.			7		0					4	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.07	763.8	44	6.7	75	w.			1-2		7	w.						misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.97	761.2	62	16.7	86	nw.			1		10							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 44° 18′, W. 61° 45′	29.63	752.6	61	16.1	88	w.			5		2					2	w.	blue sky	Capt. L. Jones.
H. M. S. Iris, Beirut, Syria	30.03	762.7	57	13.9	100	calm			0		9						s.	showery	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.31	769.9	61	16.1	82	e.			1–2		2	e.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	30.20	767.1	62.6	17.0	83	ne.			2–3		0					2	nne.	misty	Capt. A. Carpenter.
H. M. S. Malabar, Bombay, India	30.01	762.2	75	23.9	90	nw.			2–3		3	nw.						d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S Northampton, N. 14° 25′, W. 60° 25′	30.07	763.8	78	25.6	73	ne.			5		2	ne.				2	e.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, Mauritius Island, Africa	29.91	759.7	82	27.8	78	wsw.			2		2	ene.						d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 26° 41′, W. 7° 09′	30.16	766.1	78	25.6	97	e.			2		4					1	e.	d. clouds	Capt. F. R. Dicken
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, N. 26° 20′, E. 55° 22′	30.14	765.5	73.1	22.8		wsw.			1									d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′. W. 123° 27′	30.32	770.1	34	1.1	90	calm			0		2							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, Ind	30.07	763.8	79.5	26.4	78	ne.			1		4	ne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis																			Capt. G. O. Twiss.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Triumph, N. 6° 51′, W. 79° 54′	29.88	758.9	79	26.1	86	n.			5		0					6	n.	blue sky	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.10	764.5	72	22.2		nne.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.06	763.5	69.5	20.8	79	s.			1		7	s.				2	sse.	misty	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 33° 29′, E. 135° 35′	30.08	764.0	49	9.4	100	nnw.			6–7		9	nw.				7	nw.	squally	Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	29.97	761.3	75.2	24.0	75	ne.			3		5		sw.			2	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 14° 45′, W. 61° 11′	30.09	764 3	74.8	23.8	88	ne.			1		8							overcast	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.05	763.3	68	20.0	84	sse.	4	1.8	.....	.....	5	.....	sse.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	30.33	770.4	20	— 6.7	.....	nw.	6	2.7	.....	.....	10	.....	nnw.	0	0	.....	.....	cloudy	
Naval Hospital Yokohama, Japan	29.82	757.4	36	2.2	95	calm	.....	.....	0	.....	0	.....	.....	0.12	3.0	.....	.....	clear	
Adams, S. 14° 59′, W. 75° 56′	29.69	754.1	69	20.6	95	n.	.....	.....	1-2	.....	0	.....	.....	.....	.....	sm'h	s.	clear	
Alaska, Iquique, Peru	29.94	760.5	66	18.9	89	calm	.....	.....	0	.....	2	.....	.....	0	0	sm'h	.....	clear	
Alert, Hong Kong, China*	30.13	765.3	63	17.2	62	e.	.....	.....	2	.....	2	.....	e.	0	0	sm'h	.....	hazy	
Alliance, Boston, Mass.*†	30.38	771.6	30	— 1.1	68	wnw.	.....	.....	1	.....	10	.....	.....	0	0	.....	.....	overcast	
Ashuelot, Tientsin, China	30.58	776.7	21	— 6.1	100	n.	.....	.....	1	.....	1	.....	calm	.....	.....	.....	.....	clear	
Brooklyn, S. 13° 25′, W. 36° 10′	29.99	761.7	82	27.8	83	ese.	6	2.7	.....	.....	2	.....	ese.	0	0	light	sse.	fair	
Colorado, New York, N. Y	30.23	767.8	36	2.2	55	se.	1	0.4	.....	.....	10	.....	.....	0.03	0.8	.....	.....	snowing	
Essex, N. 36° 52′, W. 63° 00′	30.37	771.4	50	10.0	72	nne.	.....	.....	3	.....	5	.....	ne.	.....	.....	mod.	ne.	fair	
Franklin, Norfolk, Va	30.11	764.8	50	10.0	93	se.	9	4.0	.....	.....	10	.....	.....	0.04	1.0	.....	.....	rainy	
Galena, N. 10° 37′, W. 17° 15′	29.91	759.7	76	24.4	73	ne.	.....	.....	4	.....	2	.....	.....	.....	.....	mod.	ne.	clear	
Independence, N. Yard, Mare I'd, Cal	29.78	756.4	39	3.9	58	nw.	9.6	4.3	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La	30.03	762.7	66	18.9	100	sse.	.....	.....	2	.....	10	.....	s.	.....	.....	.....	.....	foggy	
Lackawanna, Valparaiso, Chili†	30.00	762.0	61	16.1	100	nnw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Lancaster, Villafranca, France	30.44	773.4	65	18.3	48	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Michigan, Erie, Pa	30.02	762.5	33	0.6	.....	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	raining	
Minnesota, Newport, R. I	30.33	770.4	40	4.4	82	sse.	7	3.1	.....	.....	10	.....	s.	.....	.....	.....	.....	overcast	
Monocacy, Yokohama, Japan	29.96	761.0	42	5.6	91	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Nipsic, Naples, Italy	30.42	772.7	58	14.4	38	ne.	.....	.....	3	.....	2	.....	ne.	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.03	762.7	67	19.4	100	se.	.....	.....	2	.....	10	.....	nw.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.27	768.8	58	14.4	64	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C	30.20	767.1	34	1.1	90	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	raining	
Pensacola, S. 17° 47′, W. 75° 42′	29.94	760.5	72	22.2	71	se.	.....	.....	2	.....	10	.....	se.	0	0	long	s.	cloudy	
Powhatan, Boston, Mass	30.30	769.6	27	— 2.8	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	overcast	
Quinnebaug, Villafranca, France	30.46	773.7	58	14.4	70	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear	
Ranger, N. 17° 04′, W. 100° 34′*	29.90	759.4	78	25.6	73	ne.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, Pago Pago, Samoa Islands*	29.66	753.4	79	26.1	95	calm	.....	.....	0	.....	10	.....	.....	0.65	16.5	.....	.....	cloudy	
Shenandoah, Montevideo, Uruguay*,	30.01	762.2	69	20.6	56	n.	.....	.....	4	.....	1	.....	.....	.....	.....	sm'h	.....	clear	
St Louis, League Island, Pa	30.46	773.7	34	1.1	79	se.	3	1.3	.....	.....	10	.....	.....	.....	.....	.....	.....	snowing	
Swatara, Kobe, Japan*	29.95	760.7	45	7.2	61	w.	.....	.....	3	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy	
Tennessee, New York, N. Y	30.25	768.3	35	1.7	90	se.	2.5	1.1	.....	.....	10	.....	.....	inap.	inap.	.....	.....	fog & snow	
Vandalia, St. Georges, Grenada, W.I.	30.08	764.0	81	27.2	66	nne.	.....	.....	1	.....	2	.....	ne.	.....	.....	.....	.....	clear	
Wabash, Boston, Mass	30.33	770.4	24	— 4.4	87	wsw.	2	0.9	.....	.....	10	.....	calm	0	0	.....	.....	hazy	
Wachusetts, N. 56° 20′, W. 133° 21′	29.75	755.6	40	4.4	100	sw.	.....	.....	5	.....	10	.....	.....	.....	.....	.....	.....	rainy	
Wyoming, Port Royal, S. C	30.19	766.8	53	11.7	100	calm	0	0	.....	.....	10	.....	.....	0	0	.....	.....	foggy	
Yantic, Port Royal, Jamaica, W. I*	30.06	763.5	70	21.1	90	nnw	.....	.....	2	.....	2	.....	e.	.....	.....	.....	.....	clear	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. *Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.*																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith, N. 43° 06′, W. 66° 30′	30.68	779.3	23	—5.0	.....	ne.	2	.....	9	.....	ene.	0	0	2	nw.	overcast	C. Gapon.
S. S. Polynesian, Capt. Robt. Brown, Boston, Mass*	30.12	765.0	26	—3.3	.....	wsw.	3	.....	10	.....	.....	0	0	.....	.....	hazy	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. N. 47° 47′, W. 51° 35′*	29.71	754.6	20	—6.7	.....	nnw.	5	.....	10	.....	nnw.	.....	.....	mod.	nnw.	snowy	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, N. 43° 40′, W. 56° 41′*	30.21	767.3	26	—3.3	.....	nnw.	6	.....	.....	.....	nnw.	2 h'r	snow	r'gh	con.	overcast	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, N. 43° 09′, W. 54° 17′	29.75	755.6	33	0.6	89	nw.	8	.....	8	.....	nw.	.....	.....	r'gh	nw.	fair	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 51° 34′, W. 15° 34′†	29.64	752.8	53	11.7	86	s.	6	.....	8	.....	s.	0	0	r'gh	s.	cloudy	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†	30.32	770.1	49	9.4	93	sse.	2	.....	8	.....	se.	.....	.....	.....	.....	fair	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 50° —′, W. 17° —′†	29.64	752.8	54	12.2	93	wsw.	4	.....	4	.....	sw.	.....	.....	mod.	s.	showery	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Utopia, Capt. A. McRitchie, N. 47° 24′, W. 29° 00′*†	29.20	741.7	48	8.9	71	sse.	7	.....	10	.....	se.	4 h'r	hv'y	h'vy con.	nw.	cloudy	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 18° 33′, W. 72° 20*†	30.23	767.8	68	20.0	79	ne.	3	.....	0	.....	.....	0	0	sm'h	.....	hazy	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Cartagena, U. S. C.*	29.94	760.5	79	26.1	.....	ne.	4	.....	0	.....	.....	0	0	.....	.....	very fine	J. Sandberg.
S. S. Arden, Capt. R. de Echevarrieta,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse, N. 18° —′, W. 77° —′	29.78	756.4	.....	.....	.....	e.	4	.....	1	.....	e.	0	0	mod.	e.	clear	Fisher & Welden.
BOSTON & HALIFAX. *E. W Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S.	.....	.....	50	10.0	78	calm	0	.....	10	.....	.....	0	0	.....	.....	cloudy	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
British Merchant, Capt. E. J. Molony. N. 1° 57′, E. 94° 15′	29.93	760.2	81	27.2	87	wsw.	4	.....	9	.....	.....	.....	.....	.....	.....	squally	
Caldew, Capt. W. Peterson, S. 22° 10′, W. 74° 06′	30.03	762.7	66	18.9	.....	se.	3	.....	10	.....	.....	.....	.....	.....	.....	overcast	
S. S. Cipero, Capt. W. N. Lailey, N. 48° 40′, W. 10° 32′	29.91	759.7	54.2	12.3	97	ssw.	6	.....	10	.....	.....	.....	.....	3–5	sw; ssw.	drizzling	
S. City of Agra, Capt. Thos. Young, S. 11° 33′, W. 23° 53′	30.01	762.2	79.5	26.4	.....	e.	5	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	
Bk. Glaramara, Capt. R. Morton, N. 19° 53′, W. 39° 03′	30.18	766.6	78	25.6	46	e.	1	.....	2	.....	.....	.....	.....	.....	.....	blue sky	
Glencairn, Capt. R. S. Tannock, S. 40° 49′, E. 9° 00′	30.09	764.3	62	16.7	66	w.	4–5	.....	8	.....	.....	.....	.....	.....	.....	blue sky	
S. S. Gordon Castle, Capt. W. Waring, N. 37° 35′, W. 9° 28′	30.30	769.6	64.0	17.8	67	sse.	3–4	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	
Bg. Hermine, Capt. G. G. Jones, S. 29° 43′, W. 81° 56′	30.10	764.5	65.8	18.8	84	se.	5	.....	10	.....	.....	.....	.....	.....	.....	drizzling	
S. S. Humboldt, Capt. A. W. Jeffery, S. 25° 13, W. 42° 05′	29.98	761.5	76.2	24.6	76	sse.	5	.....	9	.....	.....	.....	.....	.....	.....	overcast	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 9° 30′, E. 89° 00′	29.70	754.4	80	26.7	91	sw.	8	.....	9	.....	.....	.....	.....	.....	.....	showery	
May Hulse, Capt. H. Youlden, S. 8° 02′, W. 33° 45′	29.98	761.5	83.2	28.4	87	e.	3	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	
Minho, Capt. J. Lawson, N. 15° 53′ W. 23° 29′	30.02	762.5	72.4	22.4	71	ne.	4	.....	5	.....	.....	.....	.....	.....	.....	misty	
Naiad, Capt. John Smith, S. 15° 31′, W. 24° 24′	30.07	763.8	78.2	25.7	82	ene.	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	
Pole Star, Capt. F. Norman, S. 43° 47′, W. 62° 21′	29.63	752.6	61.7	16.5	98	w.	3	.....	3	.....	.....	.....	.....	.....	.....	misty	
Queen of Cambria, Capt. M. Parry, S. 41° 09′, W. 3° 48′	30.07	763.8	58.5	14.7	90	nnw.	5	.....	10	.....	.....	.....	.....	.....	.....	foggy	
S. S. Strathleven, Capt. C. W. Pearson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
S. Superb, Capt. Berridge N. 7° 25′, W. 31° 12′	29.98	761.5	77.8	25.4	90	ne.	4	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham, Bristol, England†*	30.40	772.1	84	12.2	.....	e.	4	.....	7	.....	ese.	0	0	.....	.....	dull	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent, San Francisco*																	
S. S. Newbern, Capt. E. Y. Rogers, Mazatlan, Mexico.†	29.92	760.0	66	18.9	94	nne.	1	.....	10	.....	nnw.	light	light	.....	.....	rainy	
CROMWELL LINE. *Clark & Seaman, Agents, New York*																	
S. S. Hudson, Capt. H. R. Freeman, N. 24° 42′, W. 80° 47′†*	30.31	769.9	74	23.3	.....	ese.	5	.....	10	.....	.....	0	0	.....	se	cloudy	Crowell & Henry.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, N. 49° 57′, W. 13° 20′	29.90	759.4	50.0	10.0	.....	s.	6	.....	5	.....	s.	2 h'r	2 h'r	.....	.....	.....	
S. S. St. Laurent, Capt. A. Servan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kunhardt & Co., Agents, New York.*																	
S. S. Geilert, Capt. Kuhlewein, N. 48° 40′, W. 42° 01′*	29.60	751.8	38	3.3	80	sw.	6	.....	9	.....	sw.	6 h'r	h'y	h'vy	sw.	raining	P. Frochlich, 3d Off.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, N. 12° —′, W. 26° —′*†	30.16	766.1	78	25.6	.....	ne.	2	.....	1	.....	ne.	0	0	sm'h	wsw.	clear	J. Carroll.

MERCHANT-MARINE SERIES.

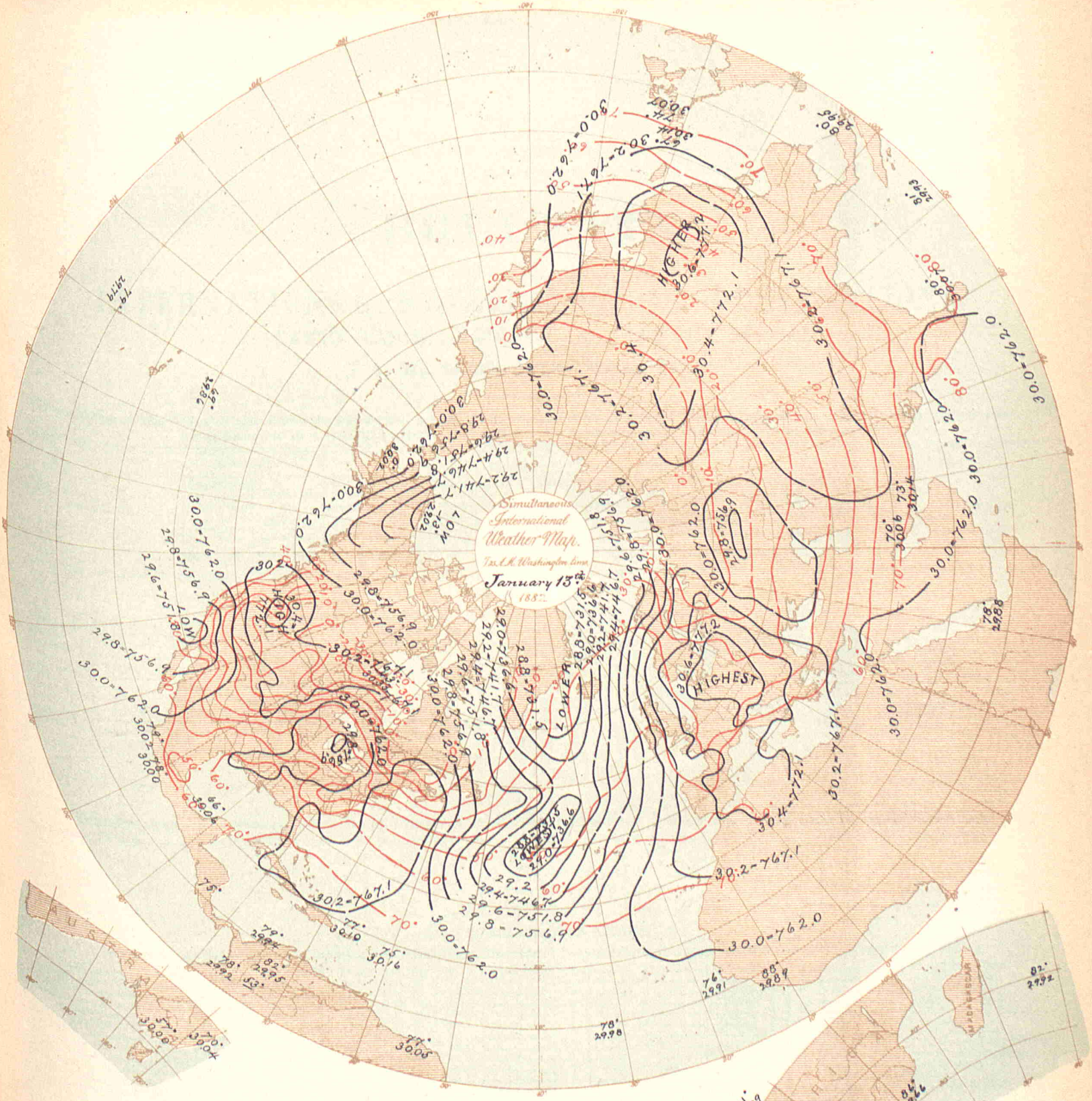
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
LEYLAND LINE.																	
Thayer & Lincoln, Agents, Boston.																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE.																	
F. W. J. Hurst, Manager, New York.																	
S. S. England, Capt. T. P. Hoeley N. 50° 23′, W. 21° 28′*	29.35	745.5				ssw.	5		2		ssw.	5 h'r	5h'r	high	s.	showery	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO.																	
Jas. E. Ward & Co., Agents, New York.																	
S. S. Niagara, Capt. J. B. Baker, Havana, Cuba, W. I*†	30.34	770.6	78	25.6		calm	0		0			0	0			clear	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. S. F. Phillips, Cienfuegos, Cuba†	30.22	767.6	74	23.3		ne.	1		2		ne.	1 h'r	light			clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sanson																	
S. S. Bothnia, Capt. W. McMickan																	E. Steinbridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Timmer-man																	
S. S. City of Washington, Capt. J. W. Rey-nolds	30.16	766.1	76	24.4		sse.	4							sm'h		hazy	
S. S. Maas, Capt. T. H. Bonjer																	
S. S. New York, Capt. R. B. Quick, N. 34° 15′, W. 76° 30′†*	30.27	768.8	66	18.9		sse.	6								e.	rainy	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. F. M. Chevalier																	
NORTH GERMAN LLOYD.																	
A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.																	
S. S. General Werder, Capt. H. Christoffers																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander																	G. H. Lose, 3d Off.
S. S. Leipzig, Capt. F. Pfeiffer																	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, N. 50° 35′, W. 23° 30′*	29.32	744.7	57.0	13.9		w.	6		7		wsw.			high	wsw.	raining	
S. S. Mosel, Capt. J. Hesse, N. 47° 20′, W. 34° 22′	28.84	732.5	42.1	5.6		nne.	9		10		nne.	6 h'r	6 h'r	cross r'gh	nne.	heavy rain	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger																	
S. S. Oder, Capt. Undeutsch																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	F. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO.																	
Leland Stanford, President, San Francisco.																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal†	29.85	758.2	40	4.4	90	nw.	5		0			0	0			clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 22° 22′, E. 113° 10′*†	30.47	773.9	62	16.7	66	ene.	4		3		ne.			mod.	e.	clear	
S. S. Oceanic, Capt. J. Metcalf, Yokohama, Japan*	30.18	766.6	40	7.8	85	calm	0		3					sm'h			
OCEAN S. S. CO.																	
George Young, Agent, New York.																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.90	759.4				ese.	3		10		se.					snowing	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, N. 41° 14′, W. 71° 05′	29.87	758.7	44	6.7	67	s.	3		8		ssw.	2 h'r	2 h'r	mod.	se.	light rain	H. K. Hallett.
OREGON IMPROVEMENT CO.																	
John L. Howard, Agent, San Francisco.																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.32	770.1	38	3.3	80	s.	1		3		s.					fair	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer, Seattle, Wash. Ter*	30.28	769.1	35	1.7	80	calm	0		7			0	0			hazy	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO.																	
R. Van Otterendorp, Agent, San Francisco.																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d Off.
S. S. Columbia, Capt. F. Bolles																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 43° 31′, W. 124° 38′†	30.33	770.4	42	5.6	58	ene.	3		0					light	w.	clear	G. Boese.
PACIFIC COAST S. S. CO.																	
Goodall, Perkins & Co., Agents, San Francisco.																	
S. S. Ancon, Capt. J. W. Ingalls, San Francisco, Cal†	29.77	756.1	41	5.0	42	ne.	4		0							clear	
S. S. G. W. Elder, Capt. H. G. Morse, San Francisco, Cal†	30.24	768.1	47	8.3		calm	0		2		w.					clear	
S. S. Idaho, Capt. E. Alexander, N. 44° 29′, W. 124° 46′†	30.24	768.1	40	4.4	83	ne.	4		0					h'vy	nw.	clear	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 32° 40′, W. 117° 11′†	29.39	746.5	38	3.3	46	ne.	8		10		ne.	24 h'r	24 h'r	r'gh	ne.	sleeting	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, N. 34° 20′, W. 119° 25′†	29.74	755.4	48	8.9	36	ene.	2		4			0	0	sm'h		fair	T. Wallace.
S. S. State of California, Capt. G. Debney, Portland, Oregon†	30.31	769.9	30	-1.1	78	calm	0		0			0	0			clear	
S. S. Victoria, Capt. H. M. Hayward, San Francisco, Cal†	29.90	759.5	40	4.4	63	nw.	5		0							clear	
PACIFIC MAIL S. S. CO.																	
Williams, Dimond & Co., Agents, San Fran-cisco, and H. J. Bulkley, Supt., New York.																	
S. S. Australia, Capt. ——, N. 60° 51′, W. 163° 35′	29.79	759.7	79	26.1	86	nne.	4		8		n.			long	ne.	rainy	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	30.04	703.0	70	21.1	79	calm.	0		0			0	0			clear	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 34° 21′, E. 118° 43′†	30.64	778.2	58	14.4	76	ne.	5		0			0	0	mod.	nw.	clear	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn																	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 29° 54′, W. 156° 55′	29.86	758.4	69	20.6	84	e.	9		8		s.	0	0	r'gh	sse.	cloudy	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, Panama, Panama†	29.87	758.7	70	24.4	100	nw.	1		3		n.	0	0	sm'h		clear	
S. S. Grenada, Capt. M. Connolly, Acapulco, Mexico†	29.92	760.0	75	23.9	72	calm	0		0			0	0			clear	
S. S. South Carolina, Capt. W. J. Russell, N. 19° 06′, W. 104° 10′*†	29.92	760.0	79	26.1	85	nw.	2		5		nw.	0	0	light	nw.	fair	
S. S. Zelandia, Capt. H. Webber, S. 34° 29′, E. 169° 02′	29.90	761.0	63	17.2	83	s.	3		0					mod.	s.	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co. *A. E. Outerbridge & Co., Agents, New York.* S. S. Muriel, Capt. Geo. S. Locke Martinique, W. I.						ene.	3		2			0	0	sm'h		fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.* S. S. Belgenland, Capt. J. Stokes																	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, Flushing, Netherlands*	30.50	774.7	43	6.1	75	ese.	2		10			0	0	sm'h		hazy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 47° 42′, W. 38° 50′*†	29.43	747.5	42	5.6	83	n.	8		10		n.	0	0	high	n.	cloudy	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 48° 37′, W. 31° 30′*	28.89	733.8	45	7.2		ese.	6		10			1 h'r	driz	long high	ese. nw.	overcast	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.* S. S. W. A. Scholten, Capt. G. J. Vis																	
THINGVALLA LINE. *Funch, Edye & Co., Agents, New York.* S. S. Thingvalla, Capt. G. J. H. Laub N. 60° 15′, W. 2° 39′†.	30.19	766.8	47.3	8.5		s.	4		6?		s.	0	0	h'vy	s.	clear?	J. T. Ulberling
WARREN LINE. *Warren & Co., Agents, Boston.* S. S. Iowa, Capt. S. Walters, N. 47° 17′, W. 30° 40′*†	29.00	736.6	45	7.2		ene.	6		10		ene.	4 h'r	rain hail	long cross	sw. n.	heavy rain	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent.* S. S. Adriatic, Capt. J. W. Jennings, N. 51° 05′, W. 22° 00′*†.	29.52	749.8	48	8.9		sw.	6		10		sw.	sh'rs	shr's	very h'vy	sw. to wnw.	showery	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 43° 37′, W. 56° 06′*†	29.80	756.9	27	—2.8		nw.	6		8		nw.	shr's	shr's	h'vy	nw.	snowing	W. Thomas.
S. S. Celtic, Capt. B. Gleadell New York, N. Y.*†	30.02	762.5	34	1.1	79	se.	2		10?		se.	0	0			clear.?	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. Liverpool, Eng.*†	30.42	772.7	47	8.3	92	s.	1		8		ssw	shr's	shr's			d. clouds	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE. *Sanderson & Sons, Agents, New York.* S. S. Romano, Capt. Joseph Mitchell, N. 39° 48′ W. 69° 30′*	30.38	771.6	40	4.4		ese.	2		8			6 h'r	6 h'r	sm'h		hazy	Shaw & Smith.
MISCELLANEOUS. Sch. Addie Fuller, Capt. J. Jorgensen, N. 25° 00′, W. 79° 00′†	30.42	772.7	71	21.7	90	ese.	2	0	0			0	0	sm'h		clear	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona,																	
Bk. Alpha, Capt. Ole Grönn, N. 40° 02′, E. 11° 40′*†	30.38	771.6	61	16.1		ene.	5		3		e.	0	0	sm'h	ne.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis																	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin S. 23° 39′, W. 40° 00′*†	29.70	754.4				s.								hv'y	se.	cloudy	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.12	765.0				se.	3				s.	3 h'r	3 h'r			cloudy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 9° 14′, W. 30° 32′†	30.00	762.0				ene.	3		2		ene.	0	0	mod.	ne.	fine	
S. Enoch Train, Capt. H. D. Chapman. N. 49° 20′, W. 9° 50′*	29.87	758.7				sse.	4		10		sw.	sh's	sh's	light	ssw.	rainy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 41° 14′, W. 40° 12′*	28.66	728.0				nw.	9–11		10		nw.	12 h'r	h'vy	very hv'y	var.	rainy	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C.†	30.22	767.6	43	6.1	75	calm	0		10							cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 42° 05′, W. 60° 47′†	29.86	758.4	72	22.2		sse.	5		0			0	0	sm'h		clear	G. D. Morrison.
Bk Freya, Capt. Blaouw, N. 52° 29′, W. 12° 57′			52	11.1		s.	8		10		ssw.	1 h'r	mist	high	ssw.	squally	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.06	738.1				sw.	5		10		sw.	17 h'r	17 h'r				
Bk. Geo. Booth, Capt. D. Williams																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 50° 15′, W. 1° 56′*	30.27	768.8	42.3	5.7	91	se.	4		10		se.	0	0	sm'h	se.	hazy	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 8° 30′, W. 33° 53′*	29.83	757.7				ese.	2		5		ese.			long	sse.	sprinkling	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 45′, W. 12° 47′*†	30.40	772.1				ssw.	3				s.	0	0	mod.	s.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.41	772.4	46	7.8	69	ne.	3		0							clear	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly N. 38° 30′, W. 49° 15′*†	29.10	739.1				sw.			2		sw.	¼ h'r	hail			squally	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 27° 40′, W. 30° 33′*	29.92	760.0	67.8	19.9	95	ssw.	6		5		wsw.			mod.	w.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.31	769.9	56	13.3	87	ene.	3		2		se.	0	0			fair	J. Green.
Bg. Wanburn, Capt. I. W. Covert, S. 18° 47′, W. 32° 46′*†	30.10	764.5				ne.	7		9		nne.			mod.	nne.		I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton															e.		N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 14, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.48	774.3	62.6	17.0	70	sw.			3		0			0	0	clear	Moiroud
Algiers			30.44	773.1	56.8	13.8	73	sw.			1		3			inap.	inap.	pretty fair	Nicolas.
La Galle			30.41	772.5	59.0	15.0	81	w.			3		4			0.020	0.5	cloudy	Fonfrède.
Tunis			30.42	772.7															Jacques.
Sfax																			Gau.
Saida			30.46	773.6	49.6	9.8	64	ne.			2		1			0	0	fair	Perès.
Tebessa			30.44	773.2	46.8	8.2	62	calm			0		6			0	0	cloudy	Derché.
Geriville					57.6	14.2	33	nw.			1		0			0	0	clear	Lonchamp
Laghouat			30.48	774.3	50.0	10.0	46	e.			1		0			0	0	clear	Herbin.
Biskra			30.44	773.2	59.4	15.2	51	nw.			1		4			0	0	cloudy	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.84	757.9	29.93	760.2	58.2	14.6	85	se.	6	2.7			0			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.24	768.0	30.83	783.0	34.9	1.6	64	e.			2		1			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	30.03	762.8	30.86	783.8	30.0	— 1.1	74	e.	0	0			0			0	0		Dr. Wierzbiski.
Eperies	29.85	758.2	30.80	782.2	31.6	— 0.2	51	calm			0		0			0	0		Julius Mikolik.
Gratz	29.46	748.3	30.81	782.5	32.4	0.2	60	s.			2		0			0	0		Andreas Rospini.
Hermannstadt	29.24	742.7	30.80	782.4	25.7	— 3.5	95	nnw.			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.32	744.6	30.78	781.7	25.7	— 3.5	98	ne.			2		10			0	0		The Staff.
Lemberg	29.74	755.5	30.82	782.7	25.9	— 3.4	72	e.			1		0			0	0		Dr. T. Stanecki.
Pola	30.58	776.6	30.69	779.6	44.4	6.9	44	ene.			1		1			0	0		I. R. Hydrographic Office
Szathmar	30.29	769.4	30.77	781.5	29.1	— 1.6	50	n.			1		0			0	0		Joseph Midlinszky, S. J.
Szegedin	30.50	774.7	30.80	782.4	32.4	0.2	94	ne.			2		0			0	0		Karl Stancel.
Trieste	30.63	777.9	30.73	780.5	42.4	5.8	36	ne.			3		2			0	0		Rieder.
Vienna	30.03	762.8	30.80	782.4	33.4	0.8	72	se.			1		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae
Maeseyck																			M. Pierrot.

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BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	30.22	767.6	30.32	770.1	44.7	7.1	89	sse.	21	9.4			7			0	0	squally	W. Boswell.
Armagh, Observatory	29.94	760.5	30.19	766.8	51.4	10.8	92	sse.	27	12.1			10					squally	S. Call.
Bidston, Liverpool Obs'y			30.41	772.4	44.8	7.1	92	se.	21	9.4			9					overcast	John Hartnup.
Bolton, Sharples	29.90	759.4	30.45	773.4	42.0	5.6	96	sse.	6	2.7			10					raining	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.02	762.5	30.41	772.4	45.1	7.3	86	sw.			1		10			0.05	1.3	overcast	J. McLandsborough, F.R.
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	78.0	25.6	77	ne.			3		6					gloomy	Pvt. J. Surgenor.
Cardington			30.53	775.4	42.6	5.9	87	s.			0.2		10					overcast	John McLaren.
Chatham, School M. E.	30.45	773.4	30.59	777.0	40.3	4.6	87	s.			1		10					gloomy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.24	768.1	30.47	773.9	51.1	10.6	94	s.					10					foggy	The Staff.
Fort Napier, Natal	27.48	698.0	29.69	754.1	74.2	23.4	59	ne.			1		2					blue sky	Pvt. E. K. Annis, A.H.C.
Free Town, Sierra Leone	29.60	751.8	29.84	757.9	89.0	31.7	66	w.			1		3					d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.01	762.2	49	9.4	93	s.			3		4			0	0	blue sky	J. O'Donnghue.
Gibraltar, Mediterranean	30.42	772.7	30.47	773.9	59.4	15.2	85	e.			6		8					overcast	Cpl. O. Baldwin.
Glasgow, Observatory	30.09	764.3	30.29	769.4	48.4	9.1	83	s.			4		10					misty	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.38	771.6	30.56	776.2	41.8	5.4	81	ssw.			1		10					overcast	The Staff.
Guernsey	30.24	768.1	30.55	776.0	43.0	6.1	94	s.			1		10					overcast	A. Collenette, F. M. S.
Kew, Observatory	30.53	775.4	30.57	776.5	42.9	6.1	81	ssw.	11	4.9			10					misty	The Staff.
Leicester, Museum	30.25	768.3	30.51	774.9	43.0	6.1	98	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.40	772.1	30.48	774.2	56.8	13.8	63	ne.			3		6					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.18	766.6	30.23	767.8	68.0	20.0	100	s.			1		2					blue sky	C. S. Duncombe.
Oscott, St. Mary's College	29.97	761.2	30.51	774.9	41.7	5.4	96	s.			2		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.30	769.6	30.53	775.4	41.9	5.5	88	sse.			3		10					overcast	The Staff.
Plymouth	30.42	772.7	30.49	774.4	49.2	9.6	92	se.			2		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.16	766.1	44	6.7	96	se.	30	13.4			1					blue sky	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.35	770.9	30.42	772.7	34.4	1.3	74	n.			4		6			blank	blank	d. clouds	W. H. Lyne.
Sheffield	30.23	767.8	30.52	775.2	45.0	7.2	100	ssw.			1		10			0.02	0.5	drizzling	W. F. Cooper.
Silloth Rectory	30.33	770.4	30.36	771.1	47.8	8.8	87	calm			0		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.44	773.2	43.5	6.4	89	s.	8	3.6			10					drizzling	Rev. S. J. Perry.
Stratfield Turgiss	30.34	770.6	30.56	776.2	41.5	5.3	85	sw.			2		10					overcast	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.39	771.9	30.44	773.2	54	12.2	86	se.			4		8					gloomy	W. Newcombe.
Valencia, Observatory	30.04	763.0	30.07	763.8	53.8	12.1	88	s.	45	20.1			10			blank	blank	misty	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	28.93	734.8	28.97	735.8	26	— 3.3	92	nw.	4	1.8			10 n			0.800	20.3	light snow	H. J. Cundall, C. E.
Chatham, N. B.*	29.14	740.1	29.20	741.7	14	—10.0	100	nw	10	4.5			10 n		nw.	0.36	9.1	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.45	748.0	29.47	748.5	5	—15.0	83	n.	25	11.2			10 n		calm	0.15	3.8	clearing	J. McWilliams.
Fort Garry, Manitoba*	28.46	722.9	29.37	746.0	1	—17.2	95	sw.	20	8.9		2 k	2 ks	w.	w.	0	0	fair	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	28.89	733.8	29.02	737.1	32	0.0	96	w.	9	4.0			10 n		nw.	0.550	14.0	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.28	743.7	29.64	752.8	21	— 6.1	80	n.	9	4.0			10 ks		w.	0.58	14.7	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.34	745.2	29.56	750.8	16	— 8.9	83	n.	9	4.0		10 cs	0			0.44	11.2	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.00	736.6	29.76	755.9	9	—12.8	76	n.	7	3.1			10 n			0.28	7.1	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.04	737.6	29.76	755.9	27	— 2.8	76	w.	19	8.5		2 k	0	w.		0.29	7.4	fair	H. Morgan.
Port Stanley, Ontario	29.14	740.1	29.82	757.4	26	— 3.3	92	w.	28	12.5		0	5 k		w.	0.11	2.8	cloudy	M. Payne.
Quebec, Quebec*	29.11	739.4	29.45	748.0	13	—10.6	100	calm			0		10 n			0.55	14.0	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.22	742.2	29.72	754.9	3	—16.1	?	nw.	5	2.2			10 s		nw.	0.56	14.2	cloudy	W. H. McIntyre.
Sangeen, Ontario*	29.01	736.8	29.76	755.9	24	— 4.4	84	nw.	21	9.4			10 s			0.35	8.9	cloudy	K. Stewart.
St. Andrews, N. B.	29.12	739.6	29.17	740.9	21	— 6.1	87	nnw.	6	2.7			10 n			0.45	11.4	cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	28.79	731.3	28.86	733.0	29	— 1.7	96	ne.	2	0.9			10 n			0.51	13.0	light snow	T. C. Hill, C. E.
Toronto, Ontario*	29.30	744.2	29.71	754.6	27	— 2.8	84	nw.	7	3.1			10 ks		nw.	0.15	3.8	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	28.97	735.8	29.04	737.6	36	2.2	92	w.	17	7.6		5 k	0	w.		0.52	13.2	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.41	747.0	29.67	753.6	25	— 3.9	100	se.	4	1.8			10			0.10	2.5	threatening	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	29.88	758.9	29.91	759.7	72.0	22.2	82	w.	21.6	9.7		0	4 n			0.040	1.0	stormy	John Duthie.
Cape Town, C. G. H. Obs'y	30.01	762.2	30.05	763.3	89.0	31.7	61	sse.	22	9.8		0	1			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Hankow	30.40	772.1	30.69	779.6	48.4	9.1	49	ne.			1		10			0	0	covered	N. Titoushkin.
Zi-Ka-Wei, near Shanghai.	30.59	776.9	30.61	777.5	34.9	1.6	84	ene.	2.0	0.9			0			0	0	clear	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours		Weather.	Observers
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From	Inch.	Mill.		
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.74	780.7	30.78	781.9	33.3	0.7	80	sse.	16	7			8						Oversergent Fischer.
Fanöe	30.66	778.8	30.68	779.3	28.9	— 1.7	98	sse.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	28.99	736.4	29.04	737.5	4.1	—15.5	100	wnw.			3		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	28.70	728.9	28.71	730.0	32.7	0.4		se.			4		10					snowing	A. O. Thorlacius.
Thorshavn	29.76	755.8	29.79	756.7	47.8	8.8	83	s.	22	10			10						Overloerer Bergh.
Vestervig	30.58	776.6	30.67	778.9	31.1	— 0.5	92	se.			2		10						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.90	759.4	30.57	776.4	49.6	9.8	89	sse.			1	0	kn			0	0		M. Labroue, Director.
Alençon, Normal School	30.07	763.7	30.62	777.7	39.2	4	97	sw.			2		fg			0	0	foggy	M. Nicot, Director.
Arras, Engineer School	30.34	770.5	30.61	777.6	34.7	1.5	100	se.			1		10			0	0	misty	M. Klein, Commandant.
Avignon, Normal School	30.55	776.0	30.63	778.0	46.4	8	72	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.05	763.2	30.63	778.1	39.6	4.2	95	sw.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.36	771.1	30.64	778.3	36.7	2.6	93	sse.			1		10			0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.72	780.4	37.8	3.2	83	ne.			1		fg			0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.28	769.2	30.56	776.1	42.8	6.0	94	ese.			1		10			0.008	0.2	covered	M. Rayet, Director.
Bourges, Normal School	30.04	763.1	30.62	777.7	45.5	7.5	85	n.			1		1		n.	0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.26	768.7	30.51	774.9	46.4	8.0	97	sse.			1		10		sse.	0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.49	774.4	30.58	776.6	37.8	3.2	86	s.			1		8		sse.	0	0	very cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.22	767.5	30.56	776.1	36.3	2.4	79	s.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.12	765.0	30.67	778.9	32.4	0.2		se.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.19	741.3	30.58	776.8	48.7	9.3	54	w.			1		0			0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.71	754.6	30.58	776.8	26.6	—3	100	n.			4		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.76	756.0	30.68	779.2	33.3	0.7	96	se.			1		10	se.	se.	0	0	covered	Dr. Coulet, Director.
Gap, Normal School	28.04	712.3	30.69	779.5	41.7	5.4	78	se.			1					0	0		M. Jeanjirard, Director.
Gréasque, du. Rhone	29.46	748.2	30.62	777.7	49.5	9.7	66	ne.			1		5		s.	0	0	¼ covered	M. Kiun, Director.
Grenoble, Normal School	29.87	758.6	30.70	779.7	28.8	—1.8	100	ese.			1		fg			0	0	foggy	M. Ablard, Director.
Guéret, Normal School	28.95	735.3	30.57	776.5	49.1	9.5	74	sw.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.27	768.8	30.55	776.0	41.9	5.5	93	se.			1		10		se.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	29.96	760.9	30.53	775.5	53.6	12	54	s.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.47	773.8	30.57	776.4	40.4	8.0	86	se.			1		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.54	750.2	30.65	778.6	37.0	2.8	93	ese.			1		0			0	0	clear	M. André, Director.
Mans, Normal School	30.30	769.5	30.62	777.8	38.3	3.5	95	se.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.29	769.4	30.57	776.4	57.4	14.1	52	ese.			0.1		5		ssw.	0	0		M. Stephan, Director.
Montlouis Pinstituteur	25.20	640.0	30.04	763.0	39.2	4.0	57	sw.	9.4	4.2			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.48	774.3	30.60	777.2	51.8	11	77	nw.			3		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.85	758.1	30.70	779.7	32.7	0.4	93	nne.			1		fg			0	0	dense fog	M. Hasse, Director
Nantes, Observatory	30.44	773.1	30.60	777.2	44.4	6.9	85	ne.			0—1		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.48	774.3	30.60	777.2	54.7	12.6	73	se.	3.8	1.7			5		se.	0	0	½ covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.53	546.8			37.0	2.8		wsw.			1		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.43	747.4	30.54	775.7	41.9	5.5	49	s.			1		fg	s.	s.	0	0	light fog	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.55	649.0			38.5	3.6	49	se.			4		c			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.50	776.3	30.60	777.1	39.0	3.9	97	se.			1		fg			0	0	foggy	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.33	770.4	30.56	776.1	42.4	5.8	100	se.			1		10			0	0	covered	M. Monillot, Director.
Rodez, Normal School	28.37	720.5	30.60	777.2	43.2	6.2	77	se.			1		1		e.	0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.54	775.6	30.58	776.8	36.7	2.6	93	se.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.44	773.2	30.60	777.2	36.9	2.7	86	s.			1		10		se.	0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.47	773.9	30.63	778.1	33.1	0.6	98	se.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.84	757.8	30.57	776.5	53.2	11.8	71	sse.			4		1	w.		0	0	clear	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.11	764.9	30.57	776.4	32.7	0.4	100	se.			1					0.004	0.1		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.82	757.5	30.70	779.7	31.3	—0.4	66	calm			0	0	2 8			0	0	foggy	Prof. Dr. Hoh.
Berlin	30.55	776.0	30.74	780.8	33.6	0.9	85	e.			1		0			0	0		Prof. Dr. Arndt.
Breslau	30.25	768.4	30.80	782.3	31.1	—0.5	79	se.			2		0			0	0		Royal University Obs'y.
Carlsruhe	30.24	768.1	30.72	780.2	30.6	—0.8	93	e.			1		10			0	0	foggy	Albert Senz.
Cassel	29.91	759.8	30.63	778.0	34.5	1.4	72	s.			1		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.31	769.8	30.70	779.8	32.5	0.3	81	se.			1		10			0	0		Physical Society.
Friedrichshafen	29.18	741.2	30.72	780.2	31.1	—0.5	90	ne.			1		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.62	777.7	30.71	780.1	30.2	—1.0	92	ese.			1		1			0	0		E. Preller.
Kiel	30.68	779.3	30.70	779.7	32.4	0.2	82	calm			0		0			0.004	0.1		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.28	769.1	30.73	780.5	33.1	0.6	72	sse.			1		1			0	0		H. Leppig, Asst.
Magdeburg	30.51	774.9	30.72	780.2	28.8	—1.8	94	se.			1		0			0	0		Dr. Assmann.
Memel	30.78	781.9	30.83	783.1	37.2	2.9	80	w.			4		10 8						Issermann.
Munich	28.77	730.8	30.68	779.2	29.3	—1.5	84	calm			0		5	ne.		0	0		Central Station.
Neufahrwasser	30.88	784.3	30.89	784.7	33.3	0.7	75	calm			0		1			0	0		A. Lothes.
Neustadt, Palatinate	30.13	765.2	30.67	778.9	31.8	—0.1	90	ne.			2		10			0	0		Dicknether.
Stuttgart	29.67	753.5	30.61	777.6	34.7	1.5	87	n.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.75	781.1	30.78	781.7	30.2	—1.0	96	se.			2	0	4 8			0	0		Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.13	765.4	30.54	775.7	40.5	4.7		n.			2.0		8			0.083	2.1	snowing	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.07	763.7	30.12	765.1	71.6	22.0	42	sw.					3			0	0	d. clouds	
Deesa	29.59	751.6	30.08	763.9	76.2	24.6	33	nne.	8.2	3.7			3	nnw.		0	0	d. clouds	
Bombay	29.97	761.2	30.01	762.2	79.6	26.4	69	nw.	14	6.3			0			0	0	blue sky	
Poona, Yarrowda	28.15	714.9	30.00	761.9	83.0	28.3	27	n.	5	2.2			1	wsw.		0	0	d. clouds	
Belgaum	27.43	696.8	29.96	761.0	80.0	26.7	27	ne.	5	2.2			0			0	0	blue sky	
Lahore	29.35	745.5	30.13	765.3	60.4	15.8	79	calm	1.7	0.8			5			0	0	d. clouds	
Roorkee	29.17	740.9	30.12	765.0	56.8	13.8	87	nw.	3.6	1.6			3			0	0		
Agra	29.54	750.4	30.13	765.4	64.3	17.9	53	nw.	3.6	1.6						0	0		
Nagpur	29.00	736.6	29.96	760.9	77.2	25.1	37	calm	2.3	1.0			0			0	0	blue sky	
Jubbulpore	28.72	729.5	30.13	765.3	64.5	18.1	40	n.	1.0	0.4			0			0	0	blue sky	
Lucknow	29.73	755.1	30.13	765.2	63.3	17.4	53	wsw.	5.4	2.4			0			0	0	blue sky	
Allahabad	29.80	756.8	30.12	765.1	61.2	16.2	69	calm	1.5	0.7			1			0	0	blue sky	
Patna	29.92	760.0	30.12	765.0	64.6	18.1	73	w.	3.9	1.7			4	w.	w.	0	0	d. clouds	
Hazaribagh	28.02	711.8	30.11	764.7	63.8	17.7	40	nnw.	6.8	3.0			0			0	0	blue sky	
Cuttack	30.01	762.3	30.10	764.4	74.5	23.6	58	calm	1.3	0.6			3			0	0	d. clouds	
Calcutta, Alipore	30.07	763.7	30.09	764.3	69.8	21.0	61	nne.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.97	761.3	30.10	764.4	65.9	18.8	66	calm	1.1	0.5			0			0	0	blue sky	
Chittagong	29.98	761.4	30.07	763.8	72.2	22.3	60	nnw.	2.0	0.9			1			0	0	blue sky	
Sibsagar	29.77	756.0	30.12	765.0	63.3	17.4	89	nw.	3.1	1.4			0			0.40	10.2	blue sky	
Jeypore	28.65	727.6	30.15	765.8	63.7	17.6	49	n.	3.2	1.4			2	n.		0	0	d. clouds	
Zanzibar, Africa	29.85	758.2			87.5	30.8	54	nne.	9.2	4.1			1			0	0	blue sky	
Trichinopoly	29.75	755.6			80.6	27.0	60	e.	2	0.9			5			0	0	d. clouds	
Bellary	28.51	724.1			81.5	27.5	29	se.	3.4	1.5			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.28	769.2	30.71	780.0	41.5	5.3	42	e.	4.9	2.2			0			0	0		Prof. Giovanni Clodig.
Milan	30.19	766.9	30.74	780.9	37.0	2.8	86	e.	3.8	1.7			9	e.		0	0		Prof. Schiaparelli.
Padua	30.61	777.5	30.73	780.5	39.0	4.0	52	nne.	1.3	0.6			0			0.012	0.3		Prof. Dott. Lorenzoni.
Moncalieri	29.75	755.7	30.71	780.1	34.5	1.4	81	ene.	3.8	1.7			3	w.		0	0		Prof. P. F. Denza.
Genoa	30.45	773.3	30.65	778.4	46.0	7.8	55	n.	4.5	1.1			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.70	728.9	30.71	779.9	35.6	2.0	63	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.63	778.0	30.69	779.4	40.8	4.9	86	n.	7.4	3.3			4	e.		0	0		Prof. Luigi Guidi.
Florence	30.36	771.2	30.63	778.0	46.4	8.0	50	se.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.54	775.6	30.63	777.9	47.5	8.6	45	ene.	8.0	3.6			0			0	0		Prof. P. Monte.
Rome	30.40	772.2	30.58	776.8	48.7	9.3	56	n.	2.5	1.1			0			0	0		Prof. P. S. Ferrari.
Lecce	30.30	769.7	30.57	776.4	40.3	9.6	33	n.	18.6	8.3			0			0	0		Prof. O. de Giorgi.
Cosenza	29.65	753.2	30.58	776.8	45.0	7.2	71	ene.	8.0	3.6			0			0	0		Prof. D. Conti.
Cagliari	30.31	769.8	30.51	774.9	57.7	14.3	56	sw.			4		3	ne.		0.008	0.2		Prof. A. Pacinotti.
Palermo	30.27	768.9	30.53	775.5	54.9	12.7	63	ne.	5.0	2.2			9			0	0		Prof. G. Cincciatore.
Syracuse	30.43	772.9	30.48	774.1	53.2	11.8	58	ene.	18.6	8.3			6	ene.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	30.02	762.5	30.56	776.3	50.9	10.5	48	nne.	1.3	0.6			1	n.		0	0		Prof. T. Brioschi.
Stelvio	22.43	569.7			26.8	— 2.9	34	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.57	573.2			30.6	— 0.8	37	e.			1		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of J. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.60	751.8	29.63	752.6	31.0	— 0.6	84	w.	11.3	5.0		0	7 ks;n		w.	0.308	7.8	overcast	
Hakodate	29.57	751.1	29.59	751.6	30.0	— 1.1	69	ne.	6.0	2.7			4		nw.	0	0		
Hiroshima, I. M. Obs'y	30.32	770.1	30.33	770.4	34.1	1.2	73	n.	2.4	1.1		ck	1 ks			0	0	clear	K. Susaki.
Kanazawa	30.16	766.0	30.27	768.8	32.8	0.4	100					ck	7 n					light snow	S. Endo.
Kioto	30.05	763.3	30.24	768.1	31.2	— 0.4	88	wsw.	5.3	2.4		0	5 n			0.028	0.7	light snow	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.22	767.6	30.44	773.2	32.3	0.2	68	n.	0.5	0.2		0	0			0	0	clear	S. Takehayashi.
Niigata	29.95	760.7	29.99	761.7	34.3	1.3	91	wnw.	29.3	13.1		ck	9 n		wnw.	0.020	0.5	snowing	
Nobiru	29.82	757.4	29.83	757.7	29.6	— 1.3	98	w.	11.9	5.3			10 n			0.070	1.8	snowy	H. Midzushina.
Supporo					29.0	— 1.7	96	nw.	6.0	2.7			10			0.192	4.9	covered	
Tokei Obs'y, Yeddo	29.93	760.3	30.00	762.0	33.2	0.7	59	nw.	4.4	2.0		0	0			0	0	clear	The Staff.
Wakayama	30.20	767.1	30.26	768.6	37.1	2.8	64	wnw.	10.7	4.8		ck	7 ks		nw.	inap.	inap.	fair	Y. Kuwamusa.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.75	755.6	29.94	760.5	78.0	25.6	85	sw.	8.0	3.6			10 ks;n			0	0	cloudy	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.64	600.5	29.86	758.5	50.9	10.5	89	calm	0	0		2 cs	0	s.		0	0	fine	Vicente Fernandez.
Leon	24.41	620.0	30.16	766.3	53.1	11.7	80	n.			1	2 c	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.64	753.0	29.91	759.7	66.5	19.1	86	nne.			4		10 n		sw.	1.339	34.0	raining	F. Quijano, C. E.
Mexico, Central Obs'y	23.08	586.2	30.23	767.9	47.3	8.5	74	calm	0	0		1 c	0	w.		0	0	fine	The Staff.
Morelia	24.31	617.5	30.57	776.5	47.3	8.5	68	ne.			2	0	0			0	0	blue sky	M. Tena, M. D.
Pabellon, Aguascalientes	23.91	607.2	30.00	761.9	47.8	8.8	79	calm			0	0	1 s		sw.	0	0	clear	M. V de Leon, M. E.
Puebla, Catholic Institute	23.39	594.0	30.25	768.3	44.6	7.0	46	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.19	614.5	30.19	766.7	50.7	10.4	64	ne.			1		10		s.	0	0	covered	G. Barrosta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.65	778.5	30.65	778.5	36.7	2.6		sse.			2					0	0		
Groningen	30.61	777.6	30.67	779.0	34.5	1.4		se.			1					0	0		
Helder	30.63	778.1	30.63	778.1	37.8	3.2		sse.			1					0	0		
Hellevoetsluis	30.63	778.1	30.63	778.1	37.0	2.8	91	se.			1					0	0		
Utrecht	30.61	777.4	30.65	778.6	36.5	2.5	79	se.			1		10			0	0	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.50	774.7	30.56	776.3	39.6	4.2	77	s.	16	7			7			0	0		
Brono	30.27	768.9	30.31	769.9	41.4	5.2	94	sw	27	12			10			0.039	1.0	raining	
Christiania	30.52	775.3	30.68	779.3	33.8	1.0	75	ssw.	9	4			10			0	0		
Gjæsvær	29.68	753.8	29.70	754.4	42.8	6.0		sw.			7		10						
Lodingen	29.92	760.0	29.97	761.2	41.9	5.5	91	sw.			8		10			0.146	3.7	raining	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					57.2	14.0	84	n.	3.1	1.4			6			0.512	13.0		Dr. J. A. Sampaio.
Campo Major	29.40	748.2	30.49	774.4	52.0	11.1	61	ene.	11.2	5.0			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.15	765.9	30.24	768.1	65.3	18.5	67	calm	0	0			2			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.10	764.6	30.48	774.1	48.9	9.4	80	ne.	9.4	4.2			1			0	0		The Staff.
Ponta Delgada, Azores	29.49	749.1	29.56	750.9	59.0	15.0	89	ssw.	21.0	9.4			10			1.654	42.0		
Saint Paul de Loando	29.75	755.6	29.95	760.7	79.5	26.4	93	wsw.	2.5	1.1			8			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.20	741.7	30.37	771.5	14.9	— 9.5		sw.	13	6			10 n			0	0		Major K. Lasarew.
Archangel	30.00	761.9	30.02	762.4	24.4	— 4.2	95	wsw.	18	8			10			0.138	3.5		Capt. Sseliwerstow.
Astrakhan	30.36	771.2	30.28	769.1	34.9	1.6	75	nne.	2	1		0	7 s			0	0	light clouds	Capt. Wisganow.
Barnaul	29.87	758.6	30.41	772.3	20.3	— 6.5	90	sw.	9	4			10			0.016	0.4		Meteorological Obs'y.
Dorpat	30.43	773.0	30.69	779.6	32.7	0.4	100	w.	7	3			10 n			0	0	light fog	Observatory.
Ekaterinburg	29.17	741.0	30.21	767.4	8.8	—12.9	92	calm	0	0			10			0.035	0.9	snowing	Meteorological Obs'y.
Kasan	30.14	765.6	30.44	773.2	9.9	—12.3	85	nnw.	2	1			10			0.004	0.1	snowing	Observatory.
Kertch	30.28	769.0	30.30	769.5	26.1	— 3.3	89	n.	11	5			10 n			0	0		Lagorio & Sastyres.
Kieff	30.02	762.4	30.72	780.2	16.5	— 8.6	67	n.	13	6		1 cᵢcs	0			0.004	0.1		Observatory.
Lugan	30.13	765.4	30.35	770.9	26.4	— 3.1	80	nne.	22	10			10			0.016	0.4		Meteorological Obs'y.
Moscow	30.05	763.3	30.60	777.2	4.3	—15.4	67	nnw.	4	2		0	0			0	0		Meteorological Obs'y
Nikolaiev	30.52	775.2	30.59	777.0	22.3	— 5.4	76	n.	45	20		0	2 kn			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.15	765.7	30.23	767.9	—13.4	—25.2	84	calm	0	0		0	0			0	0		Lieut. Iwanow.
Pekin, China	30.42	772.6	30.56	776.2	23.2	— 4.9	62	calm	0	0			0			0	0		Physical Observatory.
St. Petersburg	30.51	774.9	30.52	775.3	32.2	0.1	100	wnw.	16	7			10 n			0	0	light fog	Central Physical Obs'y.
Tashkend, Laboratory	28.57	725.7	30.21	767.3	37.8	3.2	80	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.61	726.6	30.07	763.8	39.9	4.4	52	calm	0	0			10			0.224	5.7		Physical Observatory.
Warsaw	30.43	772.9	30.89	784.5	27.7	— 2.4	77	ese.	2	1		1 c	0					light clouds	Astronomical Obs'y.
Wilna	30.39	771.9	30.84	783.3	32.0	0.0	78	sw.	2	1			10			0	0	heavy cl'ds.	Berg, Assistant
Yeniseisk	29.78	756.4	30.09	764.3	10.9	—11.7	86	w.	2	1			10			0.043	1.1		M. O. Marks
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.95	760.7	50	10.0	93	s.			6		10			0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.47	773.9	30.57	776.4	53.6	12.0	80	ne.	0.9	0.4			1			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.46	773.7	30.52	775.2	55.2	12.9	45	se.	4.0	1.8		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.51	698.7	30.69	779.4	33.8	1.0	85	ne.	2.0	0.9		0	2			0	0	light clouds	Domingo Martin.
Madrid, Royal Obs'y	28.28	718.4	30.62	777.7	45.1	7.3	67	ne.	2.9	1.3		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.42	772.7	30.58	776.7	56.1	13.4	66	sw.	1.6	0.7		3	3	ne.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.48	748.7	30.39	771.8	56.7	13.7	54	se.	5.6	2.5		0	7			0	0	cloudy	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.06	763.6	30.13	765.3	68.2	20.1	92	e.	2.2	1.0		0	0			0	0	clear	Benito Vines, S. J.
Manila, Philippine Islands	30.03	762.7	30.09	764.2	73.2	22.9	71	ne.	2.2	1.0		1 c	1 s			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.32	770.2	30.42	772.7	59.7	15.4	71	e.	22.0	9.8		0	3		se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I.	30.05	763.2	30.14	765.5	75.2	24.0	72	calm	0	0		4 cs	5 k	e.	e.	0	0		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.06	763.5	30.19	766.8	69.4	20.8	75	nnw.	7.2	3.2			8 ks		nne.	inap.	inap.	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.19	756.7	30.22	767.7	34.2	1.2	85	sw.			4		0			0	0		
Umeå	30.37	771.3	30.42	772.6	27.7	— 2.4	100	sw.			2		0			0	0		
Hernosand	30.42	772.6	30.47	773.9	32.2	0.1	89	calm			0		0			0.051	1.3		
Stockholm	30.53	775.4	30.71	779.9	31.6	— 0.2	89	w.			2		7			0.091	2.3		
Wisby	30.71	780.1	30.77	781.6	34.9	1.6	85	w.			2		7			0	0		
SUB SERIES.																			
Upsala	30.58	776.6	30.66	778.8	32.7	0.4	90	wsw.	8.3	3.7			10		wsw.	0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.19	740.4	30.67	779.0	31.8	— 0.1	97	ene.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.48	774.1	33.3	0.7	82	n.	28	12.5			10		n.			snowing	The Observatory.
Valona			30.49	774.4	49.6	9.8		nw.			1		0			0	0	clear	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.92	759.9	50.9	10.5	85	wsw.			3		10 n		wsw.	1.83	46.5		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	29.46	748.3	29.55	750.6	39	3.9	54	w.	8	3.6		0	0			0.25	6.3	clear	
Alpena, Michigan	29.15	740.4	29.86	758.4	17.5	— 8.1	83	w.	12	5.4			10 s			0.40	10.2	cloudy	
Atlanta, Georgia	28.90	734.0	30.13	765.3	48.5	9.2	88	nw.	10	4.5			10 s		nw.	0.22	5.6	cloudy	
Atlantic City, New Jersey	29.72	754.9	29.72	755.1	41.8	5.4	89	w.	7	3.1		7 cs	0			0.32	8.1	fair	
Augusta, Georgia	29.87	758.7	30.07	763.8	59.8	15.4	81	w.	4	1.8			10 s			0.13	3.3	cloudy	
Baltimore, Maryland	29.74	755.4	29.79	756.7	44	6.7	51	nw.	10	4.5		7 cs	hz.	nw.		0.33	8.4	fair	
Barnegat, New Jersey	29.68	753.9	29.70	754.4	38.8	3.8	86	w.	11	4.9		0	4 k		w.	0.74	18.8	fair	
Bismarck, Dakota	27.65	702.3	29.65	753.1	13	—10.6	83	calm	0	0		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.43	696.7	30.36	771.1	10	—12.2	91	nw.	2	0.9			10 s		calm	0	0	cloudy	
Boston, Massachusetts	29.27	743.4	29.44	747.8	39.0	3.9	59	w.	18	8.0		0	3 k		w.	0.26	6.6	clear	
Brownsville, Texas	30.03	762.7	30.08	764.0	57	13.9	100	ne.	8	3.6			10 s			0.10	2.5	cloudy	
Buffalo, New York	28.96	735.6	29.76	755.9	31	— 0.6	88	sw.	32	14.3			10 s		sw.	0.12	3.0	cloudy	
Burlington, Vermont	29.25	742.9	29.56	750.8	19.0	— 7.2	87	n.	9	4.0			10 n		n.	0.03	0.8	light snow	
Cairo, Illinois	29.84	757.9	30.26	768.6	33.8	1.0	83	nw.	7	3.1			10 s		nw.	0	0	cloudy	
Campo, California	27.24	691.9	29.86	758.4	31.5	— 0.3	88	e.	16	7.2			10 n		e.	0.29	7.4	light snow	
Camp Thomas, Arizona	27.20	690.9	30.03	762.7	37	2.8	96	calm			0	5 cs	2 ks			0	0	fair	
Cape Henry, Virginia	29.79	756.7	29.81	757.2	51	10.6	80	w.	11	4.9		1 c	1 s			0	0	clear	
Cape May, New Jersey	29.73	755.1	29.76	755.9	43	6.1	74	w.	13	5.8			10 ks		w.	0.34	8.6	cloudy	
Castroville, Texas	29.23	742.4	30.08	764.0	54	12.2	93	se.	7	3.1			10 n			0.05	1.3	light rain	
Cedar Keys Florida	30.10	764.5	30.12	765.0	65	18.3	93	s.	10	4.5			fg.		s.	0	0	dense fog	
Champaign, Illinois	29.30	744.2	30.17	766.3	19.4	— 7.0	70	nw.	10	4.5		0	0			0	0	clear	
Charleston, S. Carolina	29.98	761.5	30.04	763.0	62	16.7	93	w.	9	4.0		0	9 s		w.	0	0	cloudy	
Charlotte, N. Carolina	29.08	738.6	29.98	761.5	46.0	7.8	100	sw.	3	1.3			fg.			0.11	2.8	dense fog	
Chattanooga, Tennessee	29.29	744.0	30.15	765.8	44.5	6.9	78	nw.	6	2.7		8 ck	0	w.		0.52	13.2	cloudy	
Cheyenne, Wyoming	23.75	603.2	30.00	762.0	32.3	0.2	32	nw.	36	16.1		0	0			0	0	clear	
Chicago, Illinois	29.34	745.2	30.08	764.0	10.2	—12.1	79	w.	13	5.8		0	0			inap.	inap.	clear	
Chincoteague, Virginia	29.76	755.9	29.78	750.4	45	7.2	100	w.	4	1.8		0	8 s		w.	0.17	4.3	cloudy	
Cincinnati, Ohio	29.41	747.0	30.10	764.5	38	3.3	53	w.	9	4.0		0	5 s		w.	0.10	2.5	fair	
Cleveland, Ohio	29.16	740.7	29.94	760.5	26.2	— 3.2	86	w.	22	9.8		0	5 k		w.	0.03	0.8	fair	
Coleman City, Texas	28.31	719.1			41	5.0	82	n.	6	2.7			10 s			0	0	cloudy	
Columbus, Ohio	29.13	739.9	30.03	762.7	31	— 0.6	57	w.	14	6.3			10 ks		w.	0.18	4.6	cloudy	
Concho, Texas	28.16	715.3	30.18	766.6	43	6.1	93	ne.	4	1.8			10 s		e.	0	0	cloudy	
Davenport, Iowa	29.46	748.3	30.18	766.6	12	—11.1	61	w.	3	1.3		0	0			0.04	1.0	clear	
Dayton, Washington T'y	28.34	719.8	30.14	765.5	28.8	— 1.8	85	ne.	2	0.9			10 s			0	0	cloudy	
Deadwood, Dakota	24.93	633.2	29.88	758.9	30.5	— 0.8	70	sw.	8	3.6		0	0			inap.	inap.	clear	
Decatur, Texas					39	3.9	89	n.	10	4.5			10 s			0	0	cloudy	
Delaware Breakwater, Del.	29.73	755.1	29.75	755.6	44	6.7	83	w.	18	8.0		8c;ck;cs	3 s	w.	w.	0.22	5.6	cloudy	
Denison, Texas	29.36	745.7	30.20	767.1	39.2	4.0	89	n.	2	0.9			10 s			inap.	inap.	cloudy	
Denver, Colorado	24.55	623.6	30.07	763.8	35.2	1.8	37	sw.	5	2.2		0	0			0	0	clear	
Des Moines, Iowa	29.13	739.9	30.10	764.5	11	—11.7	80	sw.	4	1.8		0	0			inap.	inap.	clear	
Detroit, Michigan	29.18	741.2	29.94	760.5	23.2	— 4.9	88	w.	26	11.6			10 s		nw.	0.04	1.5	cloudy	
Dodge City, Kansas	27.35	694.7	30.10	764.5	22.2	— 5.4	83	sw.	3	1.3		0	0			0	0	clear	
Dubuque, Iowa	29.38	746.2	30.15	765.8	0.0	—17.8	39	nw.	2	0.9		0	0			0	0	clear	
Duluth, Minnesota	29.15	740.4	29.91	759.7	— 2	—18.9	83	sw.	8	3.6		0	5 s		sw.	0.10	2.5	fair	
Eagle Pass, Texas	29.31	744.5	30.15	765.8	56.2	13.4	100	ne.	6	2.7			10 n			0.19	4.8	light rain	
Eagle Rock, Idaho	25.36	644.1	30.32	770.1	—14	—25.6	56	n.	5	2.2		4 cs	0			0	0	fair	
Eastport, Maine	29.12	739.6	29.19	741.4	24	— 4.4	88	nw.	20	8.9			10 s		nw.	0.15	3.8	cloudy	
El Paso, Texas	26.23	666.2	30.11	764.8	38.1	3.4	19	e.	4	1.8		0	0			0	0	clear	
Erie, Pennsylvania	29.06	738.1	29.83	757.7	32	0.0	78	w.	20	8.9			10 ks		w.	0.27	6.9	cloudy	
Escanaba, Michigan	29.17	740.9	29.89	759.2	13	—10.6	80	w.	5	2.2		0	0			0.61	15.5	clear	
Florence, Arizona																			
Fort Apache, Arizona	24.90	632.4	30.02	762.5	38	3.3	92	se.	12	5.4			10 s		calm	0.18	4.6	cloudy	
Fort Assinnaboine, Montana	26.84	681.7	29.88	758.9	29	— 1.7	54	sw.	20	8.9		0	9 s		sw.	0	0	cloudy	
Fort Bennett, Dakota	28.02	711.7	29.76	755.9	— 2	—18.9	68	nw.	2	0.9		0	0			0	0	clear	
Fort Benton, Montana	26.93	684.0	29.91	759.7	33	9.6	54	w.	28	12.5		0	0			0	0	clear	
Fort Buford, Dakota	27.44	697.0	29.64	752.8	30	— 1.1	70	w.	4	1.8		0	0			0	0	clear	
Fort Custer, Montana	26.46	672.1	29.84	757.9	29	— 1.7	80	se.	8	3.6		0	5 s		calm	0	0	fair	
Fort Davis, Texas	25.13	638.3	30.11	764.8	40	4.4	92	calm	0	0			fg.			0	0	dense fog	
Fort Elliott, Texas	27.26	692.4	30.19	766.8	23	— 5.0	64	s.	8	3.6		3 c	0	s.		0	0	clear	
Fort Gibson, Indian T'y	29.59	751.6	30.19	766.8	33.2	0.7	88	calm	0	0		4 cs	0			0	0	fair	
Fort Grant, Arizona	25.10	637.5	30.00	762.0	41	5.0	54	se	8	3.6		5 cs	0	sw.		0	0	fair	
Fort Griffin, Texas																			
Fort Keogh, Montana	27.05	687.1	29.74	755.4	29	— 1.7	67	w.	2	0.9		4 c	0			0	0	fair	
Fort Macon, North Carolina	29.91	759.7	29.92	760.0	56	13.3	93	w.	7	3.1		7 cs	2 s;hz	w.	calm	0	0	cloudy	
Fort McKavett, Texas	27.83	706.9	30.22	767.6	43.8	6.6	93	ne.	6	2.7			10 s			0.27	6.9	cloudy	
Fort Missoula, Montana	26.69	677.9	30.15	765.8	3	—16.1	76	calm	0	0			10 s			0	0	clo dy	
Fort St. Michaels, Alaska	30.32	770.1	30.35	770.9	9	—12.8	100	ne.	10	4.5			10 n			0.03	0.8	light snow	
Fort Shaw, Montana	26.08	662.4	29.94	760.5	31	— 0.6	52	sw.	31	13.9		0	0			0	0	clear	
Fort Sill, Indian Territory	28.92	734.6	30.26	768.6	33	0.6	81	n.	2	0.9		10 cs	0	w.		0	0	cloudy	
Fort Stevenson, Dakota	27.52	699.0	29.58	751.3	21	— 6.1	84	sw.	7	3.1		1 c	3 s	calm	nw.	0	0	clear	
Fort Verde, Arizona					31.3	— 0.4	88	e.			1		10 n			0.88	22.4	heavy snow	
Fredericksburg, Texas	28.33	719.6	30.15	765.8	48	8.9	86	e.	3	1.3			10 s			0	0	cloudy	
Galveston, Texas	30.05	763.3	30.09	764.3	61	16.1	88	e.	11	4.9			10 s		e.	0.26	6.6	cloudy	
Grand Haven, Michigan	29.26	743.2	29.97	761.2	21.5	— 5.8	91	w.	20	8.9			10 n		w.	0.52	13.2	light snow	
Hatteras, North Carolina	29.84	757.9	29.86	758.4	56	13.3	93	nw.	16	7.2		6 cs	0	w.		0	0	fair	
Helena, Montana	25.63	651.0	30.06	763.5	22	— 5.6	73	calm	0	0		0	8 s			0	0	cloudy	
Henrietta, Texas	29.20	741.7	30.27	768.8	36	2.2	79	calm	0	0			10 s			inap.	inap.	cloudy	
Huron, Dakota	28.34	719.8	29.88	758.9	0	—17.8	65	se.	16	7.2		0	0			0	0	clear	
Indianapolis, Indiana	29.26	743.2	30.10	764.5	26	— 3.3	70	nw.	10	4.5		0	0			inap.	inap.	clear	
Indianola, Texas	30.06	763.5	30.09	764.3	62.4	16.9	93	e.	13	5.8			10 s			0.03	0.8	cloudy	
Jacksboro, Texas	28.98	736.1	30.22	767.6	37	2.8	82	n.	1	0.4			10 s			0	0	cloudy	
Jacksonville, Florida	30.05	763.3	30.10	764.5	67	19.4	90	s.	11	4.9		4 cs	hz.	w.		0	0	fair	
Keokuk, Iowa	29.46	748.3	30.16	766.1	17.0	— 8.3	83	w.	1	0.4		0	0			0	0	clear	
Key West, Florida	30.11	764.8	30.14	765.5	72.0	22.2	90	se.	3	1.3			10 s			0	0	cloudy	
Kittyhawk, North Carolina	29.84	757.9	29.86	758.4	52	11.1	93	w.	14	6.3		3 c	0	w.		0.09	2.3	clear	
Knoxville, Tennessee	29.07	738.4	30.15	765.8	39.8	4.3	89	sw.	4	1.8		3 cs	0	calm		0.43	10.9	clear	
La Crosse, Wisconsin	29.24	742.7	30.08	764.0	— 3	—19.4	65	s.	1	0.4		0	0			0	0	clear	
La Mesilla, New Mexico	26.07	662.2	30.10	764.5	31.3	— 0.4	69	calm	0	0		0	2 s			0	0	clear	
Leavenworth, Kansas	29.21	741.9	30.17	766.3	23	— 5.0	61	se.	4	1.8		0	0			0	0	clear	
Lewiston, Idaho	29.28	743.7	30.15	765.8	33	0.6	68	s.	12	5.4			10 s		s.	0	0	cloudy	
Little Rock, Arkansas	29.86	758.4	30.19	766.8	44	6.7	73	n.	1	0.4		0	9 ks			0.05	1.3	cloudy	
Los Angeles, California	29.60	751.8	30.00	762.0	38	3.3	82	nw.	8	3.6		0	7 s		calm	0.02	0.5	fair	
Louisville, Kentucky	29.54	750.3	30.14	765.5	34.0	1.1	79	w.	8	3.6			10 s		w.	0.05	1.3	cloudy	
Lynchburg, Virginia	29.15	740.4	29.87	758.7	45.2	7.3	60	calm	0	0		0	0			0.09	2.3	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	28.99	736.3	30.08	764.0	— 4	—20.0	65	w.	8	3.6		0	0			0.01	0.3	clear	
Marquette, Michigan	29.07	738.4	29.85	758.2	11	—11.7	80	w.	6	2.7			10 s		w.	0.19	4.8	cloudy	
Mason, Texas	28.45	722.6	30.19	766.8	46	7.8	71	n.	4	1.8			10 s		n.	0	0	cloudy	
Memphis, Tennessee	29.85	758.2	30.21	767.3	40	4.4	89	nw.	5	2.2			10 s			0.04	1.0	cloudy	
Milwaukee, Wisconsin	29.25	742.9	30.05	763.3	0	—17.8	100	w.	15	6.7		0	1 s			inap.	inap.	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.05	763.3	30.09	764.3	64.0	17.8	93	n.	1	0.4			10 n		ne.	0.61	15.5	light rain	
Montgomery, Alabama	29.89	759.2	30.13	765.3	58.6	14.8	91	n.	6	2.7		0	9 s		n.	0.22	5.6	cloudy	
Moorhead, Minnesota	28.60	726.4	29.71	754.6	— 5	—20.6	100	s.	34	15.2			10 s		s.	0.08	2.0	cloudy	
Morgantown, W. Virginia	28.91	734.3	29.97	761.2	40.5	4.7	81	w.	20	8.9			10 s		w.	0.32	8.1	cloudy	
Mt. Washington, N. H.	22.87	580.9	29.50	749.3	— 0.5	—18.1	100	nw.	65	29.1			10n; fg		nw.	0.73	18.5	light snow	
Nashville, Tennessee	29.60	751.8	30.16	766.1	43.0	6.1	91	nw.	2	0.9			10 ks		nw.	1.29	32.8	cloudy	
New Haven, Connecticut	29.42	747.3	29.54	750.3	41	5.0	40	w.	18	8.0		0	3 s		sw.	0.72	18.3	clear	
New London, Connecticut	29.48	748.8	29.52	749.8	39	3.9	73	w.	9	4.0			10 s		w.	0.85	21.6	cloudy	
New Orleans, Louisiana	30.04	763.0	30.10	764.5	66.5	19.2	92	s.	3	1.3			10 n		s.	1.62	41.1	light rain	
Newport, Rhode Island	29.44	747.8	29.48	748.8	40.5	4.7	78	sw.	23	10.3		2 cs; k	2 s	c.; sw	sw.	0.56	14.2	fair	
New River, N. Carolina					59	15.0	81	w.			1	2 cs	3 s	w.		0	0	fair	
New Shoreham, Rhode I'd.	29.48	748.8	29.51	749.5	41.5	5.3	73	nw.	33	14.8		2 cs	0	nw.		1.32	33.5	clear	
New York, New York	29.45	748.0	29.64	752.8	40	4.4	62	w.	17	7.6		4 cs	0	w.		0.03	16.0	fair	
Norfolk, Virginia	29.79	756.7	29.82	757.4	54	12.2	80	nw.	6	2.7		0	0			0.03	0.8	clear	
North Platte, Nebraska	26.93	684.0	30.04	763.0	4.6	—15.2	89	w.	10	4.5		0	0			0	0	clear	
Olympia, Washington T'y	30.10	764.5	30.14	765.5	35.0	1.7	92	s.	6	2.7			10 s		calm	0	0	cloudy	
Omaha, Nebraska	28.81	731.8	30.08	764.0	11.8	—11.2	80	s.	8	3.6		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas-	30.20	767.1	30.22	767.6	—18.8	—28.2	87	w.	32	14.3			10			0.02	0.5	stormy	
Oswego, New York	29.26	743.2	29.61	752.1	30.0	— 1.1	92	n.	14	6.3			10 n		nw.	0.30	7.6	light snow	
Palestine, Texas																			
Pensacola, Florida	30.08	764.0	30.11	764.8	65.1	18.4	100	se.	2	0.9			fg			0.09	2.3	dense fog	
Philadelphia, Pa	29.66	753.4	29.72	754.9	42	5.6	57	nw.	22	9.8		3 ck	hz	nw.		0.38	9.7	fair	
Pike's Peak, Colorado	17.46	443.5	30.16	766.1	0	—17.8	62	sw.	34	15.2		0	0			0	0	clear	
Pioche, Nevada	24.01	609.8	30.21	767.3	13	—10.6	83	n.	7	3.1			10 n		s.	0.02	0.5	light snow	
Pittsburg, Pennsylvania	29.05	737.9	29.90	759.4	35.3	1.8	64	sw.	11	4.9			10 s		sw.	0.22	5.6	cloudy	
Port Eads, Louisiana	30.11	764.8	30.12	765.0	64.1	17.8	93	n.	6	2.7		0	8 k		n.	inap.	inap.	cloudy	
Port Huron, Michigan	29.14	740.1	29.87	758.7	23.6	— 4.7	76	w.	23	10.3			10 s		w.	0.08	2.0	cloudy	
Portland, Maine	29.28	743.7	29.33	745.0	33	0.6	78	nw.	7	3.1		3 k	0	w.		0.44	11.2	clear	
Portland, Oregon	30.13	765.3	30.20	767.1	33.0	0.6	88	calm	0	0			10 s		calm	0	0	cloudy	
Portsmouth, N. Carolina					55	12.8	69	w.	6	2.7		10 ck	0	nw.		0	0	cloudy	
Prescott, Arizona	24.60	624.8	29.98	761.5	28	— 2.2	80	calm	0	0			10 n		calm	0.22	5.6	light snow	
Punta Rassa, Florida	30.12	765.0	30.13	765.3	68.5	20.3	90	se.	7	3.1		hz.	4 ks	calm	s.	0	0	fair	
Red Bluff, California	29.75	755.6	30.13	765.3	33.5	0.8	64	calm	0	0		1 ck	1 s	ne.		0	0	clear	
Rio Grande City, Texas	29.85	758.2	30.10	764.5	61	16.1	93	w.	1	0.4			10 s		calm	0.19	4.8	cloudy	
Rochester, New York	28.98	736.1	29.69	754.1	31	— 0.6	100	w.	31	13.9			10 n		w.	0.09	2.3	light snow	
Roseburg, Oregon	29.61	752.1	30.18	766.6	30.4	— 0.9	90	se.	1	0.4			10 s			0	0	cloudy	
Sacramento, California	29.98	761.5	30.06	763.5	34.2	1.2	72	n.	7	3.1		0	0			0	0	clear	
St. Louis, Missouri	29.58	751.3	30.22	767.6	26.1	— 3.3	88	nw.	7	3.1		3 c	0			0	0	clear	
St. Paul, Minnesota	29.06	738.1	30.01	762.2	— 6.0	—21.1	78	se.	5	2.2		0	0			0.02	0.5	clear	
St. Vincent, Minnesota	28.52	724.4	29.50	749.3	0	—17.8	100	s.	26	11.6			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.75	654.0	30.32	770.1	3	—16.1	76	se.	2	0.9		0	0			0	0	clear	
San Antonio, Texas	29.37	746.0	30.10	764.5	52.6	11.4	93	e.	4	1.8			10 n		e.	0.13	3.3	light rain	
San Diego, California	29.77	756.1	29.84	757.9	43.3	6.3	73	nw.	2	0.9			10 s			0.35	8.9	cloudy	
Sandusky, Ohio	29.24	742.7	29.96	761.0	26	— 3.3	77	w.	22	9.8		0	5 ks		w.	0.08	2.0	fair	
Sandy Hook, New Jersey	29.62	752.3	29.66	753.4	41.0	5.0	65	nw.	24	10.7		3 k	0	nw.		0.95	24.1	clear	
San Francisco, California	30.00	762.0	30.07	763.8	41	5.0	52	nw.	7	3.1		0	0			0	0	clear	
Santa Fé, New Mexico	23.22	589.8	30.23	767.8	19	— 7.2	80	ne.	1	0.4		0	0			0	0	clear	
Savannah, Georgia	29.98	761.5	30.08	764.0	65	18.3	84	nw.	4	1.8			10 n		nw.	inap.	inap.	light rain	
Shreveport, Louisiana	29.94	760.5	30.19	766.8	49	9.4	100	ne.	4	1.8			10 s		calm	0.04	1.0	cloudy	
Silver City, New Mexico	24.17	613.9	30.03	762.7	26	— 3.3	80	n.	2	0.9		0	0			0	0	clear	
Sitka, Alaska	30.11	764.8	30.28	769.1	30	— 1.1	78	nw.	7	3.1		0	0			0.39	9.9	clear	
Smithville, North Carolina	29.92	760.0	29.96	761.0	56	13.3	93	w.	10	4.5			10 s		w.	0.09	2.3	cloudy	
Spokane Falls, Wash. Ter.	28.02	711.7	30.16	766.1	19	— 7.2	87	ne.	3	1.3			10 s		ne.	0	0	cloudy	
Springfield, Illinois	29.47	748.5	30.20	767.1	24	— 4.4	73	nw.	1	0.4		0	0			0	0	clear	
Springfield, Massachusetts	29.40	746.7	29.54	750.3	39.0	3.9	54	w.	10	4.5		0	7 s		w.	0.39	9.9	fair	
Springfield, Mo	25.70	729.0	30.28	769.1	26	— 3.3	82	se.	4	1.8		3 cs	0	se.		0	0	clear	
Stockton, Texas	27.02	686.3	30.16	766.1	44.0	6.7	100	calm	0	0			10 n		ne.	0.04	1.0	light rain	
Thatcher's Island, Mass	29.34	745.2	29.40	746.7	39.3	4.1	62	w.	25	11.2		0	3 s			0.34	8.6	clear	
Toledo, Ohio	29.24	742.7	29.98	761.5	27	— 2.8	54	w.	21	9.4		1 k	2 s	sw.		0.06	1.5	clear	
Tucson, Arizona	27.46	697.5	29.96	761.0	42	5.6	93	nw.	2	0.9			9 s			0.47	11.9	cloudy	
Umatilla, Oregon	29.81	757.2	30.20	767.1	25.1	— 3.8	88	s.	1	0.4		3 cs	0			0	0	clear	
Uvalde, Texas																			
Vicksburg, Mississippi	29.90	759.4	30.17	766.3	54	12.2	86	n.	1	0.4			10 s		calm	1.56	39.6	cloudy	
Visalia, California	29.64	752.8	30.03	762.7	22	— 5.6	85	s.	2	0.9		0	0			0	0	clear	
Washington, D. C.	29.69	754.1	29.81	757.2	44	6.7	51	nw.	6	2.7		3 cs	2 s	w.	nw.	0.25	6.3	fair	
West Los Animas, Colorado	25.90	657.8	30.04	763.0	18	— 7.8	91	se.	1	0.4		2 cs	0	se.		0	0	clear	
Wickenburg, Arizona																			
Williamsport, Pa	29.08	738.6	29.71	754.6	37.4	3.0	57	nw.	14	6.3			10 ks		nw.	0.10	2.5	cloudy	
Wilmington, N. Carolina	29.90	759.4	29.96	761.0	61	16.1	87	w.	9	4.0		10 k	0	w.		0.02	0.5	cloudy	
Winnemucca, Nevada	25.69	652.5	30.23	767.8	3	—16.1	76	ne.	10	4.5		0	0			0	0	clear	
Wood's Holl, Mass	29.43	747.5	29.47	748.5	41	5.0	82	w.	30	13.4		0	1 s		w.	0.17	4.3	clear	
Yankton, Dakota	28.52	724.4	29.94	760.5	5	—15.0	49	e.	2	0.9		0	0			0	0	clear	
Yuma, Arizona	29.79	756.7	29.94	760.5	41.1	5.1	96	n.	9	4.0			10 s		n.	0	0	cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559.3			50.5	10.3	84	calm	0	0		0	2 s			0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.10	764.5	30.11	764.8	76	24.4	90	e.				0	5 n		ne.	0.60	15.2	cloudy	J. A. Racker.
Buenaventura, U. S. C.	29.89	759.2	29.91	759.7	79	26.1	90	calm	0	0			10 ks		calm	c	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.04	763.0	30.06	763.5	75	23.9	90	e.				3 c	0			0	0	clear	B. Bigar.
Havana, Cuba, W. I.	30.13	765.3	30.18	766.6	72	22.2	90	calm	0	0		0	0			0	0	clear	A. Van Ganeghem, Ass't
Kingston, Jamaica, W. I.	30.08	764.0	30.09	764.3	69.7	20.9	79	n.	1	0.4		0	1 s		e.	0	0	fine	Robert Johnstone.
Navassa, W. I.	29.99	761.7	30.07	763.8	77	25.0	61	ne.	4.5	2.0		5 ck	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.05	763.3	30.05	763.3	78	25.6	86	e.			3	5 k	6 ps	e.	e.	0.010	0.3	½ cloudy	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mba	29.38	746.2	29.93	760.2	83	28.3	76	n.			1	1 c	2 k	calm	calm	0	0	clear	Miss Flora A. Nichols.
Rivas, Nicaragua					73.9	23.3	90	ne.			4	0	d		ne.				Earl Flint.
Santiago de Cuba, W. I.	30.09	764.3	30.12	765.0	75	23.9	69	calm	0	0		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	28.62	726.9	28.68	728.5	— 1.0	—18.3	100	sw.	43	19.2			10 n		sw.	0.10	2.5	snowing	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India.	29.95	760.7	79.5	26.4	77	nne.			1-2		8							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.50	774.7	55	12.8	50	calm			0		0							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.04	763.0	72	22.2	65	ssw.			1		7	se.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.86	758.4	68	20.0	94	sse.			1		10	calm				2	ssw.	drizzling	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey.	30.52	775.2	34	1.1	90	n.			3-4		10	nne.						snow squalls	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.43	772.9	59	15.0		ene.			4-6		4	ese.				2	wsw.	squally	Lieut. J. L. Burr.
H. M. S. Cormorant. S. 30° 55′, E. 153° 45′	29.91	759.7	75	23.9		nne.			3		10	ne.				2	ne.	overcast	Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.25	768.3	44.5	6.9	84	calm			0		4	ne.						d. clouds	Capt. S. Long.
H. M. S. Diamond, S. 28° 35′, W. 22° 02′	30.04	763.0	77.5	25.3	79	nnw.			4		9	ssw.				3	nnw.	d. clouds	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.00	762.0	66.5	19.2	87	ssw.			3-4		3	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 09′, W. 82° 21′	30.13	765.3	70.5	21.4	97	calm			0		0							blue sky	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 20′, W. 60° 40′	29.48	748.8	53	11.7	79	wsw.			5-6		8					3	wsw.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.82	757.4	85	29.4		nne.			2-3		4							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.18	766.6	46	7.8		n.			3-4		4							d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, S. 3° 24′, W. 27° 10′	29.96	761.0	78	25.6	95	se.			3		5					1	sse.	d. clouds	Capt. O. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.93	760.2	78.5	25.8	65	ssw.			4		1					3	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.23	767.8	36	2.2	80	nw.			1		5	nw.						misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.94	760.5	61	16.1	94	nnw.			1		10							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 46° 07′, W. 62° 01′	29.82	757.4	57	13.9	87	ssw.			3		1							blue sky	Capt. L. Jones.
H. M. S. Iris, Beirut, Syria	29.88	758.9	53	11.7	79	w.			3-6		8	w.				4	w.	showery	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.31	769.9	61	16.1	70	e.			2-3		3	e.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	30.21	767.3	63.4	17.4	85	nne.			2-3		2					3	nne.	misty	Capt. A. Carpenter.
H. M. S. Malabar, Bombay, India	30.01	762.2	76	24.4	90	nw.			2		3	nw.						d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton																			Capt. E. Drummond.
H. M. S. Orontes, Mauritius Island, Africa	29.92	760.0	81	27.2	87	ese.			1		10							raining	Capt. R. Kinahan.
H. M. S. Pelican, S. 24° 49′, W. 6° 58′	30.11	764.8	77.5	25.3	97	ene.			2		8					1	e.	d. clouds	Capt. F. R. Dickens.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Ready, N. 26° 55′, E. 52° 46′	30.14	765.5	74.1	23.4		ssw.			1									d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.16	766.1	36	2.2	90	nnw.			1		2							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.00	762.0	79.5	26.4	82	nne.			1		5	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis																			Capt. G. O. Twiss.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Triumph, N. 7° 58′, W. 79° 35′	29.90	759.4	78	25.6	86	n.			6		0					7	n.	blue sky	Capt. A. H. Markham.
H. M. S. Tyne, N. 23° 37′, E. 36° 51′	30.09	764.3	75	23.9	100	nnw.			4		4	nw.				4	nw.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamacia, W I.	30.07	763.8	73	22.8		nne.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Bushire, Persia	30.08	764.0	68.5	20.3	74	sse.			2		8	s.				2	sse.	misty	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 34° 33′, E. 134° 48′	30.26	768.6	39	3.9	81	w.			4-6		6	w.						squally	Capt. G. N. A. Pollard.
PORTUGESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	29.98	761.4	80.2	26.8	71	ne.			3		4		sw.			2	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 14° 45′, W. 61° 11′	30.08	764.0	74.8	23.8	91	ene.			2		8							overcast	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.07	763.8	68	20.0	90	calm	0	0	.....	.....	10	.....	.....	0	0	.....	.....	cloudy	
N. Yard, Portsmouth, N. H.	30.37	771.4	35	1.7	.....	nw.	24	10.7	.....	.....	10	.....	.....	0	0	.....	.....	snowing	
Naval Hospital Yokohama, Japan	29.80	756.9	37.5	3.1	48	nnw.	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	clear	
Adams, S. 12° 06′, W. 77° 18′	29.73	755.1	69	20.6	95	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	sm'h	s.	cloudy	
Alaska, Iquique, Peru	29.86	758.4	64	17.8	89	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert, Hong Kong, China*	30.15	765.8	63	17.2	72	ene.	.....	.....	3	.....	8	.....	e.	0	0	sm'h	.....	cloudy	
Alliance, Boston, Mass.*†	29.59	751.6	42	5.6	58	w.	.....	.....	4	.....	8	.....	.....	0	0	.....	.....	cloudy	
Ashuelot, Tientsin, China	30.62	777.7	33	0.6	100	w.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, S. 15° 29′, W. 37° 07′	29.97	761.2	83	28.3	87	ene.	8	3.6	.....	.....	8	.....	e.	0	0	light	se.	fair	
Colorado, New York, N. Y	29.60	751.8	41	5.0	57	w.	5	2.2	.....	.....	8	.....	calm	0.08	2.0	.....	.....	cloudy	
Essex, N. 35° 50′, W. 61° 58′	29.60	751.8	68	20.0	90	wsw.	.....	.....	6-10	.....	10	.....	sw.	.....	.....	high	sw.	cloudy	
Franklin, Norfolk, Va	29.79	756.7	52	11.1	79	w.	10	4.5	.....	.....	2	.....	calm	0.01	0.3	.....	.....	fair	
Galena, N. 11° 08′, W. 18° 57′	29.97	761.2	75	23.9	77	ne.	.....	.....	5	.....	2	.....	.....	.....	.....	mod.	ne.	fair	
Independence, N. Yard, Mare I'd, Cal	29.90	759.4	39	3.9	64	calm	0	0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La	30.09	764.3	64	17.8	94	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	foggy	
Lackawanna, Valparaiso, Chili†	30.02	762.5	58	14.4	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Lancaster, Villafranca, France	30.55	776.0	61	16.1	61	s.	.....	.....	1	.....	2	.....	e.	0	0	.....	.....	fair	
Michigan, Erie, Pa	29.66	753.4	33	0.6	.....	w.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I	29.48	748.8	42	5.6	83	wsw.	12	5.4	.....	.....	5	.....	w.	.....	.....	.....	.....	squally	
Monocacy, Yokohama, Japan	30.01	762.2	38	3.3	72	nnw.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	clear	
Nipsic, Naples, Italy	30.57	776.5	54	12.2	49	ne.	.....	.....	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.05	763.3	67	19.4	100	se.	.....	.....	2	.....	10	.....	nnw.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.32	770.1	60	15.6	88	e.	.....	.....	4	.....	10	.....	calm	.....	.....	.....	.....	cloudy	
Passaic, Washington, D. C	29.79	756.7	42	5.6	91	w	.....	.....	1	.....	5	.....	w.	.....	.....	.....	.....	fair	
Pensacola, S. 19° 57′, W. 75° 00′	29.96	761.0	70	21.1	90	se.	.....	.....	1-2	.....	10	.....	se.	0	0	long	se.	cloudy	
Powhatan, Boston, Mass	29.43	747.5	39	3.9	56	w.	.....	.....	3	.....	8	.....	.....	.....	.....	.....	.....	cloudy	
Quinnebaug, Villafranca, France	30.61	777.5	59	15.0	65	ssw.	.....	.....	2	.....	0	.....	.....	0	0	long	ssw.	clear	
Ranger, N. 17° 04′, W. 100° 34′*	29.88	758.9	76	24.4	73	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, Pago Pago, Samoa Islands*	29.67	753.6	81	27.2	91	calm	.....	.....	0	.....	5	.....	.....	0	0	.....	.....	fair	
Shenandoah, Montevideo, Uruguay*	30.00	762.0	74	23.3	63	nw.	.....	.....	4	.....	5	.....	.....	.....	.....	sm'h	.....	fair	
St. Louis, League Island, Pa	29.88	758.9	38	3.3	72	nw.	5	2.2	.....	.....	0	.....	.....	0.41	10.4	.....	.....	clear	
Swatara, Kobe, Japan*	30.09	764.3	36	2.2	70	n.	.....	.....	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Tennessee, New York, N. Y	29.61	752.1	42	5.6	66	wnw.	10	4.5	.....	.....	0	.....	.....	0.89	22.6	.....	.....	clear	
Vandalia, St. Georges, Grenada, W. I.	30.06	763.5	82	27.8	67	e.	.....	.....	1	.....	2	.....	e.	.....	.....	.....	.....	clear	
Wabash, Boston, Mass	29.40	746.7	40	4.4	64	w.	13	5.8	.....	.....	2	.....	w.	0.21	5.3	.....	.....	fair	
Wachusetts, N. 55° 04′, W. 131° 08′	30.13	765.3	37	2.8	71	w.	.....	.....	2	.....	2	.....	w.	.....	.....	.....	.....	fair	
Wyoming, Port Royal, S. C	30.03	762.7	61	16.1	94	wnw.	6	2.7	.....	.....	10	.....	wnw.	0	0	.....	.....	overcast	
Yantic, Port Royal, Jamaica, W. I*	30.04	763.0	72	22.2	85	nnw.	.....	.....	0-1	.....	5	.....	.....	.....	.....	.....	.....	fair	

MERCHANT-MARINE SERIES.

Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.

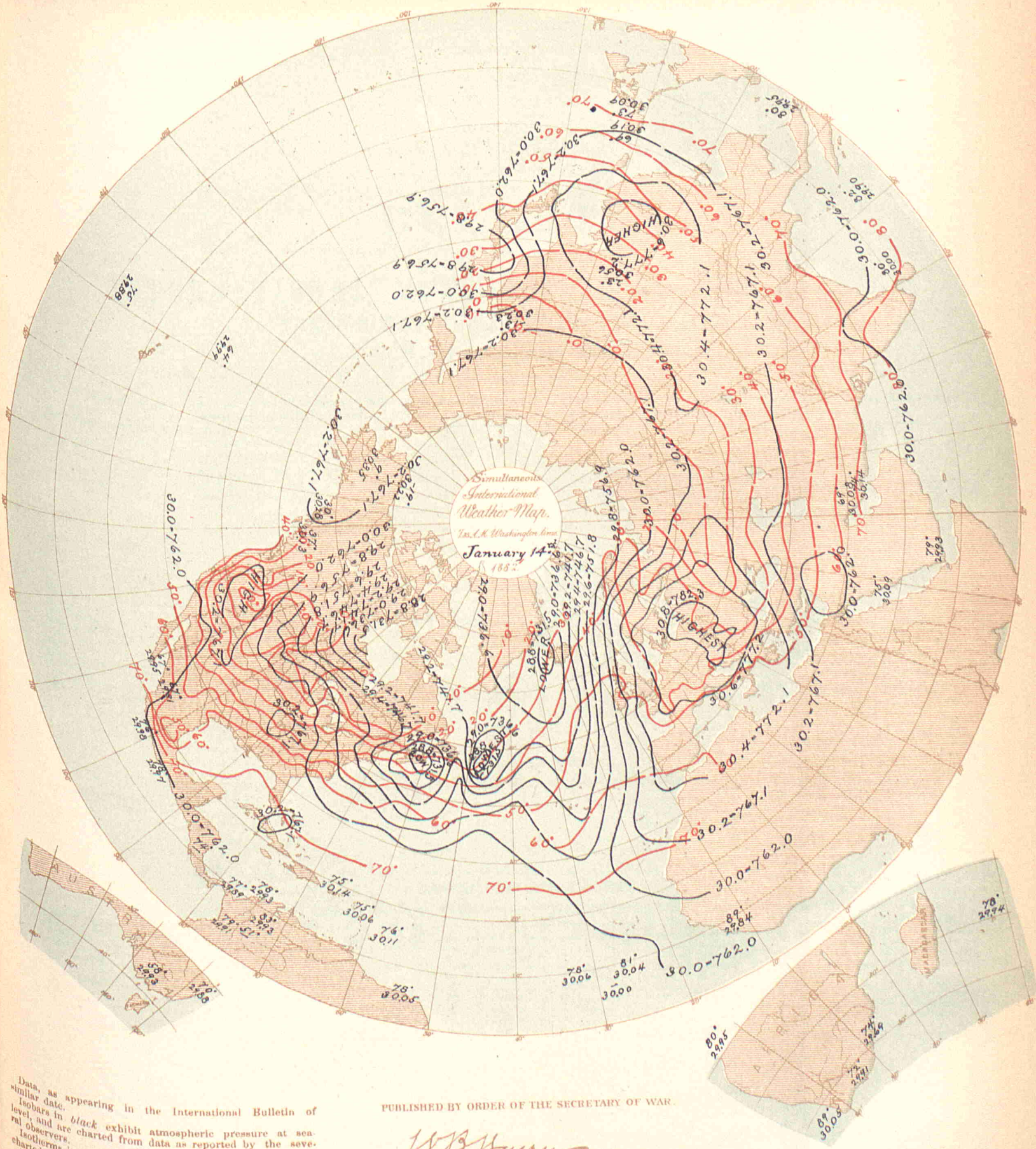
Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 44° 26′, W. 63° 30′	29.25	742.9	36	2.2	.....	wnw.	6	.....	10	.....	wnw.	12 h'r	snow	2	w.	snowing	C. Gapon, 2d Officer.
S. S. Polynesian, Capt. R. Brown, Boston, Mass*	30.25	768.3	36	2.2	.....	wnw.	4	.....	2	.....	.....	5½ h'r	snow	.....	.....	clear	Roberts & Spark
S. S. Prussian, Capt. J. G. Stephens, Off Cape Speare, N. F.*	30.32	770.1	24	—4.4	.....	s.	6	.....	10	.....	s.	.....	.....	mod.	s.	misty	J. G. Stephens.
S. S. Waldensian N. 45° 08′, W. 51° 21′†	29.60	751.8	30	—1.1	.....	s.	7	.....	.....	.....	s.	3 h'r	snow	r'gh	s.	cloudy	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, N. 42° 48′, W. 59° 54′	28.95	735.3	42	5.6	91	ne.	8	.....	2	.....	nw.	.....	.....	r'gh	e.	squally	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 53° 09′, W. 21° 19′†	29.08	738.6	54	12.2	68	ssw.	8	.....	8	.....	sw.	mod.	mod.	h'vy	ssw.	cloudy	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, Eng*†	30.48	774.2	46	7.8	100	sse.	2	.....	10	.....	sw.	.....	.....	.....	.....	overcast	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 51° —′, W. 80 —′*	30.20	767.1	54	12.2	93	s.	4	.....	1	.....	sw.	.....	.....	.....	.....	foggy	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Utopia, Capt. A. McRitchie,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 18° 33′, W. 72° 20′*†	30.20	767.1	74	23.3	81	calm	0	.....	0	.....	.....	0	0	sm'h	.....	fine	C. P. Krause.
S. S. Alvo, Capt. D. W. Williams, Cartagena, U. S. C*	29.93	760.2	78	25.6	.....	ne.	3	.....	0	.....	.....	0	0	.....	.....	very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse N. 20° —′, W. 76° —′	29.79	756.7	.....	.....	.....	n.	3	.....	1	.....	n.	0	0	mod.	e.	clear	Fisher & Weldon.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S*†	29.35	745.5	41	5.0	42	nw.	.....	.....	.....	.....	.....	0	0	.....	.....	stormy	S. E. Wright.
BRITISH METEOROLOGICL OFFICE.																	
Baroda, Capt. C. J. Russell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British Merchant, Capt. E. J. Molony, N. 3° 21′, E. 91° 14′	29.90	759.4	82	27.8	74	n.	4	.....	3	.....	.....	.....	.....	.....	.....	misty	.....
Bk. Caldew, Capt. W. Peterson S. 23° 28′, W. 75° 16′	30.06	763.5	67	19.4	.....	se.	4	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Cipero, Capt. W. N. Laily N. 46° 57′, W. 12° 59′	30.04	763.0	57.6	14.2	90	ssw.	6	.....	10	.....	.....	.....	.....	4	.....	misty	.....
S. City of Agra, Capt. Thos. Young, S. 8° 32′, W. 24° 32′	30.00	762.0	79.5	26.4	.....	se.	4	.....	10	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Glaramara, Capt. R. Morton; N. 20° 40′, W. 38° 51′	30.23	767.8	74	23.3	76	wnw.	1	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Glencairn, Capt. R. S. Tannock, S. 41° 19′, E. 14° 30′	29.93	760.2	58	14.4	81	sw.	5	.....	10	.....	.....	.....	.....	.....	.....	drizzling	.....
S. S. Gordon Castle, Capt. W. Waring, N 44° 01′, W. 8° 47′	30.38	771.6	65.5	18.6	63	s.	4–5	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bq. Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery, S 27° 45′, W. 46° 05′	30.14	765.5	76	24.4	49	ese.	1	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
S. Lochee, Capt. J. Raeburn, S. 11° 07′ E. 89° 33′	29.73	755.1	80	26.7	95	var.	1	.....	8	.....	.....	.....	.....	.....	.....	showery	.....
May Hulse, Capt. H. Youlden, S. 10° 55′ W. 34° 04′	29.95	760.7	82.5	28.1	87	ese.	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, N. 11° 44′, W. 25° 38′	30.06	763.5	75.9	24.4	72	ne.	5	.....	1	.....	.....	.....	.....	.....	.....	misty	.....
Naiad, Capt. John Smith S 13° 33′, W. 24° 49′	30.07	763.8	77.8	25.4	82	ene.	4	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 45° 42′, W. 62° 38′	29.84	757.9	61	16.1	82	s.	4	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Queen of Cambria, Capt. M. Parry, S. 41° 18′, E. 0° 40′	30.06	763.5	57.2	14.0	93	nw.	4	.....	10	.....	.....	.....	.....	.....	.....	foggy	.....
S. S. Strathleven, Capt. C. W. Pearson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge, N. 9° 44′ W. 33° 11′	30.06	763.5	77.8	25.4	86	nne.	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Bristol*†	30.40	772.1	52	11.1	.....	ese.	5	.....	10	.....	e.	0	0	.....	.....	dull	Wm. Fitt.
CALIFORNIA, AND MEXICAN S. S. CO																	
J. Birmingham, Agent San Francisco.																	
S. S. Newbern, Capt. E. Rogers, N. 23° 58′, W. 109° 22′†	29.85	758.2	67	19.4	90	nw.	2	.....	10	.....	.....	light	light	sm'h	.....	light rain	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman N. 26° 23′, W. 85° 35′*†	30.31	769.9	74	23.3	.....	nw.	1	.....	0	.....	.....	0	0	.....	se.	clear	Crowell & Henry.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul, N. 49° 58′, W. 6° 00′	30.46	773.6	51.8	11.0	.....	s.	3	.....	5	.....	s.	1 h'r	1 h'r	.....	.....	.....	.....
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York																	
S. S. Gellert, Capt. Kuhlewein, N. 46° 50′ W. 47° 58′*	28.70	729.0	30	—1.1	?	s.	6	.....	8	.....	s.	10 h'r	h'vy	h'vy	ssw.	cloudy	P. Froehlich, 3d Off.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, N. 8° —′, W. 27° —′*†	30.19	766.8	81	27.2	.....	ne.	2	.....	?	.....	ne	0	0	sm'h	wsw.	clear	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.* S. S. Iberian, Capt. E. Parry, N. 52° 02′, W. 6° 36′						se.	3				wsw.	8 h'r	8h'r		s.	cloudy	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.* S. S. England, Capt. T. P. Heeley N. 50° 45′, W. 15° 01′*	29.73	755.1				s.	6		10		s.	16 h'r	16h'r	high	s;sw.	rainy	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.* S. S. Niagara, Capt. J. B. Baker Havana, Cuba, W. I*†	30.28	769.1	70	21.1		calm	0		0			0	0			clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, Cienfuegos, Cuba, W. I†	30.20	767.1	72	22.2		ene.	1		3		ene.	0	0			fair	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE. S. S. Alsia, Capt. J. W. Sansom,																	
S. S. Bothnia, Capt. MacMackan																	E. F. Steinbridge, 3d offi
S. S. City of Alexandria, Capt. L. F. Timmerman																	
S. S. City of Washington, Capt. J. W Rogers Frontera Rouds, C. A.*†	30.19	766.8	73	22.8		e.	3							sm'h		hazy	
S. S. Maas, Capt. T. N. Bonjer N. 18° 44′, W. 93° 00′*†	30.10	764.5	82	27.8		e.	1							sm'h		fine	
S. S. New York, Capt. R. B. Quick, N. 32° 00′, W. 79° 35′*†	30.14	765.5	67	19.4		wsw.	3								sw.	drizzling	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt E. M. Chevalier																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.* S. S. Gen. Werder, Capt. H. Christoffers																	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander, N. 38° 33′, W. 69° 50′*	29.68	753.9	44.4	6.9		nw.	6		8		wnw.	rain	rain	h'vy	wnw.	cloudy	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer,																	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, N. 50° 12′, W. 29° 50′*	29.04	737.6	54.5	12.5		nw.	8		6		n;wnw.	hail	hail	very high		hailing	
S. S. Mosel, Capt. J. Hesse, N. 48° 29′, W. 31° 56′	29.49	749.0	45.5	7.5		nw.	6		4		nw.	7 ½ rain	hour hail	cross h'vy	nnw.	cloudy	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A, Jaeger																	
S. S. Oder, Capt. C. Undeutsch, Bremerhaven, Germany*	30.71	780.0	30.2	—1.0		sw.	2		2		sw.	0	0			fair	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer																	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.* S. S. Belgic, Capt. H. Davison, San Francisco, Cal†	30.03	762.7	41	5.0	56	nw.	2		0			0	0			clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 23° 26′, E. 117° 34′*†	30.42	772.7	61	16.1	77	ene.	5		6?		ene.			r'gh	ene.	clear.?	
S. S. Oceanic, Capt. J. Metcalf, N. 34° 23′, E. 138° 47′*	29.97	761.2	45	7.2	60	wsw.	6		0					6	wsw.	clear	
OCEAN S. S. CO. *George Young, Agent, New York.* S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.30	744.2				nw.	6		0							clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 39° 10′, W. 73° 50′†	29.42	747.3	47	8.3	77	nw.	6		2		nw.	10 h'r	10 h'r	large	se.	clear	H. K. Hallett.
OREGON IMROVEMENT CO. *John L. Howard, Agent, San Francisco.* S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.19	766.8	41	5.0	73	nnw.	1		10		nw.					cloudy	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer Seattle, Wash. Ter*	30.13	765.3	40	4.4	82	calm	0		8		e.	0	0			hazy	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *R. Van Otercndorp, Agent, San Francisco.* S. S. Columbia, Capt. Fred Bolles																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 39° 14′, W. 123° 45′†	30.05	763.3	48	8.9	56	se.	1		0					sm'h		clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.* S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	29.96	761.0	40	4.4	14	calm	0		0							clear	
S. S. Geo. W. Elder, Capt. H. G. Morse																	
S. S. Idaho, Capt. E. Alexander, N. 48° 06′, W. 124° 49′†	30.11	764.8	43	6.1	83	nw.	1		6		nw.					fair	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 32° 40′, W. 117° 11′†	29.81	757.2	52	11.1	66	se.	6		8		se.	24 h'r	24 h'r	r'gh	se.	drizzling	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, N. 35° 06′, W. 120° 52′†	30.19	766.8	42	5.6	83	nne.	2		0			0	0	sm'h		clear	T. Wallace.
S. S. State of California, Capt. G. Debney, Portland, Oregon†	30.13	765.3	33	0.6	?	calm	0		5?			0	0			cloudy?	
S. S. Victoria, H. M. Hayward, N. 38° 04′, W. 123° 46′†	30.02	762.5	46	7.8	92	ne.	3		0					sm'h		clear	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulley, Supt. New York.* S. S. Australia, Capt. ——, N. 10° 43′, W. 161° 04′	29.88	758.9	75	23.9	81	nne.	4		0					long	ne.	clear	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.88	758.9	70	21.1	95	ne.	1		0			0	0			clear	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 26° 22′, E. 122° 28′†	30.64	778.2	57	13.9	62	ne.	5		0			0	0	mod.	nw.	clear	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn,																	E. Le Saik.
S. S. City of Tokio, Com. J. Maury N. 29° 57′, W. 160° 49′†	29.99	761.7	64	17.8	67	wnw.	2		5		nw.	0	0	high	wnw.	fine	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, Panama, Panama†	29.89	759.2	77	25.0	90	nnw.	2		7		nw.	0	0	sm'h		cloudy	
S. S. Grenada, Capt M. Connolly, N. 15° 40′, W. 96° 30′†	29.87	758.7	78	25.6	73	ene.	3		0			0	0	small	se.	clear	
S. S. South Carolina, Capt. W J. Russell, N. 22° 14′, W. 105° 50′*†	29.82	757.4	72	22.2	90	nne.	4		10		ne.	0	0	light	ne.	overcast	
S. S. Zelandia, Capt. H. Webber, S. 34° 24′, E. 152° 23′	29.95	760.7	61	16.1	94	se.	2		2		se.			mod.	s.	clear	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10		From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke, St. Lucia, W. I.						ene.	3		0			0	0	sm'h		clear	G. S. Locke
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	30.69	779.5	40	4.4	73	s.	1		10		s.	0	0			hazy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 49° 14′, W. 35° 48′*†	29.64	752.8	42	5.6	83	n.	5		8		nne.	0	0	high	nne.	squally	M. Eymond.
S. S. Waesland, Capt. H. Nickels. N. 46° 30′, W. 37° 07′*	29.38	746.2	41	5.0		nnw.	9		10		nw.	10 h'r	10 h'r	h'vy	nw.	overcast	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis																	
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub, N. 58° 55′, E. 1° 29′†	30.43	772.9	45.5	7.5		s.	4		10		s.	1 h'r	1 h'r	h'vy	s.	covered	J. T. Ulberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 46° 52′, W. 34° 04′*†	29.65	753.1	44	6.7		wsw.	6		3		wnw.	6 h'r	rain hail	h'vy	n.	clear	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 50° 40′, W. 28° 12′*†	29.00	736.6	44	6.7		nw.	8		10		w.	shr's	shr's	h'vy	w.	showery	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 42° 02′, W. 62° 42′*†	29.13	739.9	39	3.9		w.	6		8		wnw.	1 h'r	1 h'r	mod.	wnw.	misty	W. Thomas.
S. S. Celtic, Capt. B. Gleadell New York, N. Y*†	29.47	748.5	40	4.4	73	w.	4		10		nw.	3 h'r	sh'rs			snowing	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. Liverpool, Eng.*†	30.58	776.7	45	7.2	92	s.	2		8		sse.	sh'rs	sh'rs			d. clouds	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 40° 00′, W. 64° 37′†	29.48	748.8	49	9.4		w.	6		6?		wnw.	8 h'r	8 h'r			clear?	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, N. 24° 14′, W. 79° 45′†	30.32	770.1	75	23.9	81	ese.	3	0	5 k		se.	0	0	mod.	se.	fair	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona																	
Bk. Alpha, Capt. Ole Grönn, Off southern part of Sardinia*†	30.50	774.7	66	18.9		ene	5		2		e.	0	0	sm'h	ne.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis																	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin, S. 22° 37′, W. 39° 16′*†	29.60	751.8				ene.								h'vy	se.	cloudy	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.46	773.7				sse	3				wnw.	6 h'r	6 h'r			cloudy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 6° 27′, W. 28° 59′†	30.00	762.0				ene.	3		2		ene.	0	0	sm'h	ne.	fine	
S. Enoch Train, Capt. H. D. Chapman. N. 49° 28′ W. 7° 00′*	30.20	767.1				sse.	3		2		s.	sh'rs	shr's	long	ssw.	fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 40° 58′, W. 39° 36′*	29.82	757.4				nnw.	6		8		nnw.	4 h'r	h'vy	long	nw	fair	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	29.97	761.2	47	8.3	62	w.	3		4		w.			sm'h		clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 43° 43′, W. 62° 54′†	29.91	759.7	67	19.4		nw.	3		0			0	0	sm'h		clear	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 52° 49′, W. 14° 54′			54	12.2		s.	9		10		s.	1 h'r	light	hv'y	s.	cloudy	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.07	738.4				ssw.	2		10		ssw.	2 h'r	light			cloudy	
Bk. Geo. Booth, Capt D. Williams,																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 50° 40′, E. 0° 34′*	30.47	773.8	40.6	4.8	93	ese.	2		10		ese.	0	0	sm'h		overcast	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 11° 08′, W. 33° 59′*	29.88	758.9				ese.	4		2		ese.	0	0	long	e.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 37° 45′, W. 10° 56′*†	30.50	774.7				sse.	4				se.	0	0	hv'y	se.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.49	774.4	46	7.8	54	ne.	2		0							clear	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 36° 20′, W. 46° 20′*†	29.90	759.4				sw.			5		sw.	½ h'r	hail			squally	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen.																	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 26° 02′, W. 28° 35′*	29.92	760.0	66.2	19.0	95	ssw.	5		3		wsw.			mod.	w.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.41	772.4	56	13.3	87	ene.	4		0			0	0			clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 20° 30′, W. 31° 58′*†	30.20	767.1				nnw.	5		3		nnw.			sm'h			I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton,																	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 15, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.52	775.1	64.8	18.2	78	sw.			3		0			0	0	clear	Moiroud.
Algiers			30.61	777.6	56.5	13.6	71	ne.			1		0			0.094	2.4	clear	Nicolas.
La Calle			30.58	776.7	58.6	14.8	81	wnw.			2		6			0	0	cloudy	Fonfrède.
Tunis			30.60	777.1															Jacques.
Sfax																			Gau.
Saida			30.56	776.3	51.4	10.8	56	e.			3		1			0	0	fair	Perès.
Tebessa			30.60	777.3	45.3	7.4	77	se.			2		7			0.059	1.5	very cloudy	Derché.
Geriville					40.3	4.6	78	n.			4		4			0	0	cloudy	Lonchamp.
Laghouat			30.61	777.5	48.2	9.0	63	e.			2		6			0.039	1.0	cloudy	Herbin.
Biskra			30.48	774.3	59.7	15.4	66	nw.			3		10			0.083	2.1	covered	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.82	757.4	29.91	759.7	62.0	16.7	67	se.	4	1.8			9			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.35	771.0	30.95	786.1	32.5	0.3	90	e.			1		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Observatory	30.17	766.4	31.01	787.7	25.5	— 3.6	93	e.	9.8	4.4			1			0	0		Dr. Wierzbiski.
Eperies	29.96	760.9	30.90	784.9	33.8	1.0	39	n.			1		0			0	0		Julius Mikolik.
Gratz	29.59	751.5	30.93	785.7	31.3	— 0.4	73	s.			2		0			0	0		Andreas Rospini.
Hermannstadt	29.36	745.7	30.92	785.4	27.5	— 2.5	85	nnw.			2		4			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.41	746.9	30.85	783.7	29.8	— 1.2	90	e.			2		0			0	0	clear	The Staff.
Lemberg	29.91	759.7	30.99	787.2	25.7	— 3.5	72	se.			1		9			0	0		Dr. T. Stanecki.
Polin	30.68	779.3	30.80	782.3	46.4	8.0	28	ne.			1		0			0	0		I. R. Hydrographic Office.
Szathmar	30.41	772.3	30.88	784.4	29.1	— 1.6	54	ne.			1		0			0	0		Joseph Midlinszky, S. J.
Szegedin	30.63	778.1	30.94	785.8	31.1	— 0.5		n.			2		0			0	0		Karl Stancel.
Trieste	30.75	781.0	30.85	783.6	45.3	7.4	30	e.			1		0			0	0		Rieder.
Vienna	30.19	766.7	30.96	786.5	30.2	— 1.0	78	calm			0		0			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Aberdeen	30.34	770.6	30.44	773.2	48.0	8.9	89	s.	13	5.8			10			0	0	overcast	W. Boswell.
Armagh, Observatory	30.21	767.3	30.46	773.7	51.6	10.9	89	s.	24	10.7								overcast	S. Call.
Bidston, Liverpool Obs'y			30.62	777.7	43.3	6.3	90	se.	16	7.2			10					gloomy	John Hartnup.
Bolton, Sharples	30.08	764.0	30.63	778.0	39.5	4.2	96	s.	6	2.7			10						Thomas Mackereth [A.S.
Bradford, Yorkshire																0.01	0.3		J. McLandsborough, F.R.
Bridgetown, Barbadoes	30.04	763.0	30.07	763.8	81.0	27.2	63	ne.			3		2					d. clouds	Pvt. J. Surgenor.
Cardington			30.68	779.3	41.6	5.3	87	s.			0.2		10					overcast	John McLaren.
Chatham, School M. E.	30.58	776.7	30.72	780.3	40.3	4.6	92	calm			0		10					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.42	772.7	30.65	778.5	48.6	9.2	85	s.					10					overcast	The Staff.
Fort Napier, Natal	27.56	700.0	29.78	756.4	81.3	27.4	52	ne.			1		2					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	88.0	31.1	66	nw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College																			J. O'Donaghue.
Gibraltar, Mediterranean	30.42	772.7	30.48	774.2	61.2	16.2	80	e.			6		4					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.24	768.1	30.44	773.2	49.3	9.6	89	s.			3		10 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.52	775.2	30.70	779.8	39.9	4.4	89	sse.			1		10					overcast	The Staff.
Guernsey	30.37	771.4	30.68	779.3	44.1	6.7	89	sse.			1		10					overcast	A. Collenette, F. M. S.
Kew, Observatory	30.67	779.0	30.70	779.8	41.5	5.3	83	sse.	4	1.8			10					misty	The Staff.
Leicester, Museum	30.40	772.1	30.67	779.0	41.0	5.0	87	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.47	773.9	30.55	776.0	56.0	13.3	62	ne			3		4					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.24	768.1	30.28	769.1	70.0	21.1	90	s.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.13	765.3	30.68	779.3	39.5	4.2	96	s.			1		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.46	773.7	30.69	779.5	40.7	4.8	85	s.			1		10					overcast	The Staff.
Plymouth	30.57	776.5	30.65	778.5	48.0	8.9	88	se.			1		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.27	768.8	52.6	11.4	85	s.	19	8.5			10						Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.48	774.2	30.55	776.0	32.0	0.0	95	n.			3		10					snowing	W. H. Lyne
Sheffield	30.35	770.9	30.65	778.5	42.6	5.9	95	ssw.			1		10			0	0	overcast	W. F. Cooper.
Silloth Rectory	30.54	775.7	30.58	776.7	48.8	9.3	80	sw.			3		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.65	778.5	41.2	5.1	89	ssw.	10	4.5			10					misty	Rev. S. J. Perry.
Straitfield Turgiss	30.47	773.9	30.70	779.8	42.2	5.7	85	se.			1		10					overcast	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.58	776.7	30.63	778.0	52	11.1	86	se.			4		10					gloomy	W. Newcombe.
Valencia, Observatory	30.38	771.6	30.41	772.4	53.5	11.9	86	sse.	35	15.6			10					d. clouds	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.86	758.4	29.90	759.4	— 7	—21.7	100	w.	1	0.4		2 ck	2 s			0.200	5.1	fair	H. J. Cundall, C. E.
Chatham, N. B.*	29.82	757.4	29.89	759.2	—11	—23.9	100	calm	0	0		2 k	8 ks	w.	w.	0.01	0.3	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.63	752.6	29.65	753.1	2	—16.7	83	wsw.	25	11.2			10 n		calm			light snow	J. McWilliams.
Fort Garry, Manitoba*	28.98	736.1	29.92	760.0	—10	—23.3	95	sw.	5	2.2		0	0			0	0	clear.	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.82	757.4	29.97	761.2	— 2	—18.9	100	w.	3	1.3		0	0			inap.	inap.	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.44	747.8	29.79	756.7	30	— 1.1	88	s.	27	12.1			10 ks		sw.	0.02	0.5	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.49	749.0	29.70	754.4	25	— 3.9	76	sw.	24	10.7			10 s			inap.	inap.	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	28.95	735.3	29.67	753.6	32	0.0	81	w.	23	10.3		5 k	5 ks	w.	w.	0.07	1.8	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.13	739.9	29.85	758.2	33	0.6	89	sw.	13	5.8			10 k		sw.	0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.20	741.7	29.87	758.7	33	0.6	85	w.	28	12.5			10 n		w.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.39	746.5	29.74	755.4	3	—16.1	100	w.			1		10 n		w.	0.25	6.3	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.14	740.1	29.61	752.1	24	— 4.4	88	w.	3	1.3			10 n					light snow	W. H. McIntyre.
Saugeen, Ontario*	28.99	736.3	29.73	755.1	33	0.6	92	sw.	27	12.1			10 s			0.05	1.3	cloudy	K. Stewart.
St. Andrews, N. B.	29.86	758.4	29.92	760.0	11	—11.7	88	w.	1	0.4		0	2 s			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.78	756.4	29.85	758.2	2	—16.7	96	nw.	5	2.2		0	8 ks		nw.	0.30	7.6	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.42	747.3	29.82	757.4	31	— 0.6	78	sw.	16	7.2			10 n			0.02	0.5	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.90	759.4	29.97	761.2	18	— 7.8	83	nw.	13	5.8		3 c	2 k	w.	nw.	0	0	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.43	747.5	29.72	754.9	— 5	—20.6			5	2.2		0	0			0.30	7.6		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Cape St. Francis Lt. House	30.04	763.0	30.07	763.8	74.0	23.3	79	ssw.	21.5	9.6		0	2 k			0.040	1.0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.96	761.0	30.00	762.0	82.2	27.9	60	s.	31	13.9		0	0			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Sub-Series.																			
Hankow	30.32	770.1	30.61	777.5	43.6	6.4	93	e.			1		0			0	0	clear	N. Fitoushkin.
Zi-Ka-Wei, near Shanghai	30.51	774.9	30.53	775.5	35.2	1.8	94	e.	2.2	1.0		0	0			0	0	clear	M. Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From	Lower. From	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.84	783.3	30.89	784.5	34.3	1.3	80	sse.	4	2			0						Oversergent Fischer.
Fanöe	30.80	782.4	30.82	782.9	31.1	—0.5	92	s.			2		10						Overloerer Lauridsen.
Godthaab, Greenland	29.09	738.8	29.13	739.9	3.6	—15.8	81	ene.			4		1						S. Kleinschmidt.
Stykkisholm, Iceland	29.58	751.3	29.62	752.4	32.0	0.0		sw.			6		10					snowing	A. O. Thorlacius.
Thorshavn	30.17	766.3	30.21	767.2	42.8	6.0	81	calm	0	0			0						Overloerer Bergh.
Vestervig	30.71	779.9	30.80	782.2	29.5	—1.4	96	s.			2		10						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.97	761.2	30.64	778.2	50.4	10.2	80	se.			2	2 cki	0			0	0	slightly cl'dy	M. Labroue, Director.
Alençon, Normal School	30.14	765.6	30.69	779.6	37.0	2.8	96	ne.			2	c	0			0	0		M. Nicot, Director.
Arras, Engineer School	30.48	774.3	30.76	781.4	34.2	1.2	100									0	0		M. Klein, Commandant.
Avignon, Normal School	30.69	779.5	30.77	781.5	40.4	8	59	n.			1		0			0	0	clear	M. Girand, Director.
Bar-sur-Seine	30.17	766.3	30.77	781.5	32.0	0.0	96	se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.50	774.7	30.78	781.8	36.3	2.4	96	se.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.75	781.0	33.4	0.8	93	ne.			1		fg		ne.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.34	770.6	30.61	777.5	51.1	10.6	70	se.			2		1		sse.	0.004	0.1	almost clear	M. Rayet, Director.
Bourges, Normal School	30.12	765.1	30.69	779.6	45.5	7.5	77	e.			1		1		e.	0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.41	772.4	30.65	778.6	45.3	7.4	85	sse.			1		9		sse.	0	0		M. de Kermaree, Dir.
Caen, Normal School	30.60	777.2	30.68	779.2	39.9	4.4	90	sse.			1		10			0	0	covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.39	772.0	30.74	780.7	34.0	1.1	100	sse.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.28	769.2	30.84	783.2	33.1	0.6		sse.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.28	743.8	30.69	779.5	48.0	8.9	55	w.			1		0			0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.82	757.3	30.71	780.0	32.4	0.2	100	s.			7		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.88	759.0	30.81	782.5	32.5	0.3	96	se.			1		10	se.	se.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	28.15	715.1	30.81	782.5	42.1	5.6	56	se.			2					0	0		M. Jeanginard, Director.
Grénsque, du. Rhone	29.56	750.7	30.72	780.4	48.7	9.3	44	s.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	30.00	761.9	30.82	782.9	28.4	—2	100	se.			1		fg			0	0	foggy	M. Ablard, Director.
Guéret, Normal School	29.06	738.1	30.69	779.5	48.7	9.3	50	sw.			1	0	2 s			0	0	slightly cl'dy	M. Rivoire, Director.
Lamballe, Normal School	30.39	771.8	30.67	779.0	43.2	6.2	88	se.			1		5		se.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	30.04	763.0	30.61	777.6	53.6	12	54	sw.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.58	770.7	30.68	779.3	42.8	6.0	100	se.			1		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.67	753.0	30.81	782.5	30.2	—1.0	100	e.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.02	762.4	30.34	770.7	33.3	0.7	97	sse.			3		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.41	772.5	30.69	779.4	55.2	12.9	50	ese.			0.1		1		se.	0	0		M. Stephan, Director.
Montlouis l'Institutteur	25.29	642.3	30.13	765.3	37.0	2.8	69	w.	5.6	2.5			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.62	777.8	30.74	780.7	51.8	11	75	ese.			3		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.99	761.8	30.81	783.2	30.2	—1	96	nne.			1		fg			0	0	dense fog	M. Hasse, Director
Nantes, Observatory	30.56	776.3	30.72	780.4	39.2	4	95	ene.			0–1		10			0	0	foggy	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.60	777.1	30.71	780.0	55.0	12.8	65	s.	16.8	7.5			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.59	548.3			29.3	—1.5		ese.			2		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.50	749.3	30.65	778.6	28.4	—2.0		s.			1		fg	s.	s.	0	0	foggy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.05	651.6			43.9	6.6	20	s.			2		0			0	0	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.65	778.6	30.69	779.4	38.5	3.6	92	ese.			1		2		sw.	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.43	772.8	30.65	778.5	48.2	9	78	se.			1		0			0	0	clear	M. Moullot, Director.
Rodez, Normal School	28.42	721.9	30.66	778.8	40.6	4.8	77	e.			1		k			0	0		M. Colrat, Director.
Rouen, Normal School	30.69	779.6	30.74	780.8	39.6	4.2	76	se.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.53	775.5	30.69	779.5	45.3	7.4	75	ssw.			1		1		se.	0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.60	777.2	30.76	781.4	34.5	1.4	100	ene.			1		10			0.008	0.2	covered	M. Renou, Director.
Toulouse, Observatory	29.92	760.0	30.66	778.7	50.7	10.4	95	sse.			3		0			0	0	clear	M Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.21	767.2	30.70	779.7	33.1	0.6	100	sw.			1					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.97	761.3	30.85	783.6	32.9	0.5	84	n.			1	0	1 8			0	0	foggy	Prof. Dr. Hoh.
Berlin	30.69	779.6	30.88	784.3	34.5	1.4	72	s.			1		0			0	0		Prof. Dr. Arndt.
Breslau	30.42	772.6	30.97	786.6	32.7	0.4	54	se.			2		0			0	0		Royal University Obs'y.
Carlsruhe	30.30	771.2	30.84	783.3	32.0	0.0	85	ene.			1		10			0	0		Albert Senz.
Cassel	30.06	763.5	30.78	781.7	33.1	0.6	78	s.			1		0			0	0		Dr. H. Mohl.
Frankfort on the Main	30.47	773.8	30.85	783.8	30.7	—0.7	86	se.			1		10			0	0		Physical Society.
Friedrichshafen	29.31	744.4	30.85	783.6	30.2	—1.0	88	ne.			1		10	ne.		0	0		Wilhelm, Chief Tel.
Hamburg	30.76	781.2	30.85	783.6	30.4	—0.9	84	se.			2		0			0	0	hazy	E. Preller.
Kiel	30.80	782.3	30.82	782.7	32.2	0.1	89	calm			0		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.43	772.9	30.88	784.4	32.4	0.2	71	se.			1		0			0	0		H. Leppig, Asst.
Magdeburg	30.64	778.3	30.85	783.6	32.4	0.2	81	ese.			2		0			0	0		Dr. Assmann.
Memel	30.98	786.9	31.03	788.1	34.0	1.1	87	sw.			2	0	0					clear	Issermann.
Munich	28.91	734.4	30.83	784.0	25.7	—3.5	92	e.			2		10			0	0		Central Station.
Neufahrwasser	31.00	787.5	31.02	787.9	31.5	—0.3	79	s.			2		0			0	0		A. Lothes.
Neustadt, Palatinate	30.27	768.8	30.81	782.5	32.9	0.5	90	ene.			1		10			0	0		Dickauther.
Stuttgart	29.82	757.4	30.78	781.8	31.6	—0.2	89	w.			1		10			0	0		Prof. Dr. Schoder.
Wustrow	30.89	784.7	30.92	785.3	29.7	—1.3	94	se.			1	0	1 8			0	0		Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.22	767.6	30.63	778.1	34.7	1.5		n.			2.0		6			0.035	0.9	snowing	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.03	762.8	30.09	764.2	72.9	22.7	76	wsw.				6		s.		0	0	d. clouds	
Deesa	29.59	751.6	30.07	763.8	79.7	26.5	35	nnw.	8.3	3.7		3		nnw.		0	0	d. clouds	
Bombay	29.97	761.3	30.01	762.2	80.5	26.9	64	nw.	13	5.8		0				0	0	blue sky	
Poona, Yarrowda.	28.14	714.7	29.99	761.7	83.2	28.4	28	nne.	5	2.2		0				0	0	blue sky	
Belganm	27.45	697.1	29.97	761.3	80.8	27.1	29	ne.	3	1.3		0				0	0	blue sky	
Lahore	29.36	745.8	30.14	765.6	60.6	15.9	77	calm	0.2	0.1		0				0	0	blue sky	
Roorkee	29.18	741.2	30.14	765.5	55.2	12.9	91	nw	2.0	0.9		3				0	0		
Agra	29.61	752.1	30.21	767.4	57.2	14.0	81	ne.	4.2	1.9						0	0		
Nagpur	29.00	736.5	30.05	763.2	79.2	26.2	29	calm	2.3	1.0		0				0	0	blue sky	
Jubbulpore	28.74	730.1	30.16	766.0	62.8	17.1	45	calm	0.8	0.4		0				0	0	blue sky	
Lucknow	29.72	755.0	30.12	765.1	60.3	15.7	57	w.	2.8	1.2		0				0	0	blue sky	
Allahabad	29.79	756.8	30.12	765.1	61.6	16.4	69	calm	1.3	0.6		0				0	0	blue sky	
Patna	29.93	760.2	30.12	765.1	64.4	18.0	65	w.	3.0	1.3		2		w.	w.	0	0		
Hazaribagh	28.03	712.0	30.10	764.5	67.6	19.8	36	nw.	4.2	1.9		0				0	0	blue sky	
Cuttack	30.02	762.4	30.10	764.5	75.0	23.9	60	ne.	0.2	0.1		0				0	0	blue sky	
Calcutta, Alipore	30.08	763.9	30.10	764.5	69.0	20.6	69	wsw.	1.0	0.4		0				0	0	blue sky	
Dhubri	29.98	761.6	30.11	764.8	66.0	18.9	61	calm	0.2	0.1		1		nw.		0	0	d. clouds	
Chittagong	30.01	762.2	30.10	764.5	70.8	21.6	62	nw.	2.0	0.9		0				0	0	blue sky	
Sibsagar	29.77	756.2	30.13	765.2	61.3	16.3	86	sw.	2.9	1.3		0				0.19	4.8	blue sky	
Jeypore	28.65	727.7	30.14	765.6	66.4	19.1	49	nnw.	2.0	0.9		3		n.		0	0	d. clouds	
Zanzibar, Africa	29.89	759.2			87.5	30.8	62	nne.	9.9	4.4		3				0	0	d. clouds	
Trichinopoly	29.75	755.6			80.2	26.8	57	e.	1	0.4		2				0	0	d. clouds	
Bellary	28.52	724.4			82.5	28.1	30	e.	2.5	1.1		0				0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.41	772.4	30.84	783.2	45.0	7.2	22	e.	2.5	1.1		0				0	0		Prof. Giovanni Clodig.
Milan	30.34	770.7	30.89	784.7	30.7	— 0.7	99	w.	1.3	0.6		10				0.020	0.5		Prof. Schiaparelli.
Padua	30.75	781.0	30.87	784.0	40.6	4.8	55	nnw.	3.1	1.4		0				0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.92	759.9	30.86	784.3	37.9	3.3	80	ese.	2.5	1.1		0				0	0		Prof. P. F. Denza.
Genoa	30.58	776.7	30.78	781.8	45.1	7.3	49	n.	5.6	2.5		0				0	0		Prof. G. M. Garibaldi.
Mondovi	28.84	732.4	30.84	783.4	38.1	3.4	47	w.			2	0				0	0		Prof. D. C. Bruno.
Pesaro	30.78	781.8	30.84	783.2	39.9	4.4	66	nw.	18.1	8.1		0				0	0		Prof. Luigi Guidi.
Florence	30.51	774.9	30.78	781.7	45.5	7.5	51	ne.			2	0				0	0		Prof. Costantino Pitter.
Leghorn	30.66	778.8	30.75	781.1	45.9	7.7	48	ne.	5.6	2.5		0				0	0		Prof. P. Monte.
Rome	30.49	774.5	30.67	779.1	48.9	9.4	47	nne.	2.5	1.1		0				0	0		Prof. P. S. Ferrari.
Lecce	30.40	772.2	30.67	778.9	44.6	7.0	23	nne.	19.9	8.9		1				0	0		Prof. C. de Giorgi.
Cosenza	29.74	755.4	30.67	779.0	42.1	5.6	69	nnw.	8.7	3.9		2		nw.		0	0		Prof. D. Conti.
Cagliari																			Prof. A. Pacinotti.
Palermo	30.35	770.9	30.61	777.5	52.7	11.5	42	ne.	8.0	3.6		2		ne.		0	0		Prof. G. Ciacciatore.
Syracuse	30.48	774.2	30.53	775.4	52.2	11.2	47	ene.	22.4	10.0		6		nne.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	30.08	764.0	30.63	777.9	48.9	9.4	52	ne.	14.3	6.4		0				0	0		Prof. T. Brioschi.
Stelvio	22.52	571.9			23.7	— 4.6	31	e.			1	0				0	0	clear	Prof. P. F. Denza.
Valdobbia	22.67	575.7			25.7	— 3.5	49	e.			1	0				0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.03	762.7	30.07	763.8	26.2	— 3.2	72	wnw.	12.4	5.5		0		2 s		0.207	5.3	fair	
Hakodate	30.03	762.7	30.04	763.0	32 0	0.0	89	n.	15.0	6.7				1		0.093	2.4	snowing	
Hiroshima, I. M. Obs'y	30.32	770.1	30.34	770.6	38.4	3.6	62	nnw.	3.6	1.6		ck		10 s		0	0	covered	K. Sasaki.
Kanazawa	30.17	766.3	30.28	769.1	29.3	— 1.5	95					ck		9 n				light snow	S. Endo.
Kioto	30.10	764.5	30.29	769.3	30.7	— 0.7	98	w.	1.3	0.6		0		9 n		0.030	0.8	snowing	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.22	767.6	30.43	772.9	35.5	1.9	73	w.	0.4	0.2		0		0		0	0	clear	S. Takehayashi.
Niigata	30.10	764.5	30.14	765.5	32.2	0.1	83	w.	13.3	5.9		3 ck		0		0.055	1.4	fair	
Nobiru	29.99	761.7	30.01	762.2	30.3	— 0.9	64	wnw.	17.2	7.7		0		0		0	0	clear	H. Midzushina.
Supporo					15.5	— 9.2	92	calm	0	0				10		0.255	6.5	covered	
Tokei Obs'y, Yeddo	30.04	763.0	30.11	764.8	32.9	0.5	46	nnw.	8.7	3.9		0		0		0	0	clear	The Staff.
Wakayama	30.24	768.1	30.29	769.3	36.9	2.7	73	nnw.	4.3	1.9		0		1 ks		0.007	0.2	fair	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.76	755.9	29.94	760.5	81.9	27.7	72	wnw.	9.0	4.0		0		2 k		w.	0	0	fair	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.69	601.9	29.91	759.9	53.6	12.0	71	calm	0	0		1 cs		5 k	w.	w.	0	0	½ cloudy	Vicente Fernandez.
Leon	24.45	621.0	30.19	766.7	55.5	13.1	86	n.			1	3 c		0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.72	754.9	29.98	761.6	69.5	20.8	79	n.			2			10 n		se.	0.394	10.0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.11	587.1	30.27	769.0	47.5	8.6	76	calm	0	0		10 ck		0			0	0	covered	The Staff.
Morelia	24.32	617.6	30.57	776.7	47.5	8.6	77	ne.			4	0		0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	23.95	608.2	30.04	763.1	50.7	10.4	83	calm			0	1 cs		0			0	0	fine	M. V de Leon, M. E.
Puebla, Catholic Institute	23.46	595.9	30.42	772.7	41.9	5.5	63	calm	0	0		0		0			0	0		Prof. P. Spina.
San Luis Potosi	24.19	614.7	30.15	765.6	50.9	10.5	66	se.			1			10		e.	0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.79	782.1	30.79	782.1	35.2	1.8		sse.			2					0	0		
Groningen	30.74	780.9	30.80	782.3	32.7	0.4		s.			1					0	0		
Helder	30.79	782.1	30.79	782.1	33.3	0.7		s.			1					0	0		
Hellevoetsluis	30.79	782.0	30.79	782.0	33.1	0.6	99	sse.			1					0	0		
Utrecht	30.76	781.4	30.81	782.6	32.5	0.3	88	sse.			1			10			0	0	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.50	774.7	30.56	776.3	41.9	5.4	82	s.	34	15			10			0.661	16.8		
Brono	30.12	765.0	30.16	766.0	42.4	5.8	84	sw.	27	12			10			0.472	12.0	raining	
Christiania	30.53	775.5	30.69	779.5	32.7	0.4	80	ssw.	11	5			10			0	0		
Gjæsvær	29.42	747.2	29.44	747.8	44.8	7.1		sw.			7		10						
Lodingen	29.75	755.6	29.80	756.8	44.1	6.7	83	sw.			8		10			0.551	14.0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					55.8	13.2	73	nne.	4.3	1.9			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.48	748.8	30.51	775.0	53.1	11.7	53	ene.	15.4	6.9			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.05	763.3	30.14	765.6	65.8	18.8	60	sse.	4.9	2.2			7			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.12	765.1	30.49	774.5	52.2	11.2	63	ene.	15.4	6.9			0			0	0		The Staff.
Ponta Delgada, Azores	30.01	762.2	30.08	764.0	59.0	15.0	72	ne.	2.5	1.1			3			0.020	0.5		
Saint Paul de Loando	29.74	755.4	29.94	760.5	78.1	25.6	90	e.	1.8	0.8			9			blank	blank		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.63	727.1	29.78	756.3	14.5	— 9.7		sw.	45	20			10 n			0.031	0.8		Major K. Lasarew.
Archangel	30.13	765.4	30.15	765.9	23.7	— 4.6	98	wsw.	4	2			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.56	776.1	30.47	774.0	30.7	— 0.7	90	ene	11	5		10 cp	0			blank	blank		Capt. Wisganow.
Barnaul	29.44	747.8	29.97	761.3	22.1	— 5.5	77	s.	4	2			10			0.063	1.6	light clouds	Meteorological Obs'y.
Dorpat	30.64	778.2	30.90	784.9	30.6	— 0.8	98	w.	9	4			10 n			0	0		Observatory.
Ekaterinburg	28.98	736.0	30.01	762.2	9.3	—12.6	76	nw.	13	6			2 s			0	0		Meteorological Obs'y.
Kasan	30.08	763.9	30.37	771.3	18.9	— 7.3	93	w.	7	3			10			0.016	0.4		Observatory.
Kertch	30.38	771.7	30.40	772.2	30.0	— 1.1	94	ne.	18	8			10 n			0	0		Lagorio & Sastyres.
Kieff	30.17	766.2	30.86	783.8	14.2	— 9.9	86	nw.	4	2		cs	10ks;n			0	0		Observatory.
Lugan	30.45	773.3	30.67	778.9	21.9	— 5.6	82	nne.	13	6			10			0	0		Meteorological Obs'y.
Moscow	29.99	761.7	30.50	774.7	30.9	— 0.6	90	n.	7.8	3.5			10 s			0	0		Meteorological Obs'y
Nikolaiev	30.71	780.0	30.78	781.8	22.6	— 5.2	76	nne.	31	14		7 cs	0			0	0	light clouds	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.82	757.3	29.90	759.5	— 9.8	—23.2	77	w.	9	4			0			0	0		Lieut. Iwanow.
Pekin, China	30.37	771.5	30.52	775.1	27.1	— 2.7	41	calm	0	0		0	3 k			0	0		Physical Observatory.
St. Petersburg	30.70	779.8	30.72	780.2	32.2	0.1	85	wnw.	11	5		3 c;cs	0			0	0	light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.65	727.8	30.28	769.2	41.4	5.2	69	calm	0	0			0			0.008	0.2		Telch, A. M.
Tiflis	28.85	732.9	30.34	770.7	36.5	2.5	87	calm	0	0			10			0.079	2.0		Physical Observatory.
Warsaw	30.00	777.1	31.06	788.8	28.0	— 2.2	79	sse.	4	2		0	1ks;s						Astronomical Obs'y.
Wilna	30.56	779.3	31.02	787.8	30.9	— 0.6	92	nw.	4	2			10			0	0	heavy cl'ds	Berg, Assistant.
Yeniseisk	30.00	762.1	30.32	770.2	4.3	—15.4	80	w.	2	1			7			0.012	0.3		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.17	766.3	51	10.6	93	ssw.			6		10			0.3	8.	light rain	Andrew Gibb.
Monach Lt. House, Hebrides																			J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.57	776.4	30.67	779.0	55.4	13	76	e.	3.6	1.6			6			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.54	775.7	30.60	777.2	57.2	14.0	51	se.	6.9	3.1		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.58	700.5	30.76	781.2	33.8	1.0	79	ne.	4.3	1.9		0	1			0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.36	720.3	30.67	779.1	48.9	9.4	59	ne.	11.0	4.9		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.45	773.5	30.61	777.4	56.7	13.7	77	w.	3.4	1.5		5	5	w.		0.272	6.9	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.55	750.5	30.47	773.8	54.0	12.2	51	calm	0	0		0	0			0	0	clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.11	764.8	30.18	766.4	66.6	19.2	89	ese.	0.9	0.4		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.98	761.6	30.04	763.1	74.3	23.5	66	nne.	1.1	0.5		4 c	1 ks			0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.30	769.7	30.40	772.2	60.6	15.9	59	e.	22.0	9.8		0	3		ese.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I.	30.07	763.7	30.16	766.0	82.0	27.8	60	calm	0	0		3 k	2 kn	e.	e.	0	0	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.05	763.3	30.18	766.6	67.9	19.9	83	nnw.	9.6	4.3		4 cs	6 ks	sse.	ne.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.15	765.7	30.19	766.7	28.0	— 2.2	87	sw.			2		10			0	0		
Umea	30.32	770.0	30.37	771.3	23.7	— 4.6	95	sw.			2		7			0	0		
Hernosand	30.36	771.2	30.41	772.5	31.5	— 0.3	61	ssw.			2		0			0	0		
Stockholm	30.63	778.0	30.81	782.5	27.3	— 2.6	87	wsw.			2		0			0	0		
Wisby	30.85	783.5	30.91	785.0	34.9	1.6	82	sw.			2		0			0	0		
Sub Series.																			
Upsala	30.66	778.7	30.74	780.9	27.7	— 2.4	90	sw.	15.7	7.0			10		wsw.	0.118	3.0		S. G. Flueman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.32	744.7	30.82	782.7	31.6	—0.2	92	se.			2					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.60	777.2	33.6	0.9	86	nnw.	22	10.0			10		n.			snowing	The Observatory.
Valona			30.60	777.1	45.7	7.6		nw.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.27	768.9	52.0	11.1	58	n.			1		10 n		sw.	0.40	10.2		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	29.92	760.0	30.01	762.2	24	— 4.4	73	se.	1	0.4		0	0			inap.	inap.	clear	
Alpena, Michigan	29.05	737.9	29.76	755.9	26.5	— 3.1	88	sw.	3	1.3			10 s			0.05	1.3	cloudy	
Atlanta, Georgia	29.00	736.6	30.23	767.8	49.5	9.7	60	sw.	6	2.7		8 ck	2 s	sw.	calm	0	0	cloudy	
Atlantic City, New Jersey	30.15	765.8	30.16	766.1	34.1	1.2	53	sw.	7	3.1		3 cs	0			0	0	clear	
Augusta, Georgia	30.06	763.5	30.26	768.6	44.0	6.7	93	w.	2	0.9		10 c	0			0	0	cloudy	
Baltimore, Maryland	30.12	765.0	30.17	766.3	30	— 1.1	78	w.	5	2.2		3 cs	0	w.		0	0	clear	
Barnegat, New Jersey	30.11	764.8	30.13	765.3	26.4	— 3.1	86	sw.	8	3.6		3 cs	0	w.		0	0	clear	
Bismarck, Dakota	28.10	713.7	30.10	764.5	10	—12.2	80	n.	12	5.4			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.27	692.6	30.20	767.1	12	—11.1	91	n.	2	0.9		0	0			0	0	clear.	
Boston, Massachusetts	29.85	758.2	30.02	762.5	22.4	— 5.3	78	sw.	10	4.5		5 c	0	w.		inap.	inap.	fair	
Brownsville, Texas	30.00	762.0	30.05	763.3	64	17.8	100	ne.	4	1.8			10 s			0.18	4.6	cloudy	
Buffalo, New York	29.07	738.4	29.87	758.7	32	0.0	86	sw.	24	10.7		1 ck	2 s	w.	sw.	0.01	0.3	clear	
Burlington, Vermont	29.53	750.0	29.84	757.9	24.0	— 4.4	88	s.	21	9.4			10 s		w.	0.01	0.3	cloudy	
Cairo, Illinois	29.63	752.6	30.05	763.3	43.3	6.3	90	e.	6	2.7		10 cs	0	s.		0	0	cloudy	
Campo, California	27.14	689.3	29.77	756.1	32.6	0.4	88	calm	0	0			10 n			0.10	2.5	heavy snow.	
Camp Thomas, Arizona																			
Cape Henry, Virginia	30.19	766.8	30.21	767.3	34	1.1	60	sw.	9	4.0		0	0			0	0	clear	
Cape May, New Jersey	30.16	766.1	30.19	766.8	35	1.7	69	s.	19	8.5		4 c	0	w.		0	0	fair	
Castroville, Texas	29.18	741.2	30.03	762.7	57	13.9	100	calm	0	0			10 s			0.13	3.3	cloudy	
Cedar Keys Florida	30.12	765.0	30.14	765.5	65	18.3	90	s.	8	3.6			fg.			0	0	dense fog	
Champaign, Illinois	29.07	738.4	29.94	760.5	35.0	1.7	79	s.	8	3.6		7 c	1 s	s.	s.	0	0	cloudy	
Charleston, S. Carolina	30.18	766.6	30.24	768.1	51	10.6	80	n.	4	1.8		0	0			0	0	clear	
Charlotte, N. Carolina	29.34	745.2	30.23	767.8	38.2	3.4	53	ne.	2	0.9		4 c	fg.	w.		0	0	fair	
Chattanooga, Tennessee	29.37	746.0	30.23	767.8	40.0	4.4	89	se.	3	1.3		9 cs	fg.	w.	calm	0	0	cloudy	
Cheyenne, Wyoming	23.68	601.5	29.93	760.2	35.2	1.8	37	nw.	20	8.9		0	0			0	0	clear	
Chicago, Illinois	29.11	739.4	29.86	758.4	31.7	— 0.2	86	sw.	7	3.1		1 c	0			0	0	clear	
Chincoteague, Virginia	30.18	766.6	30.20	767.1	33	0.6	78	s.	1	0.4		6 ck	0	nw.		0	0	fair	
Cincinnati, Ohio	29.35	745.5	30.04	763.0	41	5.0	73	s.	6	2.7		0	0			0	0	clear	
Cleveland, Ohio	29.17	740.9	29.95	760.7	33	0.6	68	s.	11	4.9		1 c	2 s			inap.	inap.	clear	
Coleman City, Texas	28.11	714.0			48	8.9	86	sw.	11	4.9			10 s			0.02	0.5	cloudy	
Columbus, Ohio	29.11	739.4	30.01	762.2	33	0.6	74	s.	6	2.7		0	0			0	0	clear	
Concho, Texas	27.94	709.7	29.96	761.0	55	12.8	86	sw.	26	11.6		0	0			0	0	clear	
Davenport, Iowa	29.18	741.2	29.89	759.2	32	0.0	78	sw.	2	0.9		hz.	5 s	calm	w.	0	0	fair	
Dayton, Washington T'y	28.43	722.1	30.23	767.8	27	— 2.8	92	sw.	4	1.8			10 s			inap.	inap.	cloudy	
Deadwood, Dakota	25.05	636.5	30.01	762.2	21.3	— 5.9	88	sw.	2	0.9			10 n			0.02	0.5	light snow	
Decatur, Texas					47	8.3	86	s.	12	5.4			10 s			0	0	cloudy	
Delaware Breakwater, Del.	30.16	766.1	30.18	766.6	30	— 1.1	88	s.	13	5.8		6 c;cs	3 s	w.		0	0	cloudy	
Denison, Texas	29.14	740.1	29.98	761.5	51.5	10.8	93	s.	7	3.1			10 s			0	0	cloudy	
Denver, Colorado	24.42	620.3	29.94	760.5	33.0	0.6	57	s.	10	4.5		0	0			0	0	clear	
Des Moines, Iowa	28.91	734.3	29.88	758.9	25	— 3.9	73	w.	1	0.4		3 c	0	w.		0	0	clear	
Detroit, Michigan	29.14	740.1	29.90	759.4	37.3	2.9	89	sw.	14	6.3			10 s		calm	0.01	0.3	cloudy	
Dodge City, Kansas	27.09	688.1	29.84	757.9	37	2.8	92	sw.	12	5.4		4 cs	0			0	0	fair	
Dubuque, Iowa	29.12	739.6	29.89	759.2	24.2	— 4.3	61	sw.	5	2.2		0	0			0	0	clear	
Duluth, Minnesota	29.11	739.4	29.87	758.7	13	—10.6	80	sw.	4	1.8		0	0			0	0	clear	
Eagle Pass, Texas	29.19	741.4	30.03	762.7	58.0	14.4	93	se.	6	2.7			10 s		s.	0.75	19.1	cloudy	
Eagle Rock, Idaho	25.19	639.8	30.15	765.8	—14	—25.6	56	w.	8	3.6		0	0			0	0	clear	
Eastport, Maine	29.88	758.9	29.95	760.7	13	—10.6	61	s.	5	2.2		6 cs	0			0	0	fair	
El Paso, Texas	26.04	661.4	29.92	760.0	41.4	5.2	67	ne.	6	2.7		0	0			0	0	clear	
Erie, Pennsylvania	29.16	740.7	29.93	760.2	32	0.0	78	sw.	20	8.9		0	0			inap.	inap.	clear	
Escanaba, Michigan	29.09	738.9	29.81	757.2	18	— 7.8	84	sw.	5	2.2			10 s			0	0	cloudy	
Florence, Arizona																			
Fort Apache, Arizona	24.81	630.2	29.93	760.2	38	3.3	100	se.	6	2.7			10 n		calm	0.37	9.4	heavy rain	
Fort Assinnaboine, Montana	27.26	692.4	30.30	769.6	13	—10.6	66	w.	2	0.9		0	8 s			0.01	0.3	cloudy	
Fort Bennett, Dakota	28.23	717.0	29.97	761.2	18	— 7.8	87	n.	8	3.6			10 s			0.05	1.3	light snow	
Fort Benton, Montana	27.33	694.2	30.31	769.9	14	—10.0	83	calm	0	0			10 s		calm	0.05	1.3	cloudy	
Fort Buford, Dakota	28.04	712.2	30.24	768.1	2	—16.7	75	nw.	8	3.6		0	0			0	0	clear	
Fort Custer, Montana	26.70	678.2	30.08	764.0	19	— 7.2	87	nw.	16	7.2			10 n		calm	inap.	inap.	light snow	
Fort Davis, Texas	25.03	635.8	30.01	762.2	46	7.8	86	s.	8	3.6			10 ks		s.	0	0	cloudy	
Fort Elliott, Texas	27.11	688.6	30.04	763.0	39	3.9	38	se.	4	1.8		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.33	745.0	29.93	760.2	50.0	10.0	93	se.	8	3.6			10 s		s.	0	0	cloudy	
Fort Grant, Arizona	25.13	638.3	30.03	762.7	38	3.3	42	se.	8	3.6			10 n			0.20	5.1	light rain	
Fort Griffin, Texas	28.61	726.7	29.99	761.7	49	9.4	93	s.	1	0.4			10 s		calm	0.15	3.8	cloudy	
Fort Keogh, Montana	27.42	696.5	30.11	764.8	16	— 8.9	70	ne.	16	7.2			10 s		ne.	0.04	1.0	cloudy	
Fort Macon, North Carolina	30.25	768.3	30.26	768.6	42	5.6	93	ne.	4	1.8		hz.	hz.	calm	calm	0	0	light haze	
Fort McKavett, Texas	27.68	703.1	30.08	764.0	55.8	13.2	86	sw.	14	6.3			10 s			0.07	1.8	cloudy	
Fort Missoula, Montana	26.68	677.7	30.14	765.5	18	— 7.8	100	sw.	11	4.9		0	0			0.02	0.5	clear	
Fort St. Michaels, Alaska	29.48	748.8	29.52	749.8	12	—11.1	100	ne.	22	9.8			10 n			0.06	1.5	light snow	
Fort Shaw, Montana	26.43	671.3	30.29	769.4	11	—11.7	80	n.	4	1.8		7 cs	0			0.07	1.8	fair	
Fort Sill, Indian Territory	28.67	728.2	30.00	762.0	46	7.8	93	s.	4	1.8			10 s			0	0	cloudy	
Fort Stevenson, Dakota	28.08	713.2	30.14	765.5	6	—14.4	76	nw.	3	1.3		2 c	4 s	w.	w.	0	0	fair	
Fort Verde, Arizona					35.4	1.9	82	w.			1		10 n			0.93	23.6	light rain	
Fredericksburg, Texas	28.20	716.3	30.02	762.5	56	13.3	93	sw.	8	3.6		0	8 ks		sw.	0.13	3.3	cloudy	
Galveston, Texas	30.01	762.2	30.05	763.3	64	17.8	100	se.	4	1.8			fg			0.01	0.3	dense fog	
Grand Haven, Michigan	29.13	739.9	29.84	757.9	35.5	1.9	79	w.	12	5.4			10 s		w.	0.07	1.8	cloudy	
Hatteras, North Carolina	30.21	767.3	30.23	767.8	41	5.0	82	ne.	1	0.4		0	0			0	0	clear	
Helena, Montana	25.73	653.5	30.16	766.1	16	— 8.9	70	w.	12	5.4			10 s		w.	0.16	4.1	cloudy	
Henrietta, Texas	28.98	736.1	30.05	763.3	47	8.3	86	s.	3	1.3			10 s			0	0	cloudy	
Huron, Dakota	28.44	722.4	29.98	761.5	20	— 6.7	73	n.	11	4.9			10 s			0	0	cloudy	
Indianapolis, Indiana	29.13	739.9	29.97	761.2	36.5	2.5	69	s.	4	1.8		1 k	0	s.		0	0	clear	
Indianola, Texas	30.04	763.0	30.07	763.8	60.1	15.6	100	nw.	12	5.4			10 s			0.09	2.3	cloudy	
Jacksboro, Texas	28.74	730.0	29.98	761.5	49	9.4	93	se.	9	4.0			10 s			0	0	cloudy	
Jacksonville, Florida	30.18	766.6	30.24	768.1	59	15.0	87	nw.	1	0.4		0	fg.			0.02	0.5	clear	
Keokuk, Iowa	29.17	740.9	29.87	758.7	34.5	1.4	82	sw.	2	0.9			10 s		sw.	0	0	cloudy	
Key West, Florida	30.17	766.3	30.20	767.1	72.0	22.2	90	e.	3	1.3		0	5 s			0	0	fair	
Kittyhawk, North Carolina	30.23	767.8	30.25	768.3	40	4.4	73	s.	6	2.7		hz.	0			0	0	clear	
Knoxville, Tennessee	29.16	740.7	30.24	768.1	33.2	0.7	88	ne.	4	1.8		9 cs	0	w.		0	0	cloudy	
La Crosse, Wisconsin	29.02	737.1	29.86	758.4	27	— 2.8	77	calm	0	0		0	0			0	0	clear	
La Mesilla, New Mexico	25.92	658.4	29.95	760.7	33.5	0.8	83	calm	0	0		0	9 s		sw.	0	0	cloudy	
Leavenworth, Kansas	28.90	734.0	29.86	758.4	38	3.3	82	calm	0	0			10 s			0	0	cloudy	
Lewiston, Idaho	29.35	745.5	30.22	767.6	29.5	— 1.4	42	nw.	7	3.1		0	1 s		nw.	0.01	0.3	clear	
Little Rock, Arkansas	29.68	753.9	30.01	762.2	47	8.3	93	s.	1	0.4			10 s			0	0	cloudy	
Los Angeles, California	29.29	744.0	29.69	754.1	45.0	7.2	83	ne.	5	2.2			10 s		calm	0	0	cloudy	
Louisville, Kentucky	29.44	747.8	30.03	762.7	44.8	7.1	69	s.	9	4.0		2 cs	0			0	0	clear	
Lynchburg, Virginia	29.46	748.3	30.18	766.6	33.8	1.0	60	calm	0	0		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	28.78	731.0	29.87	758.7	23	— 5.0	73	s.	5	2.2		0	0			0	0	clear	
Marquette, Michigan	28.95	735.3	29.73	755.1	23	— 5.0	73	nw.	12	5.4		0	5 s		w.	0	0	fair	
Mason, Texas	28.30	718.8	30.04	763.0	52	11.1	93	w.	10	4.5			10 s		w.	0.05	1.3	cloudy	
Memphis, Tennessee	29.71	754.6	30.07	763.8	50	10.0	93	s.	6	2.7			10 s		calm	0	0	cloudy	
Milwaukee, Wisconsin	29.04	737.6	29.84	757.9	27	— 2.8	88	sw.	7	3.1		0	4 s			0	0	fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.11	764.8	30.15	765.8	62.0	16.7	100	e.	2	0.9	.....	1 cs	0	.....	.....	0.10	2.5	clear	
Montgomery, Alabama	29.95	760.7	30.19	766.8	55.6	13.1	81	e.	3	1.3	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	
Moorhead, Minnesota	28.89	733.8	30.00	762.0	2	—16.7	72	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Morgantown, W. Virginia	29.07	738.4	30.13	765.3	41.5	5.3	64	sw.	8	3.6	.....	3 cs	0	w.	.....	0	0	clear	
Mt. Washington, N. H.	23.23	590.0	29.86	758.4	0.0	—17.8	89	nw.	80	35.8	.....	.....	10 s	.....	nw.	0.12	3.0	cloudy	
Nashville, Tennessee	29.56	750.8	30.12	765.0	43.3	6.3	86	nw.	2	0.9	.....	.....	10 ks	.....	w.	0	0	cloudy	
New Haven, Connecticut	29.94	760.5	30.06	763.5	23	— 5.0	73	sw.	8	3.6	.....	0	hz	.....	.....	0.01	0.3	clear	
New London, Connecticut	30.04	763.0	30.09	764.3	29	— 1.7	67	w	7	3.1	.....	0	0	.....	.....	0	0	clear	
New Orleans, Louisiana	30.05	763.3	30.11	764.8	66.4	19.1	93	se.	4	1.8	.....	.....	10 s	.....	.....	0.11	2.8	cloudy	
Newport, Rhode Island	30.02	762.5	30.07	763.8	31.8	— 0.1	69	w.	17	7.6	.....	0	1 s	.....	sw.	inap.	inap.	clear	
New River, N. Carolina	.....	.....	.....	.....	40	4.4	82	n.	.....	.....	1	0	2 s	.....	.....	0	0	clear	
New Shoreham, Rhode I'd.	30.06	763.5	30.09	764.3	32.0	0.0	68	nw.	23	10.3	.....	0	1 k	.....	.....	0	0	clear	
New York, New York	29.94	760.5	30.13	765.3	27.5	— 2.6	82	sw.	12	5.4	.....	0	0	.....	.....	inap.	inap.	clear	
Norfolk, Virginia	30.18	766.6	30.22	767.6	35	1.7	79	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	
North Platte, Nebraska	26.73	678.9	29.85	758.2	19.6	— 6.9	74	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Olympia, Washington T'y	30.15	765.8	30.19	766.8	36.0	2.2	89	s.	1	0.4	.....	.....	10 s	.....	calm	0.02	0.5	cloudy	
Omaha, Nebraska	28.60	726.4	29.87	758.7	26.3	— 3.2	73	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	30.40	772.1	30.42	772.7	—25.6	—32.0	61	wnw.	7	3.1	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	29.52	749.8	29.87	758.7	27.0	— 2.8	59	s.	12	5.4	.....	4 cs	0	w.	.....	0.02	0.5	fair	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	30.16	766.1	30.19	766.8	62.4	16.9	96	ne.	2	0.9	.....	0	1 s	.....	.....	0	0	clear	
Philadelphia, Pa.	30.10	764.5	30.16	766.1	27	— 2.8	77	w.	7	3.1	.....	3 cs	hz	w.	.....	0	0	fair	
Pike's Peak, Colorado	17.38	441.4	30.08	764.0	5	—15.0	61	sw.	30	13.4	.....	0	0	.....	.....	0	0	clear	
Ploche, Nevada	23.82	605.0	30.02	762.5	22	— 5.6	76	nw.	8	3.6	.....	0	0	.....	.....	0.01	0.3	clear	
Pittsburg, Pennsylvania	29.20	741.7	30.06	763.5	32.0	0.0	54	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Port Eads, Louisiana	30.14	765.5	30.14	765.5	62.1	16.7	100	se.	5	2.2	.....	0	fg	.....	.....	0.10	2.5	clear	
Port Huron, Michigan	29.16	740.7	29.89	759.2	29.8	— 1.2	84	sw.	16	7.2	.....	10 cs	0	calm	.....	0	0	cloudy	
Portland, Maine	29.88	758.9	29.93	760.2	24.5	— 4.2	88	sw.	8	3.6	.....	4 cs	3 s	sw.	calm	0	0	fair	
Portland, Oregon	30.15	765.8	30.22	767.6	36.0	2.2	89	w.	3	1.3	.....	.....	10 s	.....	sw.	inap.	inap.	cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	50	10.0	44	s.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Prescott, Arizona	24.44	620.8	29.82	757.4	33	0.6	92	s.	2	0.9	.....	.....	10 n	.....	calm	0.70	17.8	light snow	
Punta Rassa, Florida	30.18	766.6	30.19	766.8	65.5	18.6	92	ne.	4	1.8	.....	.....	10 ks	.....	se.	0	0	cloudy	
Red Bluff, California	29.49	749.0	29.87	758.7	39.0	3.9	54	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Rio Grande City, Texas	29.85	758.2	30.10	764.5	66	18.9	78	se.	4	1.8	.....	.....	10 s	.....	calm	0	0	cloudy	
Rochester, New York	29.17	740.9	29.88	758.9	25	— 3.9	73	sw.	19	8.5	.....	3 cs	0	w	.....	0.15	3.8	clear	
Roseburg, Oregon	29.59	751.6	30.16	766.1	37.2	2.9	84	n.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	
Sacramento, California	29.71	754.6	29.79	756.7	33.8	1.0	72	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.33	745.0	29.97	761.2	41.9	5.5	83	s.	13	5.8	.....	.....	10 s	.....	.....	0	0	cloudy	
St. Paul, Minnesota	28.96	735.6	29.91	759.7	24.0	— 4.4	73	w.	3	1.3	.....	.....	10 s	.....	w.	0	0	cloudy	
St. Vincent, Minnesota	28.99	736.3	29.97	761.2	— 7	—21.7	100	w.	7	3.1	.....	0	0	.....	.....	0	0	clear	
Salt Lake City, Utah	25.51	647.9	30.08	764.0	5	—15.0	74	calm	0	0	.....	0	0	.....	.....	0	0	clear	
San Antonio, Texas	29.27	743.4	30.00	762.0	55.6	13.1	62	se.	2	0.9	.....	.....	fg	.....	.....	0.15	3.8	dense fog	
San Diego, California	29.66	753.4	29.73	755.1	41.4	5.2	88	ne.	6	2.7	.....	.....	10 n	.....	.....	0.61	15.5	light rain	
Sandusky, Ohio	29.22	742.2	29.94	760.5	34	1.1	89	s.	15	6.7	.....	.....	10 s	.....	.....	0	0	cloudy	
Sandy Hook, New Jersey	30.09	764.3	30.13	765.3	28.0	— 2.2	64	w.	14	6.3	.....	0	0	.....	.....	0	0	clear	
San Francisco, California	29.77	756.1	29.84	757.9	40	4.4	82	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Santa Fé, New Mexico	23.06	585.7	30.06	763.5	34	1.1	96	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	
Savannah, Georgia	30.15	765.8	30.25	768.3	52	11.1	80	n.	2	0.9	.....	0	0	.....	.....	inap.	inap.	clear	
Shreveport, Louisiana	29.78	756.4	30.03	762.7	55	12.8	93	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	
Silver City, New Mexico	24.03	610.4	29.89	759.2	33	0.6	81	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	
Sitka, Alaska	30.04	763.0	30.12	765.0	31	— 0.6	78	se.	9	4.0	.....	.....	10 s	.....	se.	0.09	2.3	cloudy	
Smithville, North Carolina	30.21	767.3	30.25	768.3	43	6.1	83	ne.	5	2.2	.....	5 ck	0	w.	.....	0	0	fair	
Spokane Falls, Wash. Ter.	28.10	713.7	30.24	768.1	6	—14.4	87	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Springfield, Illinois	29.20	741.7	29.93	760.2	37.5	3.1	82	s.	7	3.1	.....	hz	4 s	.....	sw.	0	0	dense haze	
Springfield, Massachusetts	29.90	759.4	30.04	763.0	22.0	— 5.6	70	s.	6	2.7	.....	0	0	.....	.....	inap.	inap.	clear	
Springfield, Mo.	28.47	723.1	30.05	763.3	46	7.8	74	s.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	
Stockton, Texas	26.86	682.2	30.00	762.0	54.0	12.2	86	s.	6	2.7	.....	.....	10 s	.....	s.	inap.	inap.	cloudy	
Thatcher's Island, Mass.	29.97	761.2	30.03	762.7	27.0	— 2.8	77	nw.	20	8.9	.....	6 ck	0	.....	.....	0.01	0.3	fair	
Toledo, Ohio	29.18	741.2	29.92	760.0	32	0.0	78	s.	9	4.0	.....	2 c	0	.....	.....	0	0	clear	
Tucson, Arizona	27.34	694.4	29.84	757.9	46	7.8	93	sw.	2	0.9	.....	.....	10 n	.....	.....	0.07	1.8	light rain	
Umatilla, Oregon	29.94	760.5	30.33	770.4	25.0	— 3.9	88	e.	2	0.9	.....	0	2 s	.....	.....	0	0	clear	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.81	757.2	30.08	764.0	58	14.4	93	se.	1	0.4	.....	.....	10 s	.....	calm	0.03	0.8	threatening	
Visalia, California	29.41	747.0	29.80	756.9	26.5	— 3.1	76	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Washington, D. C.	30.05	763.3	30.17	766.3	28	— 2.2	88	s.	1	0.4	.....	3 c	0	sw.	.....	0	0	fair	
West Los Animas, Colorado	25.74	653.8	29.88	758.9	22	— 5.6	88	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wickenburg, Arizona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Williamsport, Pa.	29.45	748.0	30.08	764.0	16	— 8.9	48	ne.	2	0.9	.....	hz	1 ks	.....	.....	0.01	0.3	dense haze	
Wilmington, N. Carolina	30.19	766.8	30.25	768.3	42	5.6	73	ne.	1	0.4	.....	5 k	0	w.	.....	0	0	fair	
Winnemucca, Nevada	25.55	649.0	30.09	764.3	2	—16.7	76	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass.	30.01	762.2	30.05	763.3	33	0.6	68	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Yankton, Dakota	28.45	722.6	29.87	758.7	20	— 6.7	70	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	29.62	752.3	29.77	756.1	40.2	4.6	91	se.	7	3.1	.....	0	2 s	.....	.....	0.70	17.8	clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.04	559.8	.....	.....	51.5	10.8	78	calm	0	0	.....	0	0	.....	.....	0	0	clear	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.13	765.3	30.14	765.5	75	23.9	90	e.	.....	.....	.....	2 k	5 ks	e.	e.	0.50	12.7	light rain	J. A. Racker.
Buenaventura, U. S. C.	29.94	760.5	29.96	761.0	78	25.6	90	sw.	4	1.8	.....	.....	10 n	.....	sw.	2.35	59.7	heavy rain	J. I. Plume.
Guadeloupe, W. I.	30.05	763.3	30.07	763.8	78	25.6	86	e.	.....	.....	.....	5 ks	0	.....	.....	0	0	.....	B. Bigar.
Havana, Cuba, W. I.	30.17	766.3	30.22	767.6	70	21.1	94	calm	0	0	.....	0	2 ks	.....	calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.08	764.0	30.09	764.3	64.4	18.0	87	n.	1	0.4	.....	0	0	.....	.....	0	0	fine	Robert Johnstone
Navassa, W. I.	30.01	762.2	30.09	764.3	77	25.0	69	e.	7	3.1	.....	5 ck	2 s	se.	e.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.06	763.5	30.06	763.5	78.5	25.8	84	e.	.....	.....	2	7 ps	5 k	e.	.....	0.150	3.8	½ cloudy	Dr. O. J. Hering
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.94	760.5	83	28.3	76	n.	.....	.....	1	2 c	4 k	calm	n.	0	0	fair	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	73.4	23.0	88	ne.	.....	.....	4	cs	1 ks	.....	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.10	764.5	30.13	765.3	73	22.8	81	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.04	737.6	29.10	739.1	—14.0	—25.6	100	nw.	44	19.7	.....	.....	10 n	.....	nw.	0.26	6.6	.....	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India	29.97	761.2	79.2	26.2	77	nne.			2		3							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.63	778.0	49	9.4	50	ese.			4		2							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 1° 17′, E. 103° 20′	29.93	760.2	81	27.2	70	ne.			2–3		3	sw.						d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.94	760.5	76	24.4	69	ese.			4–5		0							squally	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.93	760.2	66	18.9	100	s.			2		10							foggy	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.58	776.7	34	1.1	90	n.			2		10	nne.						snowing	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.43	772.9	60	15.6		ene.			4–7		3	ne.				3	wnw.	squally	Lieut. J. L. Burr.
H. M. S. Cormorant, S. 29° 00′, E. 154° 10′	29.86	758.4	75	23.9		nw.			2		10	ne.				2	n.	overcast	Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.51	774.9	41.5	5.3	83	calm			0		5	ne.						d. clouds	Capt. S. Long.
H. M. S. Diamond, S. 29° 40′, W. 200° 00′	30.13	765.3	71	21.7	75	sse.			4		9					3	s.	d. clouds.	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.06	763.5	65	18.3	78	wnw.			2–3		8	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 09′, W. 82° 21′	30.17	766.3	69.5	20.8	100	calm			0		1							blue sky	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 20′, W. 60° 40′	29.56	750.8	56	13.3	74	wnw.			1		5					1–2	wnw.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.92	760.0	84	28.9		nne.			2–3		4							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.12	765.0	35	1.7		n.			2–3		2							d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, S. 5° 44′, W. 28° 40′	30.00	762.0	78	25.6	95	ese.			3–4		9					2	ese.	d. clouds	Capt C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.27	768.8	39	3.9	72	nw.			1		8	nw.						misty	Capt. R. F. Moskyn.
H. M. S. Gannet, Coquimbo, Chili	29.94	760.5	60	15.6	88	nnw.			4		10							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 48° 00′, W. 61° 40′	29.68	753.9	51	10.6	86	w.			3		4							misty	Capt. L. Jones.
H. M. S. Iris, Off Tripoli, Syria	30.24	768.1	53	11.7	66	w.			1–2		8	w.				3	n.	d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.31	769.9	61	16.1	88	calm			0		3	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	30.23	767.8	63.6	17.6	90	ne.			3–4		0					3	nne.	misty	Capt. A. Carpenter.
H. M. S. Malabar, Bombay, India	30.02	762.5	78	25.6	90	nw.			2–3		3	nw.						d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, Barbadoes, West Indies	30.07	763.8	76	24.4	86	ne.			1		9	ne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 19° 48′, E. 57° 55′	29.93	760.2	82	27.8	83	calm			0		3							d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 23° 49′, W. 7° 05′	30.11	764.8	77	25.0	97	nne.			1		7					1	ese.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, N. 29° 00′, E. 50° 45′	30.26	768.6	74.1	23.4		ne.			1									d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.16	766.1	34	1.1	90	calm			0		4							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.09	764.3	80.5	26.9	78	nne.			2		3	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis																			Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 30′, W. 78° 50′	30.07	763.8	77	25.0	72	ene.			2		0					2	ese.	blue sky	Capt. C. G. Fane.
H. M. S. Triumph, Tabogo Id., Panama Bay	29.93	760.2	78	25.6	90	nnw.			3		2	calm						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 20° 00′, E. 38° 20′	30.09	764.3	75	23.9	100	n.			3		8	n.				3	nne.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.09	764.3	73	22.8		n.			2		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark																			Capt. T. P. Nesham.
H. M. S. Zephyr, N. 34° 00′, E. 132° 45′	30.33	770.4	41	5.0	83	nw.			2–3		7	nw.				5	nw.	squally	Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candiddos Reis.
Quanza, Santiago, Cape Verd Ids	29.98	761.4	79.7	26.5	66	ne.			3		0					2	ne.	blue sky	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stocknolm.																			
H. M. Corvette Balder, N. 15° 24′, W. 61° 35′	30.11	764.9	78.3	25.7	80	ne.			3		3							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.15	765.8	66	18.9	89	nne.	5	2.2	.....	.....	2	.....	se.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	29.95	760.7	21	— 6.1	.....	sw.	7	3.1	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Naval Hospital Yokohama, Japan	29.97	761.2	34	1.1	62	n.	.....	.....	2	.....	2	.....	w.	0	0	.....	.....	clear	
Adams, Callao, Peru	29.77	756.1	69	20.6	95	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	sm'h	s.	cloudy	
Alaska, S. 22° 23′, W. 70° 47′	29.97	761.2	66	18.9	89	s.	.....	.....	1	.....	10	.....	.....	0	0	sm'h	.....	cloudy	
Alert, Hong Kong, China*	30.16	766.1	63	17.2	72	e.	.....	.....	3	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alliance, Boston, Mass.*†	30.02	762.5	27	— 2.8	88	wsw.	.....	.....	1	.....	2	.....	.....	0	0	.....	.....	clear	
Ashuelot, Tientsin, China	30.53	775.4	29	— 1.7	100	se.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, S. 17° 16′, W. 37° 56′	30.04	763.0	83	28.3	83	ne.	3	1.3	.....	.....	2	.....	n.	0	0	light	ne.	fair	
Colorado, New York, N. Y	30.08	764.0	28	— 2.2	77	sw.	3	1.3	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Essex, N. 35° 48′, W. 60° 09′	29.98	761.5	56	13.3	38	nnw.	.....	.....	5-6	.....	8	.....	.....	.....	.....	long	nw.	cloudy	
Franklin, Norfolk, Va	30.23	767.8	34	1.1	79	sw.	6	2.7	.....	.....	10	.....	w.	0	0	.....	.....	fair	
Galena, N. 11° 39′, W. 20° 24′	29.98	761.5	76	24.4	82	nne.	.....	.....	3	.....	2	.....	.....	.....	.....	mod.	ne.	clear	
Independence, N. Yard, Mare I'd, Cal.	29.69	754.1	35	1.7	54	calm	0	0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La	30.10	764.5	65	18.3	94	se	.....	.....	2	.....	10	.....	se.	.....	.....	.....	.....	foggy	
Lackawanna, Valparaiso, Chili†	30.02	762.5	65	18.3	94	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Lancaster, Villafranca, France	30.68	779.3	58	14.4	64	e.	.....	.....	1	.....	2	.....	e.	0	0	.....	.....	fair	
Michigan, Erie, Pa	29.72	754.9	32	0.0	.....	s.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	clear	
Minnesota, Newport, R. I	30.05	763.3	34	1.1	79	wsw.	8	3.6	.....	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Monocacy, Yokohama, Japan	30.13	765.3	37	2.8	71	nw.	.....	.....	2	.....	2	.....	nw.	.....	.....	.....	.....	fair	
Nipsic, Naples, Italy	30.67	779.0	52	11.1	47	ene.	.....	.....	3	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.04	763.0	67	19.4	100	se.	.....	.....	2	.....	10	.....	nnw.	.....	.....	long	w.	foggy	
Palos, Hong Kong, China	30.32	770.1	58	14.4	82	e.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C.	30.18	766.6	30	— 1.1	.....	s.	.....	.....	1	.....	2	.....	calm	.....	.....	.....	.....	fair	
Pensacola, S. 22° 06′, W. 74° 18′	30.04	763.0	69	20.6	90	se.	.....	.....	1-2	.....	10	.....	se.	0	0	long	sse.	cloudy	
Powhatan, Boston, Mass	30.00	762.0	23	— 5.0	85	sw	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	hazy	
Quinnebaug, Villafranca, France	30.74	780.8	56	13.3	63	ese.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear	
Ranger, N. 17° 04′, W. 100° 34′*	29.88	758.9	76	24.4	82	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, Pago Pago, Samoa Islands*	29.70	754.4	82	27.8	96	calm	.....	.....	0	.....	10	.....	.....	1.50	38.1	.....	.....	rainy	
Shenandoah, Montevideo, Uruguay*	30.03	762.7	74	23.3	68	n.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
St Louis, Lengue Island, Pa	30.39	771.9	27	— 2.8	77	sw.	6	2.7	.....	.....	2	.....	.....	0	0	.....	.....	clear	
Swatara, Kobe, Japan*	30.15	765.8	40	4.4	73	nnw.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	hazy	
Tennessee, New York, N. Y	30.11	764.8	29	— 1.7	67	sw.	4	1.8	.....	.....	2	.....	.....	0	0	.....	.....	hazy	
Vandalia, St. Georges, Grenada, W.I.	30.06	763.5	81	27.2	70	ne.	.....	.....	1	.....	5	.....	e.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass	30.01	762.2	23	— 5.0	86	sw.	2	0.9	.....	.....	5	.....	sw.	0	0	.....	.....	hazy	
Wachusetts, N. 52° 40′, W. 128° 30′	30.27	768.8	32	0.0	.....	calm	.....	.....	0	.....	5	.....	.....	0	0	.....	.....	fair	
Wyoming, Port Royal, S. C	30.20	767.1	49	9.4	85	calm	0	0	.....	.....	2	.....	w.	0	0	.....	.....	clear	
Yantic, Kingston, Jamaica, W.I.*	30.03	762.7	75	23.9	81	nnw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 45° 20′, W. 59° 30′	30.10	764.5	12	—11.1	.....	wnw.	6	.....	10	.....	w.	2 h'r	snow	4	nnw.	snowin	C. Gapon.
S. S. Polynesian, Capt. Robt. Brown, Boston, Mass*	29.76	755.9	23	--5.0	.....	w.	4	.....	2	.....	ne.	1 h'r	snow	.....	.....	clear	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, N. 46° 01′, W. 54° 20′*	29.60	751.8	12	—11.1	.....	nw.	7	.....	7	.....	nw.	.....	.....	h'vy	nw.	cloudy	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, N. 46° 37′, W. 46° 59′*	29.18	741.2	19	—7.2	.....	nw.	8	.....	.....	.....	nw.	6 h'r	snow	h'vy	nw.	cloudy	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, N. 41° 42′, W. 65° 01′	29.95	760.7	28	—2.2	100	nw.	6	.....	10?	.....	ne.	.....	.....	mod.	n.	clear?	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 52° 54′, W. 24′ 32′†	29.91	759.7	47	8.3	70	s.	4	.....	2	.....	sw.	mod.	mod	r'gh	sw.	clear	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England†*	30.52	775.2	45	7.2	100	s.	1	.....	8	.....	s.	.....	.....	.....	.....	fair	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†	30.58	776.7	55	12.8	93	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Assyria, Capt. James Brown, N. 40° 25′ W. 73° 40′*†	30.27	768.8	34	1.1	.....	wsw.	5	.....	2	.....	w.	.....	.....	sm'h	.....	clear.	J. Brown.
Utopia, Capt. A. McRitchie, N. 47° 51′, W. 22° 54′*†	30.02	762.5	56	13.3	93	se.	2	.....	7	.....	se.	o	o	h'vy cf'd	.....	.....	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 18° 40′, W. 72° 34′†*	30.21	767.3	75	23.9	85	ne.	6	.....	2	.....	calm	o	o	sm'h	.....	fair	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Cartagena, U. S. C.*	29.94	760.5	77	25.0	.....	nne.	5	.....	o	.....	.....	o	o	.....	.....	very fine	J. Sandberg.
S. S. Athos, Capt. C. G. Pearse, N. 24° —′, W. 75° —′	29.83	757.7	.....	.....	.....	n.	2	.....	1	.....	n.	o	o	mod.	ne.	clear	Fisher & Weldon.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, N. 43° 12′, W. 66° 10′*†	30.05	763 3	34	1.1	61	sw.	.....	.....	.....	.....	w.	o	o	short	sw.	cloudy	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
British Merchant, Capt. E. J. Molony, N. 4° 28′, E. 88° 35′	29.95	760.7	81.2	27.3	70	nne.	4	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Bk. Caldew, Capt. W. Peterson S. 24° 47′, W. 78° 16′	30.14	765.5	66	18.9	.....	se	4	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Cipero, Capt. W. N. Lailey N. 45° 19′, W. 15° 12′	30.29	709.4	58	14.4	87	s.	5	.....	9	.....	.....	.....	.....	3	sse.	misty	.....
S. City of Agra, Capt. Thos. Young, S. 5° 30′, W. 24° 53′	30.03	762.7	79.7	26.5	.....	ese.	4	.....	9	.....	.....	.....	.....	.....	.....	squally	.....
Bk. Glaramara, Capt. R. Morton, N. 22° 05′, W. 39° 13′	30.23	767.8	72	22.2	63	ene.	3	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Glencairn, Capt. R. S. Tannock, S. 41° 30′, E. 18° 48′	29.99	761.7	59.5	15.3	82	wsw.	3	.....	10	.....	.....	.....	.....	.....	.....	misty	.....
S. S. Gordon Castle, Capt. W. Waring, N. 47° 59′, W. 5° 47′	30.69	779.5	56.8	13.8	80	se.	4	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
Hermine, Capt. S. G. Jones, S. 32° 05′, W. 84° 00′	30.27	768.8	66.0	18.9	90	sw.	1	.....	9	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Humboldt, Capt. A. W. Jeffery, S. 31° 01′, W. 49° 32′	30.04	763.0	74	23.3	72	ne.	5	.....	9	.....	.....	.....	.....	.....	.....	overcast	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 13° 12′, E. 88° 37′	29.78	756.4	80.7	27.1	87	ene.	5	.....	7	.....	.....	.....	.....	.....	.....	showery	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 13° 58′, W. 34° 57′	30.01	762.2	86	30.0	83	e.	3	.....	2	.....	.....	.....	.....	.....	.....	blue sky	.....
Minho, Capt. J. Lawson, N. 7° 39′, W. 27° 27′	29.99	761.7	78.5	25.8	73	nne.	5	.....	0	.....	.....	.....	.....	.....	.....	misty	.....
Naiad, Capt. J. Smith, S. 11° 28′, W. 25° 16′	30.05	763.3	78.1	25.6	82	ene.	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 48° 11′, W. 64° 09′	29.70	754.4	58	14.4	87	w.	4	.....	9	.....	.....	.....	.....	.....	.....	misty	.....
Queen of Cambria, Capt. M. Parry, S. 41° 53′, E. 3° 58′	29.83	757.7	58.2	14.6	87	nnw.	5	.....	9	.....	.....	.....	.....	.....	.....	overcast	.....
S. Superb, Capt. Berridge, N. 12° 02′, W. 35° 06′	30.06	763.5	74.4	23.6	95	nne.	4	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham Bristol, England†*	30.50	774.7	48	8.9	.....	e.	2	.....	10	.....	e.	o	o	.....	.....	overcast	Wm. Flitt.
CALIFORNIA AND MEXICAN S. S. CO.																	
J. Birmingham, Agent San Francisco.																	
S. S. Newbern, Capt. E. Y. Rogers, N. 26° 03′, W. 110° 46′†	29.84	757.9	65	18.3	89	s.	2	.....	1	.....	ssw.	light	light	small	ssw.	clear	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman, Wilders Bayou, Mississippi river*†	30.27	768.8	68	20.0	.....	sw.	1	.....	0	.....	.....	o	o	.....	.....	foggy	Crowell & Henry.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul, Havre, France	30.65	778.4	44.6	7.0	.....	sse.	2	.....	8	.....	s.	o	o	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Servan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, N. Y.																	
S. S. Gellert, Capt. Kuhlewein N. 43° 00′, W. 51° 50′*	30.06?	763.5?	40	4.4	82	wsw	2	.....	10	.....	wsw.	4h'r	snow	short	w.	cloudy	P. Frochlich, 3d Off.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, N. 4° —′, W. 27° —′*†	30.15	765.8	82	27.8	.....	ssw.	1	.....	10	.....	wsw.	6 h'r	6h'r	light	s.	overcast	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 51° 22′, W. 11° 39′	.....	.....	.....	.....	.....	s.	3	.....	.....	.....	nnw.	0	0	mod.	s.	cloudy	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Off Kinsale, Ireland*	30.50	774.7	.....	.....	.....	s.	3	.....	5	.....	ssw.	3 h'r	3h'r	long	ssw.	fine.....	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, Havana, Cuba, W. I*†	30.34	770.6	75	23.9	.....	calm	0	.....	0	.....	.....	0	0	.....	.....	clear.....	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips, Cienfuegos, Cuba†	30.24	768.1	68	20.0	.....	ne.	2	.....	0	.....	.....	0	0	.....	.....	clear.....	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Alsa, Capt. J. W. Sanson, N. 35° 50′, W. 73° 40′†	30.27	768.8	60	15.6	.....	ene	2	.....	.....	.....	.....	.....	.....	con.	ne.	clear.....	.....
S. S. Bothnia, Capt. W. McMickan, Queenstown, Ireland* [man	30.39	771.9	52	11.1	.....	sw.	3	.....	.....	.....	.....	.....	.....	.....	.....	overcast.....	E. Stembridge, 3d Offi.
S. S. City of Alexandria, Capt. L. F. Thumer- Vera Cruz, Mexico*† [nolds	30.27	768.8	70	21.1	.....	nw.	2	.....	.....	.....	.....	.....	.....	sm'h	.....	rainy	.....
S. S. City of Washington, Capt. J. W. Rey- N. 19° 48′, W. 90° 57′†*	30.10	764.5	78	25.6	.....	ene.	3	.....	.....	.....	.....	.....	.....	sm'h	.....	clear.....	.....
S. S. Maas, Capt. T. H. Bonjer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick, N. 28° 28′, W. 80° 19′†*	30.32	770.1	68	20.0	.....	calm	0	.....	.....	.....	.....	.....	.....	sm'h	.....	clear.....	.....
S. S. Olbers, Capt. J. Clarke	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander, N. 39° 31′, W. 64° 00′*	30.09	764.3	38.3	3.5	.....	wnw.	4	.....	10	.....	nw.	0	0	r'gh	nw.	.....	G. H. Lose, 3d Offi.
S. S. Leipzig, Capt. F. Pfeiffer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, N. 49° 24′, W. 36° 26′*	28.78	731.0	50.0	10.0	.....	s.	10	.....	10	.....	s.	rain&	hail	high	.....	rain & hail..	.....
S. S. Mosel, Capt. J. Hesse, N. 48° 56′, W. 23° 56′	30.03	762.7	51.1	10.6	.....	se.	4	.....	4	.....	se.	0	0	.....	nnw.	fine..	J. Hesse.
S. S. Oder, Capt. Undeutsch, Weser River, Germany*..	30.85	783.6	26.6	—3.0	.....	w.	1	.....	10	.....	.....	0	0	.....	.....	foggy.....	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal†	29.80	756.9	40	4.4	82	n.	1	.....	0	.....	.....	0	0	.....	.....	clear.....	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 24° 55′, E. 119° 36′*†	30.52	775.2	58	14.4	87	nne.	6	.....	1	.....	ene.	.....	.....	high	ne.	clear.....	.....
S. S. Oceanic, Capt. J. Metcalf, N. 33° 18′, E. 134° 30′*	30.22	767.6	48	8.9	56	nw.	5	.....	5?	.....	nw.	.....	.....	sm'h	.....	clear?.....	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 37° 10′, W. 74° 56′*†	29.86	758.4	.....	.....	.....	sw.	1	.....	2	.....	w.	.....	.....	sm'h	.....	smoky.....	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, N. 35° 30′, W. 75° 15′†	29.97	761.2	48	8.9	57	sw	1	.....	0	.....	.....	0	0	sm'h	nne.	clear.....	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter †	30.27	768.8	40	4.4	82	ne.	1	.....	5	.....	n.	.....	.....	.....	.....	fair.....	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer, Seattle, Wash. Ter*	30.21	767.3	39	3.9	82	calm	0	.....	8	.....	e.	0	0	.....	.....	cloudy.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. Columbia, Capt. F. Bolles, N. 40° 44′, W. 124° 27′†	29.92	760.0	49	9.4	77	nnw.	5	.....	0	.....	.....	.....	.....	mod.	nw.	clear.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†	29.73	755.1	40	4.4	91	calm.	0	.....	0	.....	.....	.....	.....	.....	.....	clear.....	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, San Francisco, Cal†	29.71	754.6	38	3.3	71	w.	1	.....	0	.....	.....	.....	.....	.....	.....	clear.....	.....
S. S. G. W. Elder, Capt. H. G. Morse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Idaho, Capt. E. Alexander, Port Townsend, W. T†	30.18	766.6	38	3.3	100	e.	2	.....	10	.....	ne.	.....	.....	sm'h	.....	cloudy.....	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 42′, W. 118° 14′†	29.97	761.2	56	13.3	74	se.	6	.....	8	.....	se.	driz.	driz.	long	se.	drizzling..	G. H. Harisson.
S. S. Senator. Capt. Thos. Wallace, Monterey, Cal.†	29.90	759.4	37	2.8	81	nne.	1	.....	0	.....	.....	0	0	sm'h	.....	clear.....	T. Wallace.
S. S. State of California, Capt. G. Dobney, Portland, Oregon†	30.15	765.8	36	2.2	90	nnw.	2	.....	6?	.....	.....	0	0	.....	.....	cloudy.?.....	.....
S. S. Victoria, Capt. H. M. Hayward, N. 41° 47′, W. 124° 40′†	29.94	760.5	47	8.3	85	n.	6	.....	0	.....	.....	.....	.....	hv'y	n.	clear.....	.....
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. ——, N. 15° 08′, W. 159° 36′	29.86	758.4	68	20.0	90	nne.	4	.....	0	.....	.....	...	.....	long	ne.	clear.....	A. Bannerman, 2d Offi.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.83	757.7	74	23.3	81	ene.	2	.....	8	.....	.....	sq 'lls	sq 'lls	.....	.....	cloudy.....	W. H. Hawes, 2d Offi.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 28° 53′, E. 126° 26′†	30.60	777.2	51	10.6	59	ne.	5	.....	5	.....	ne.	0	0	mod.	nw.	fair.....	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn, N. 29° 59′, W. 166° 37′†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, Panama, Capt. R. R. Searle,	30.32	770.1	59	15.0	81	wnw.	1	.....	2	.....	wnw.	0	0	high	nw.	fine.	W. Thaxter.
S. S. Colima, Capt. M. Connolly, N. 14° 40′, W. 92° 36′†	29.89	759.2	77	25.0	82	n.	2	.....	5	.....	n.	0	0	sm'h	.....	fair.....	.....
S. S. Grenada, Capt. Russell, N. 23° 04′, W. 107° 18′*†	29.90	759.4	79	26.1	61	calm	0	.....	0	.....	.....	.....	.....	small	se.	clear.....	.....
S. S. South Carolina, Capt. W. J. Webber, S. 34° 20′, E. 156° 17′	29.86	758.4	71	23.3	100	ene.	5	.....	10	.....	se.	rain	rain	mod.	ne.	rainy.....	.....
S. S. Zealandia, Capt. H. Webber,	29.93	760.2	62	16.7	94	se.	2	.....	2	.....	se.	.....	.....	mod	s.	clear.....	.....

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke Barbadoes, W. Indies	.....	.....	.....	.....	.....	e.	2	.....	8	.....	.....	driz.	driz.	sm'h	.....	light rain	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 50° 01′, W. 2° 50′*†	30.83	783.1	56	13.3	?	ssw.	1	.....	3	.....	wsw.	0	0	mod.	wsw.	fair	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	30.84	783.3	34	1.1	69	calm	0	.....	10	.....	.....	0	0	.....	.....	overcast	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 49° 28′, W. 29° 10′*†	29.96	761.0	48	8.9	85	s.	9	.....	10	.....	s.	0	0	r'gh	s.	overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 46° 20′, W. 40° 28′*	28.99	736.3	40	4.4	.....	w.	8	.....	10	.....	wnw.	4 h'r	rain hail	h'vy	w.	cloudy	.....
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
THINGVALLA LINE *Funch, Edye & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub N. 58° 05′, E. 5° 06′†	30.75	781.0	41.0	5.0	.....	se.	2	.....	10	.....	se.	0	0	sm'h	se.	covered	J. T. Ulberling
WARREN LINE. *Warren & Co, Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 45° 06′, W. 38° 00′*†	29.35	745.5	49	9.4	.....	wsw.	6	.....	10	.....	wsw.	8 h'r	h'vy	h'vy	s.	hazy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 49° 44′, W. 34° 18′*†	29.32	744.7	48	8.9	.....	s.	9	.....	10	.....	s.	sh'rs	shr's	cross	s. to nw.	misty	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 40° 46′, W. 69° 00′*†	29.91	759.7	38	3.3	.....	wsw.	3	.....	0	.....	.....	0	0	sm'h	.....	blue sky	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 40° 35′, W. 68° 45′†	29.92	760.0	36	2.2	80	w.	3	.....	0	.....	.....	0	0	sm'h	.....	clear	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. Liverpool, Eng.*†	30.62	777.7	44	6.7	92	s.	2	.....	10	.....	sse.	shr's	shr's	.....	.....	gloomy	W. A. Ward. H. Goulden, 4th Offr.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 40° 00′ W. 59° 17′*	29.97	761.2	43	6.1	.....	nnw.	6	.....	7	.....	w.	1 h'r	snow	high	.....	hailing	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 23° 30′, W. 81° 20′†	30.37	771.4	76	24.4	69	ene.	3	0	2 k	.....	e.	0	0	sm'h	.....	clear	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Alpha, Capt. Ole Grönn, N. 38° 48′, E. 6° 20′*†	30.58	776.7	64	17.8	.....	ese.	4	.....	1	.....	n.	1 h'r	light	mod.	se.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin S. 23° 04′, W. 39° 24′	.....	.....	.....	.....	.....	n.	.....	.....	.....	.....	.....	.....	.....	hv'y	se.	.....	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.68	779.3	.....	.....	.....	ese.	1	.....	.....	.....	wsw.	0	0	.....	.....	hazy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 4° 17′, W. 27° 28′†	30.00	762.0	.....	.....	.....	ene.	3	.....	2	.....	ene.	0	0	sm'h	ne.	fine	.....
S. Enoch Train, Capt. H. D. Chapman. N. 49° 50′, W. 4° 04′*	30.50	774.7	.....	.....	.....	se.	1	.....	10	.....	.....	0	0	long	ssw.	overcast	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 42° 08′, W. 37° 17′*	29.48	748.8	.....	.....	.....	ssw.	9–11	.....	10	.....	ssw.	7½ h'r	h'vy	very hv'y	ssw.	heavy rain	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C.†	30.22	767.6	40	4.4	56	sse.	2	.....	3	.....	sse.	.....	.....	sm'h	.....	fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 45° 52′, W. 64° 02′†	29.65	753.1	61	16.1	.....	w.	6	.....	0	.....	.....	0	0	sm'h	.....	clear	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 52° 52′, W. 15° 26′	.....	.....	54	12.2	.....	s.	6	.....	10	.....	ssw	12 h'r	light	long	s.	raining	.....
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.07	738.4	.....	.....	.....	ese.	1	.....	10	.....	e.	0	0	.....	.....	cloudy	.....
Bk. Geo. Booth, Capt. D. Williams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 51° 32′, E. 2° 12′*	30.50	774.6	37.8	3.2	95	ese.	3	.....	10	.....	ese.	0	0	sm'h	.....	foggy	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 13° 57′, W. 34° 06′*	29.87	758.7	.....	.....	.....	ese.	4	.....	1	.....	ese.	0	0	long	e.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 37° 04′, W. 10° 06′*†	30.50	774.7	.....	.....	.....	se.	6	.....	.....	.....	se.	0	0	h'vy	se.	fair	Sorensen & Arvesen.
Bk. Pepping, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.62	777.7	45	7.2	76	ne.	1	.....	0	.....	.....	.....	.....	.....	.....	clear	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly N. 35° 20′, W. 44° 30′*†	29.50	749.3	.....	.....	.....	nw.	.....	.....	.....	.....	.....	2 h'r	2 h'r	.....	.....	.....	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 23° 20′, W. 27° 40′*	30.00	762.0	67.8	19.9	95	n.	5	.....	4	.....	n.	.....	.....	mod.	n.	.....	.....
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.45	773.4	56	13.3	87	ene.	6	.....	0	.....	.....	0	0	.....	.....	clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 21° 36′, W. 31° 25′ *†	30.20	767.1	.....	.....	.....	nnw.	4	.....	6	.....	nne.	.....	.....	h'vy	sw.	.....	I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton. N. 34° 00′, W. 64° 40′*†	30.20	767.1	.....	.....	.....	wnw.	.....	.....	.....	.....	.....	.....	.....	.....	.....	cloudy	N. P. Dutton.

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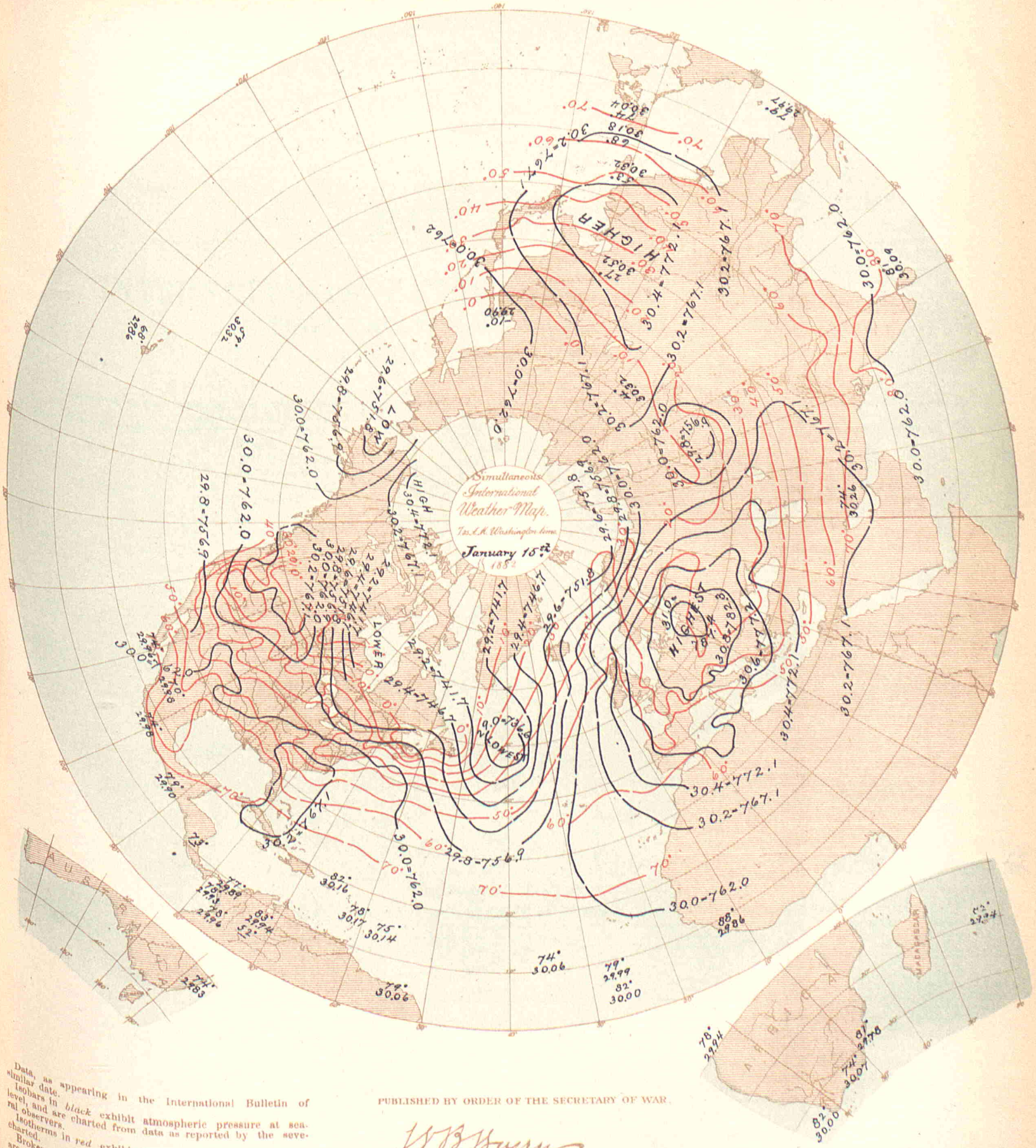
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 16, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.56	776.1	65.1	18.4	73	w.			2		0			0	0	clear	Moiroud.
Algiers			30.67	779.1	57.2	14.0	80	ne.			3		1			0	0	fair	Nicolas.
La Calle			30.67	779.1	54.3	12.4	77	e.			3		5			0.177	4.5	cloudy	Fonfrède.
Tunis			30.67	778.9															Jacques.
Sfax																			Gau.
Saida																			
Tebessa			30.59	776.9	51.4	10.8	58	se.			3		3			0	0	pretty fair	Perès.
Geriville			30.63	777.9	43.2	6.2	72	e.			3		7			inap.	inap.	very cloudy	Derché.
Laghouat					42.1	5.6	75	e.			2		4			0.079	2.0	cloudy	Louchamp.
Biskra			30.68	779.2	46.4	8.0	46	n.			1		4			0.020	0.5	cloudy	Herbin.
			30.54	775.7	56.5	13.6	67	nw.			1		9			0	0	covered	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.89	759.2	29.98	761.5	55.7	13.2	77	se.	4	1.8			1			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.34	770.6	30.93	785.7	33.8	1.0	85	nw.			1		5			0	0		Prof. Ivan Stozir.
Cracow, I. R. Observatory	30.17	766.2	31.00	787.5	27.3	—2.6	89	nne.	1.3	0.6			10			0	0		Dr. Wierzbiski.
Eperies	29.91	759.8	30.86	783.8	35.6	2.0	60	calm			0	5 cs	0			0	0		Julius Mikolik.
Gratz	29.61	752.0	30.94	785.9	35.4	1.9	58	sw.			2		0			0	0		Andreas Rospini.
Hermannstadt	29.25	743.0	30.80	782.4	29.1	— 1.6	100	nnw.			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.51	749.6	30.97	786.5	30.2	— 1.0	88	calm			0		0			0	0	clear	The Staff.
Lemberg	29.81	757.1	30.87	784.0	31.1	— 0.5	68	nw.			2		3			0	0		Dr. T. Stanecki.
Pola	30.74	780.7	30.85	783.7	45.3	7.4	30	e.			1		9			0	0		I. R. Hydrographic Office
Szathmar	30.30	769.5	30.78	781.7	28.2	— 2.1	65	w.			1		10			0	0		Joseph Midlinszky, S. J
Szegedin	30.56	776.2	30.87	784.0	33.4	0.8	71	nw.			1		4			0	0		Karl Stancel.
Trieste	30.78	781.8	30.88	784.4	48.2	9.0	27	calm			0		6			0	0		Rieder.
Vienna	30.21	767.3	30.97	786.7	38.5	3.6	44	nnw.			1		2			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Aberdeen	30.53	775.4	30.63	778.0	48.6	9.2	76	sw.	13	5.8			7			0	0	d. clouds	W. Boswell.
Armagh, Observatory	30.46	773.7	30.70	779.8	47.7	8.7	87	s.	16	7.2			6					d. clouds	S. Call.
Bidston, Liverpool Obs'y			30.81	782.6	38.1	3.4	98	se.	13	5.8			10					foggy	John Hartnup.
Bolton, Sharples	30.25	768.3	30.80	782.3	37.4	3.0	98	sse.	3	1.3			10					foggy	Thomas Mackereth, A.S.
Bradford, Yorkshire	30.38	771.6	30.78	781.8	40.1	4.5	92	se.			1		10			0	0	overcast	J. McLandsborough, F.R.
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	80.0	26.7	70	ne.			3		2					d. clouds	Corpl. J. Surgenor.
Cardington			30.83	783.1	44.0	6.7	91	s.			0.2		10					overcast	John McLaren.
Chatham, School M. E.	30.74	780.8	30.88	784.3	38.9	3.8	94	se.			1		10					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.58	776.7	30.81	782.6	49.7	9.8	82	e.					10					overcast	The Staff.
Fort Napier, Natal	27.67	702.8	29.88	758.0	66.4	19.1	88	calm			0		7						Pvt. E. K. Annis, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	88.0	31.1	69	sw.			1		3			0	0	blue sky	Sergt. John Robinson.
Galway, Queen's College			30.58	776.7				s.			2		2					blue sky	J. O'Donnghue.
Gibraltar, Mediterranean	30.45	773.4	30.51	774.9	59.1	15.1	87	e.			6		7					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.51	774.9	30.72	780.3	47.8	8.8	81	sw.			4		10 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.69	779.5	30.88	784.3	39.9	4.4	96	se.			1		10					overcast	The Staff.
Guernsey	30.52	775.2	30.83	783.1	47.8	8.8	85	sse.			1		4					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.84	783.3	30.88	784.3	42.6	5.9	89	se.	5	2.2			10					misty	The Staff.
Leicester, Museum	30.57	776.5	30.83	783.1	43.0	6.1	89	s.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.46	773.7	30.53	775.4	50.0	10.0	71	ne.			4		4					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.26	768.6	30.31	769.9	72.5	22.5	73	ne.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.30	769.6	30.85	783.6	39.2	4.0	95	s.			1		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.61	777.5	30.84	783.3	44.4	6.9	87	s.			1		10					overcast	The Staff.
Plymouth	30.72	780.3	30.80	782.3	50.3	10.2	85	se.			1		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.48	774.2	50.2	10.1	89	sw.	20	8.9			0					blue sky	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.50	774.7	30.57	776.5	34.2	1.2	78	nnw.			3		10					snowing	W. H. Lyne.
Sheffield	30.52	775.2	30.82	782.8	41.0	5.0	95	sw.			1		2			0	0	misty	W. F. Cooper.
Silloth Rectory	30.75	781.0	30.78	781.8	45.4	7.4	87	sw.			1		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.82	782.8	39.5	4.2	93	s.	2	0.9			10					foggy	Rev. S. J. Perry.
Stratfield Turgiss					43.5	6.4	88	s.			1		10					overcast	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.69	779.5	30.74	780.8	52	11.1	79	se.			4		8					gloomy	W. Newcombe.
Valencia, Observatory	30.64	778.2	30.67	779.0	53.0	11.7	83	ese.	14	6.3			8					misty	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.74	755.4	29.79	756.7	24	— 4.4	93	s.	4	1.8			10 n			0	0	threatening.	H. J. Cundall, C. E.
Chatham, N. B.*	29.67	753.6	29.74	755.4	17	— 8.3	91	calm	0	0			10 n		calm	0.01	0.3	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.53	750.0	29.55	750.6	23	— 5.0	88	wsw.	15	6.7			10 n		sw.	0.04	1.0	threatening.	J. McWilliams.
Fort Garry, Manitoba*	29.34	745.2	30.31	769.9	—21	—29.4	100	nw.	5	2.2		0	0			0	0	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.72	754.9	29.85	758.2	28	— 2.2	100	s.	4	1.8			10 k			0	0	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.36	745.7	29.71	754.6	31	— 0.6	92	w.	4	1.8			10 ks		w.	0.08	2.0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.44	747.8	29.65	753.1	30	— 1.1	85	w.	12	5.4			10 s			0.01	0.3	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.07	738.4	29.80	756.9	22	— 5.6	73	w.	16	7.2		2 k	8 ks	w.	w.	0.05	2.3	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.11	739.4	29.82	757.4	32	0.0	100	w.	4	1.8			10 n		w.	0.04	1.0	threatening.	H. Morgan.
Port Stanley, Ontario	29.15	740.4	29.82	757.4	33	0.6	85	nw.	8	3.6			10 n		nw.	inap.	inap.	cloudy	M. Payne.
Quebec, Quebec*	29.29	744.0	29.62	752.3	25	— 3.9	100	w.			1		10 n		w.	0.42	10.7	hail & sleet.	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.23	742.4	29.72	754.9	16	— 8.9	83	calm	0	0		0	5 ks		nw.	0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.08	738.6	29.83	757.7	27	— 2.8	92	w.	8	3.6			10 ks			0	0	cloudy	K. Stewart.
St. Andrews, N. B.	29.68	753.9	29.73	755.1	29	— 1.7	90	sw.	1	0.4			10 n			0	0	cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	29.80	756.9	29.87	758.7	20	— 6.7	96	sw.	2	0.9			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.40	746.7	29.80	756.9	31	— 0.6	92	w.	3	1.3			10 n		w.	inap.	inap.	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	29.70	754.4	29.77	756.1	34	1.1	92	sw.	4	1.8			fg.					sleeting	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.73	755.1	29.99	761.7	28	— 2.2		sw.				0	0			0.10	2.5		John Delany.
St. Pierre, N. F.																			N. F. Laud, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Cape St. Francis Lt. House	29.89	759.2	29.92	760.0	74.0	23.3	79	se.	15.1	6.8		0	4 s			0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.87	758.7	29.91	759.7	84.0	28.9	64	s.	31	13.9		0	2			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Sub-Series.																			
Hankow	30.23	767.8	30.52	775.2	39.2	4.0	94	nnw.			1		10			0	0	covered	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.24	768.0	30.26	768.7	41.0	5.0	89	se.	5.1	2.3		0	0			0	0	clear	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From	Rain-fall or melted snow in the past 24 hours Inch.	Rain-fall or melted snow in the past 24 hours Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.89	784.5	30.93	785.7	28.8	—1.8	96	wnw.	9	4			10					foggy	Oversergent Fischer.
Fanöe	30.91	785.2	30.93	785.7	33.3	0.7	96	sw.			2		10						Overloerer Lauridsen.
Godthaab, Greenland	28.72	729.6	28.77	730.7	8.2	—13.2	96	nw.			5		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.24	742.7	29.28	743.8	44.2	6.8		s.			8		10					raining	A. O. Thorlacius.
Thorshavn	30.16	766.1	30.20	767.0	48.2	9.0	91	sw.	22	10			10					foggy	Overloerer Bergh.
Vestervig	30.75	781.1	30.84	783.4	37.2	2.9	94	ssw.			4		10						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	30.13	765.2	30.80	782.3	46.0	7.8	80	sse.			1	0	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	30.31	769.9	30.86	783.9	38.8	3.8	96	ne			2	c		nw.	n.	0	0		M. Nicot, Director.
Arras, Engineer School	30.62	777.8	30.91	785.0	31.5	—0.3	97	sse.			2		10			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.80	782.4	30.88	784.4	37.4	3	50	nne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.32	770.1	30.93	785.5	31.1	—0.5		se.			2		10			0	c	covered	M. Saillard, Director.
Beauvais, Normal School	30.03	778.0	30.92	785.3	34.0	1.1	94	sse.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.82	782.7	34.0	1.1	89	ne.			1					0	0		M. Gobin, Director.
Bordeaux, Observatory	30.48	774.2	30.75	781.1	48.2	9.0	70	ese.			3		2			0	0	slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	30.31	769.8	30.91	785.0	30.2	—1	100	nne.			1		n		nne.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.57	776.4	30.81	782.6	43.2	6.2	97	calm			0		10			0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.74	780.9	30.83	783.0	41.5	5.3	78	s.			1		0			0	0	clear	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.53	775.4	30.88	784.3	31.1	—0.5	96	se.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.40	772.2	30.95	786.2	30.2	—1		ssw.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.43	747.4	30.88	784.3	34.5	1.4	78	n.			1		0			0	0	clear	M. Allnard, Director.
Cluny, Normal School	30.00	762.1	30.90	784.8	37.0	2.8	96	sw.			2		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	30.01	762.3	30.94	785.9	30.2	—1	96	e.			1		10	e.	e.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	28.19	716.0	30.82	782.9	45.5	7.5	40	s.			3					0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.68	753.8	30.85	783.5	50.5	10.3	50	n.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	30.12	765.0	30.95	786.0	30.9	—0.6	100	se.			1		kn			0	0		M. Ablard, Director.
Guéret, Normal School	29.18	741.1	30.81	782.5	48.2	9	65	sse.			1	0	2 s			0	0	slightly cl'dy	M. Rivoire, Director.
Lambaile, Normal School	30.52	775.3	30.82	782.7	41.0	5	94	se.			1		5		se.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	30.16	766.1	30.74	780.8	54.0	12.2	53	ssw.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.73	780.5	30.83	783.1	43.7	6.5	100	e.			1		8		n.	0	0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.80	756.9	30.95	786.0	30.4	—0.9	100	nnw.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.54	775.6	30.87	784.0	35.8	2.1	95	ese.			1		8		e.	0	0	very cloudy	M. Piboen, Director.
Marseille, Observatory	30.49	774.5	30.77	781.5	57.4	14.1	38	e.			0.1		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.38	644.7	30.22	767.7	40.0	4.8	30	sw.	3 8	1.7			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.76	781.4	30.88	784.3	53.6	12	65	e.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.93?	760.1?	30.77?	781.6?	28.0	—2.2	93	nne.			1		fg			0	0	foggy	M. Hasse, Director
Nantes, Observatory	30.09	779.6	30.85	783.7	39.4	4.1	88	ne.			0-1	kck	8 n	nne.	sw.	0	0		M. Larocque, Director.
Nice																			Capt. Boisslère, Director.
Perpignan, Observatory	30.73	780.5	30.84	783.4	52.3	11.3	70	se.	9.4	4.2			5		e.	0	0	½ covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.66	550.2			28.0	—1.9		e.			1		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	25.78	654.8			43.2	6.2	24	s.			2		fg			0	0	foggy	M. Tallieu.
Puy de Dôme Obs'y, Summit	29.58	751.4	30.74	780.7	28.4	—2.0							0			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.80	782.2	30.83	783.0	43.2	6.2	82	ese.			2		8		sw.	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.57	776.4	30.79	782.0	43.5	6.4	79	nw.			1		5		nw.	0	0	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.60	726.4	30.83	783.1	40.4	8	46	e.			2		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.85	783.5	30.89	784.7	35.6	2	95	se.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.68	779.3	30.84	783.3	45.7	7.6	83	ssw.			1		0			0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.74	780.8	30.91	785.0	31.6	—0.2	100	e.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	30.05	763.3	30.79	782.0	52.5	11.4	63	sse.			3		1	w.		0	0	clear	M Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.38	771.7	30.87	784.2	30.6	—0.8	100	se.			1					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	30.08	764.1	30.97	786.5	32.0	0.0	55	calm			0	0	1 8			0	0		Prof. Dr. Hoh.
Berlin	30.76	781.2	30.95	785.0	36.3	2.4	74	se.			1		5			0	0		Prof. Dr. Arndt.
Breslau	30.43	772.8	30.98	785.8	34.0	1.1	73	se.			1		0			0	0		Royal University Obs'y.
Carlsruhe	30.43	772.8	30.90	784.9	31.3	—0.4	97	e.			1		9	ne.		0	0		Albert Senz.
Cassel	30.17	766.4	30.89	784.7	33.6	0.9	77	s.			1		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.56	776.3	30.90	785.4	34.5	1.4	72	ese.			1		1			0	0		Physical Society.
Friedrichshafen	29.45	747.9	31.01	787.6	27.1	—2.7	89	ne.			1		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.89	784.5	30.98	785.9	28.4	—2.0	91	se.			1		1			0	0	hazy	E. Preller.
Kiel	30.90	784.9	30.92	785.3	31.8	—0.1	89	calm			0		1			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.53	775.4	30.98	785.9	31.5	1.4	64	sse.			1		0			0	0		H. Leppig, Asst.
Magdeburg	30.75	781.1	30.96	785.4	34.0	1.1	73	e.			1		0			0	0	foggy	Dr. Assmann.
Memel	30.85	783.5	30.89	784.7	30.3	2.4	93	wnw.			3	8 c	0						Issermann.
Munich	29.93	737.4	30.95	785.2	27.1	—2.7	89	calm			0		10			0	0		Central Station.
Neufahrwasser	30.91	785.1	30.93	785.5	39.2	4.0	60	calm			0		7	nne.		0	0		A. Lothes.
Neustadt, Palatinate	30.40	772.1	30.94	785.9	29.8	—1.2		nw.			1		10	nw.		0	0		Dickuether.
Stuttgart	29.91	760.4	30.90	784.9	31.6	—0.2	94	n.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.95	786.2	30.98	785.8	32.4	0.2	90	se.			1	0	5 8			0	0		Profs. Braudes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Atuens.																			
Athens	30.21	767.3	30.62	777.7	37.8	3.2		ne.			2.0		2 k			0.134	3.4		Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.97	761.2	30.02	762.5	72.9	22.7	85	sw.					3			0	0	d clouds	
Deesa	29.54	750.3	30.02	762.4	81.9	27.7	30	sw.	6.0	2.7			0			0	0	blue sky	
Bombay	29.95	760.6	29.98	761.6	82.1	27.8	63	wnw.	12	5.4			0			0	0	blue sky	
Poona, Yarrowda.	28.12	714.1	29.95	760.8	85.8	29.9	19	ne.	5	2.2			0			0	0	blue sky	
Belgaum	27.45	697.1	29.97	761.2	81.1	27.3	25	e.	3	1.3			0			0	0	blue sky	
Lahore	29.37	746.0	30.15	765.9	59.6	15.3	82	ne.	1.0	0.4			0			0	0	blue sky	
Roorkee	29.18	741.2	30.12	765.1	62.8	17.1	75	calm	0.5	0.2			2			0	0		
Agra	29.54	750.4	30.13	765.3	67.2	19.6	56	e.	1.3	0.6						0	0		
Nagpur	28.98	736.2	30.04	762.9	78.5	25.8	35	calm	1.9	0.8			2			0	0	d. clouds	
Jubbulpore	28.73	729.8	30.15	765.7	63.4	17.4	51	calm	0.9	0.4			0			0	0	blue sky	
Lucknow	29.74	755.4	30.13	765.3	68.3	20.2	41	calm	1.0	0.4			0			0	0	blue sky	
Allahabad	29.80	756.8	30.12	765.1	62.8	17.1	62	ne.	0.6	0.3			1	w.		0	0	d. clouds	
Patna	29.93	760.3	30.13	765.2	64.8	18.2	60	calm	2.1	0.9			0			0	0	blue sky	
Hazaribagh	28.03	712.0	30.11	764.7	65.3	18.5	44	n.	3.4	1.5			0			0	0	blue sky	
Cuttack	30.01	762.1	30.09	764.2	76.1	24.5	62	ne.					6			0	0	d. clouds	
Calcutta, Alipore	30.08	763.9	30.10	764.5	70.8	21.6	59	nnw.	3.0	1.3			0			0	0	blue sky	
Dhubri	29.97	761.2	30.09	764.3	68.4	20.2	67	calm	2.7	1.2			0			0	0	blue sky	
Chittagong	29.99	761.7	30.08	764.0	74.6	23.7	45	nw.	2.2	1.0			0			0	0	blue sky	
Sibsagar	29.78	756.4	30.14	765.5	62.4	16.9	82	ne.	2.3	1.0			0			0	0	blue sky	
Jeypore	28.62	726.9	30.11	764.7	67.7	19.8	48	s.	2.9	1.3			0			0	0	blue sky	
Zanzibar, Africa	29.90	759.4			83.9	28.8	74	n.	7.2	3.2			6			0		d. clouds	
Trichinopoly	29.75	755.6			80.9	27.2	54	ese.	1	0.4			2			0	0	d. clouds	
Bellary	28.52	724.4			83.0	28.3	34	e.	3.5	1.6			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.45	773.5	30.88	784.3	43.7	6.5	49	calm	0	0			6			0	0		Prof. Giovanni Clodig.
Milan	30.37	771.5	30.93	785.5	28.8	— 1.8	100	w.	3.1	1.4			10			0	0		Prof. Schiaparelli.
Padua	30.77	781.6	30.89	784.6	36.7	2.6	61	nw.	0.7	0.3			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.95	760.8	30.91	785.2	36.1	2.3	79	ene.	1.3	0.6			0			0	0		Prof. P. F. Denza.
Genoa	30.61	777.5	30.81	782.6	54.5	12.5	18	n.	5.6	2.5			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.88	733.5	30.89	784.5	38.5	3.6	49	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.82	782.7	30.87	784.1	41.0	5.0	72	n.	16.1	7.2			7	ne.		0	0		Prof. Luigi Guidi.
Florence	30.53	775.4	30.80	782.2	50.0	10.0	21	ne.			4		0			0	0		Prof. Costantino Pitter.
Leghorn	30.72	780.3	30.81	782.6	48.0	8.9	30	n.	3.1	1.4			0			0	0		Prof. P. Monte.
Rome	30.54	775.8	30.72	780.4	50.0	10.0	28	n.	6.3	2.8			6			0	0		Prof. P. S. Ferrari.
Lecce	30.42	772.7	30.69	779.4	44.6	7.0	33	n.	22.4	10.0			1			0	0		Prof. C. de Giorgi.
Cosenza	29.76	755.8	30.69	779.4	40.3	4.6	69	wnw.	4.3	1.9			9	nw.		0	0		Prof. D. Conti.
Cagliari	30.48	774.2	30.68	779.3	53.6	12.0	69	calm			0		2			0	0		Prof. A. Pacinotti.
Palermo	30.41	772.3	30.67	778.9	45.3	7.4	67	ne.	8.7	3.9			10	ne.		0.055	1.4		Prof. G. Cincciatore.
Syracuse	30.50	774.8	30.55	776.0	49.3	9.6	49	ene.	24.8	11.1			8	nne.		0.079	2.0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	30.15	765.7	30.70	779.8	45.1	7.3	62	ne.	12.5	5.6			2	e.		0	0		Prof. T. Brioschi.
Stelvio	22.62	574.6			26.2	— 3.2	36	ene.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.75	577.9			28.4	— 2.0	38	e.			1		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.04	763.0	30.08	764.0	27.1	— 2.7	77	sw.	16.3	7.3			10 n			0.067	1.7	light snow	
Hakodate	30.00	762.0	30.01	762.2	28.3	— 2.1	64	wnw.	18.0	8.0			9	wnw.		0	0	overcast	
Hiroshima, I. M. Obs'y	30.27	768.8	30.29	769.3	36.6	2.6	78	n.	4.1	1.8		ck	9 s			0	0	overcast	K. Susaki.
Kanazawa	30.16	766.0	30.27	768.8	32.2	0.1	74					ck	10 s					overcast	S. Endo.
Kioto	30.12	765.0	30.31	769.9	35.0	1.7	80	wnw.	0.5	0.2			10 s			0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.12	765.0	30.34	770.6	35.5	1.9	81	calm	0	0		0	0			0	0	clear	S. Takehayashi.
Niigata	30.19	766.8	30.23	767.8	35.6	2.0	71	wnw.	14.9	6.7		10 ck	0			0.025	0.6	covered	
Nobiru	30.12	765.0	30.14	765.5	30.6	— 0.8	92	nw.	6.4	2.9		0	9 s			0	0	cloudy	H. Midzushina.
Supporo					22.5	— 5.3	71	ssc.	10.8	4.8			10			0.200	5.1	covered	
Tokei Obs'y, Yeddo	30.13	765.3	30.21	767.3	30.0	— 1.1	58	nw.	4.4	2.0		0	0			0	0	clear	The Staff.
Wakayama	30.26	768.6	30.31	769.9	33.3	0.7	73	calm	0	0		0	0			0	0	clear	Y. Kuwamuea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.74	755.4	29.93	760.2	82.5	28.1	72	wnw.	9.0	4.0		6c,cs	4 k	sw.	nw.	0	0	cloudy	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.68	601.6	29.90	759.4	50.0	10.0	89	calm	0	0		7 c	0	w.		0	0	cloudy	Vicente Fernandez.
Leon	24.45	621.0	30.20	767.0	54.5	12.5	80	n.			2	9 c	0	sw.		0	0		Prof. M. Leal.
Mazatlan	29.76	756.1	30.03	762.8	66.5	19.1	97	e.			1		10 n		sw.	0.473	12.0	raining	F. Quijano, C. E.
Mexico, Central Obs'y	23.09	586.6	30.27	768.9	44.6	7.0	65	calm	0	0		0	0			0	0		The Staff.
Morelia	24.32	617.7	30.58	776.8	47.7	8.7	78	se.			3	0	0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	23.93	607.8	30.02	762.6	50.5	10.3	74	calm			0	0	9 ks		s.	0	0	very cloudy	M. V de Leon, M. E.
Puebla, Catholic Institute	23.45	595.6	30.38	771.5	43.7	6.5	73	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.17	614.0	30.18	766.7	54.5	12.5	60	ssw.			1		10		e.	0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.94	785.8	30.94	785.8	32.0	0.0		sse.			3					0.012	0.3		
Groningen	30.89	784.7	30.95	786.1	30.6	— 0.8		s.			1					0	0		
Helder	30.93	785.5	30.93	785.5	30.2	— 1.0		sse.			1					0	0		
Hellevoetsluis	30.92	785.4	30.92	785.4	31.1	— 0.5	100	s.			1					0	0		
Utrecht	30.89	784.7	30.94	785.9	28.9	— 1.7	98	sse.			1		hz			0	0	hazy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0–10	Clouds. Amount and kind. Up'er 0–10	Lo'er 0–10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.60	777.3	30.67	778.9	41.7	5.4	94	s.	20	9			10			0.472	12.0	raining	
Brono	30.53	775.5	30.57	776.5	35.6	2.0	84	s.	4	2			2			0.008	0.2		
Christiania	30.60	777.2	30.70	781.2	36.9	2.7	98	n.	0	0			10			0.055	1.4	foggy	
Gjæsvær	29.74	755.5	29.77	756.1	24.8	— 4.0		wnw.			10		10						
Lodingen	30.27	768.8	30.32	770.0	40.6	4.8	38	nw.			6		8			0.268	6.8	sleeting	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.4	15.2	78	nne.	6.9	3.1			10			0	0		Dr. J. A. Sampaio.
Campo Major	29.60	751.9	30.04	778.2	53.2	11.8	57	ene.	11.9	5.3			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.24	768.0	30.32	770.2	66.2	19.0	60	se.	1.3	0.6			8			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.26	768.7	30.03	778.1	54.0	12.2	63	ne.	16.1	7.2			0			0	0		The Staff.
Ponta Delgada, Azores	30.15	765.9	30.22	767.7	63.3	17.4	85	se.	6.9	3.1			3			0	0		
Saint Paul de Loando	29.73	755.1	29.93	760.2	79.5	26.4	92	sw.	0.7	0.3			9			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.04	737.7	30.26	768.7	— 4.9	—20.5		w.	13	6		0	5 ks			0	0		Major K. Lasarew.
Archangel	29.98	761.6	30.00	762.1	27.7	— 2.4	92	sw.	22	10			10			0.197	5.0		Capt. Sseliwerstow.
Astrakhan	30.00	777.3	30.52	775.2	21.7	— 5.7	87	ne.	2	1			10 ks			0	0		Capt. Wisganow.
Barnaul	29.39	746.6	29.94	760.5	5.5	—14.7	79	sw	22	10			10			0.059	1.5		Meteorological Obs'y.
Dorpat	30.45	773.3	30.71	779.9	33.8	1.0	98	wnw.	7	3			10 n			0	0		Observatory.
Ekaterinburg	28.93	734.9	29.93	760.2	24.1	— 4.4	93	wsw.	27	12			10			0.004	0.1		Meteorological Obs'y.
Kasan	29.93	760.1	30.21	767.4	27.1	— 2.7	93	sw.	13	6			10			0	0		Observatory.
Kertch	30.39	772.0	30.41	772.5	27.1	— 2.7	94	n.	4	2			10 n			0	0		Lagorio & Sastyres.
Kleff	29.95	760.6	30.62	777.8	32.4	0.2	92	n.	13	6		c;cs	9 ks			0.004	0.1		Observatory.
Lugan	30.32	770.2	30.54	775.8	22.5	— 5.3	80	w.	9	4			9			0	0		Meteorological Obs'y.
Moscow	29.92	760.0	30.44	773.1	26.1	— 3.3	60	se.	7.8	3.5		0	0			0	0		Meteorological Obs'y
Nikolaiev	30.49	774.4	30.56	776.2	30.9	— 0.6	88	n.	4	2			10 n			0.010	0.4	light clouds	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.75	755.6	29.84	757.8	— 9.8	—23.2	76	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.12	765.0	30.26	768.6	26.8	— 2.9	68	calm	0	0		0	4 k			0	0		Physical Observatory.
St. Pétersburg	30.56	776.2	30.58	776.6	31.8	— 0.1	94	nw.	11	5			10 ks			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.78	730.9	30.43	772.8	38.3	3.5	78	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.91	734.4	30.39	772.0	38.8	3.8	82	calm	0	0			9 s			0.020	0.5		Physical Observatory.
Warsaw	30.51	774.9	30.97	786.5	30.0	— 1.1	76	sw.	4	2		0	0						Astronomical Obs'y
Wilna	30.39	771.8	30.84	783.4	33.1	0.6	74	sw.	2	1			2			0	0		Berg, Assistant
Yeniseisk	29.49	749.1	29.81	757.1	6.3	—14.3	85	e.	4	2			6			0.020	0.5		M. O. Marks
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park											6		10						Andrew Gibb.
Monach Lt. House, Hebrides			30.45	773.4	51	10.6	86	ssw.								0.3	8.		J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.66	778.8	30.76	781.3	54.3	12.4	79	ne.	3.4	1.5			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.70	779.7	30.73	781.2	57.7	14.3	55	se.	7.4	3.3		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.72	704.2	30.85	783.6	42.3	5.7	57	ne.	3.4	1.5		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.46	722.9	30.78	781.8	49.8	9.9	62	ne.	6.3	2.8		0	9			0	0	almost cov'd	The Staff.
Murcia, Met. Obs'y	30.56	776.1	30.72	780.2	56.3	13.5	66	ene.	4.7	2.1		5	4	wsw.		0.204	6.7	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.74	755.3	30.66	778.7	55.2	12.9	61	calm	0	0		0	1			0	0	almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.12	765.0	30.19	766.7	66.3	19.1	89	calm	0	0		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.95	760.7	30.00	762.1	75.2	24.0	74	ne.	4.4	2.0		0	1 ks			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.44	773.2	30.54	775.7	59.2	15.1	58	e.	15.2	6.8		0	7		se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.03	763.0	30.15	765.9	74.1	23.4	90	calm	0	0		4 c	3 k	e.	e.	0.039	1.0	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.97	761.2	30.11	764.8	70.5	21.4	81	nw.	0.5	0.2			10 ks		ne.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.22	767.5	30.26	768.5	36.0	2.2	61	sw.			4		5			0	0		
Umea	30.30	771.2	30.41	772.5	31.3	— 0.4	85	sw.			2		0			0	0		
Hernosand	30.03	777.9	30.08	779.2	31.5	— 0.3	87	sw.			2		5			0.020	0.5		
Stockholm	30.60	777.1	30.77	781.6	33.8	1.0	90	wnw.			2		10			0.051	1.3	foggy	
Wisby	30.76	781.2	30.82	782.7	37.4	3.0	83	nw.			2		3			0	0		
Sub Series.																			
Upsala	30.67	773.9	30.75	781.1	34.2	1.2	96	nw.	4.9	2.2			10			0.008	0.2	foggy	S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.45	748.0	30.95	785.0	31.6	— 0.2	92	e.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.61	777.6	33.6	0.9	81	nnw.	13	6.0			10		n.	0	0		The Observatory.
Valona			30.62	777.8	45.0	7.2		nw.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.23	767.8	55.4	13.0	56	ne.			2	5 c	0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	29.64	752.8	29.72	754.9	39	3.9	65	calm	0	0			10 s		w.	0.03	0.8	cloudy	
Alpena, Michigan	29.22	742.2	29.93	760.2	15.5	— 9.2	83	w.	15	6.7		0	2 s			0	0	clear	
Atlanta, Georgia	28.85	732.8	30.08	764.0	64.5	18.1	91	sw.	20	8.9			10 s		sw.	0.07	1.8	cloudy	
Atlantic City, New Jersey	29.82	757.4	29.83	757.7	46.1	7.8	93	sw.	10	4.5		4 ck	5 s	w.		0.02	0.5	cloudy	
Augusta, Georgia	29.89	759.2	30.09	764.3	66.0	18.9	84	sw.	4	1.8			10 s		sw.	0	0	cloudy	
Baltimore, Maryland	29.76	755.9	29.81	757.2	48	8.9	93	w.	5	2.2			10s;fg		w.	0.10	2.5	cloudy	
Barnegat, New Jersey	29.78	756.4	29.80	756.9	45.0	7.2	93	sw.	11	4.9		5 cs	3 s	sw.	sw.	0.14	3.6	fair	
Bismarck, Dakota	28.49	723.6	30.49	774.4	—11	—23.9	100	nw.	10	4.5		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.59	700.8	30.52	775.2	7	—13.9	87	s.	2	0.9		0	0			0	0	clear	
Boston, Massachusetts	29.56	750.8	29.73	755.1	38.0	3.3	89	s.	7	3.1			10 s		sw.	0.04	1.0	cloudy	
Brownsville, Texas	29.83	757.7	29.88	758.9	66	18.9	100	s.	18	8.0			10 s			0	0	cloudy	
Buffalo, New York	29.04	737.6	29.84	757.9	32	0.0	98	sw.	4	1.8			10 n			0.14	3.6	light snow	
Burlington, Vermont	29.38	746.2	29.69	754.1	32.2	0.1	91	s.	9	4.0			10 n		w.	inap.	inap.	light snow	
Cairo, Illinois	29.53	750.0	29.95	760.7	53.1	11.7	92	w.	5	2.2			10 n		w.	inap.	inap.	light rain	
Campo, California	27.47	697.7	30.10	764.5	24	— 4.4	88	ne.	1	0.4		0	0			0.90	22.9	clear	
Camp Thomas, Arizona																			
Cape Henry, Virginia	29.92	760.0	29.94	760.5	56	13.3	86	sw.	14	6.3			10 s			0.37	9.4	cloudy	
Cape May, New Jersey	29.80	756.9	29.83	757.7	48	8.9	86	sw.	23	10.3		8 k	0	w.		0	0	cloudy	
Castroville, Texas	29.06	738.1	29.91	759.7	64	17.8	100	se.	7	3.1			10 n			0.04	1.0	light rain	
Cedar Keys Florida	30.18	766.6	30.20	767.1	63	17.2	93	s.	6	2.7			10s;fg			0	0	cloudy	
Champaign, Illinois	29.26	743.2	30.13	765.3	24.7	— 4.1	78	n.	30	13.4			10 n		n.	0.16	4.1	heavy snow	
Charleston, S. Carolina	30.05	763.3	30.11	764.8	61	16.1	93	sw.	10	4.5		0	4 s		sw.	0	0	fair	
Charlotte, N. Carolina	29.11	739.4	30.00	762.0	48.0	8.9	100	sw.	2	0.9			fg.			0.35	8.9	dense fog	
Chattanooga, Tennessee	29.17	740.9	30.03	762.7	51.0	10.6	100	calm	0	0			10 n		calm	2.92	74.2	heavy rain	
Cheyenne, Wyoming	24.05	610.9	30.30	769.6	— 3.7	—19.8	97	n.	3	1.3		0	1 s			0.02	0.5	clear	
Chicago, Illinois	29.37	746.0	30.12	765.0	20.9	— 6.2	84	nw.	10	4.5			10 s			0.01	0.3	cloudy	
Chincoteague, Virginia	29.85	758.2	29.87	758.7	49	9.4	100	sw.	15	6.7		8 c;ck	1 s	w.	sw.	0.06	1.5	cloudy	
Cincinnati, Ohio	29.21	741.9	29.90	759.4	50.2	10.1	86	n.	11	4.9			10 s			0.04	1.0	cloudy	
Cleveland, Ohio	29.12	739.6	29.90	759.4	33.2	0.7	100	n.	5	2.2			10 n			0.12	3.0	light rain	
Coleman City, Texas	28.04	712.2			61	16.1	84	s.	15	6.7			10 s			0	0	cloudy	
Columbus, Ohio	28.99	736.3	29.89	759.2	44	6.7	93	nw.	10	4.5			10 n			0.43	10.9	light rain	
Concho, Texas	27.87	707.9	29.89	759.2	59	15.0	93	sw.	10	4.5			10 s			0	0	cloudy	
Davenport, Iowa	29.59	751.6	30.30	769.6	15	— 9.4	67	nw.	10	4.5		8 k	0	w.		inap.	inap.	cloudy	
Dayton, Washington T'y	28.72	729.5	30.52	775.2	16.4	— 8.7	78	se.	2	0.9		0	0			0	0	clear	
Deadwood, Dakota	25.48	647.2	30.43	772.9	— 6	—21.1	68	calm	0	0		0	0			0.15	3.8	clear	
Decatur, Texas					58	14.4	100	se.	4	1.8			10 n			0.12	3.0	light rain	
Delaware Breakwater, Del.	29.79	756.7	29.81	757.2	50	10.0	93	sw.	29	13.0		5 ck	5 s	w.		0	0	cloudy	
Denison, Texas	29.68	738.6	29.92	760.0	60.3	15.7	100	s.	6	2.7			10 n			0.12	3.0	light rain	
Denver, Colorado	24.85	631.2	30.37	771.4	5.6	—14.7	87	n.	5	2.2			10 n		calm	0.12	3.0	light snow	
Des Moines, Iowa	29.46	748.3	30.43	772.9	10	—12.2	58	n.	10	4.5			10 s		n.	0	0	cloudy	
Detroit, Michigan	29.20	741.7	29.96	761.0	33.5	0.8	78	nw.	6	2.7		2 ck	3 s	nw.	w.	inap.	inap.	fair	
Dodge City, Kansas	27.59	700.8	30.34	770.6	11	—11.7	100	ne.	24	10.7			10 n		ne.	inap.	inap.	light snow	
Dubuque, Iowa	29.53	750.0	30.30	769.6	8.2	—13.2	55	nw.	12	5.4		1 cs	0	n.		0	0	clear	
Duluth, Minnesota	29.52	749.8	30.28	769.1	— 8	—22.2	78	w.	7	3.1		0	0			0	0	clear	
Eagle Pass, Texas	29.06	738.1	29.90	759.4	63.2	17.3	100	se.	3	1.3			10 n			inap.	inap.	light rain	
Eagle Rock, Idaho	25.39	644.9	30.35	770.9	—24	—31.1	100	w.	3	1.3		0	hz.			0	0	clear	
Eastport, Maine	29.67	753.6	29.74	755.4	33	0.6	78	s.	4	1.8			10 s		s.	0	0	cloudy	
El Paso, Texas	26.13	663.7	30.01	762.2	39.1	3.9	82	w.	8	3.6		0	3 ks		w	0	0	clear	
Erie, Pennsylvania	29.10	739.1	29.88	758.9	36	2.2	89	calm	0	0			10 n			0.02	0.5	light snow	
Escanaba, Michigan	29.36	745.7	30.08	764.0	6	—14.4	87	w.	7	3.1		0	0			0	0	clear	
Florence, Arizona																			
Fort Apache, Arizona	24.96	634.0	30.08	764.0	29	— 1.7	92	se.	3	1.3			10 n		calm	0.39	9.9	light snow	
Fort Assinnaboine, Montana	27.40	695.9	30.44	773.2	—10	—23.3	57	sw.	12	5.4		0	0			0	0	clear	
Fort Bennett, Dakota	28.82	732.0	30.56	776.2	— 6	—21.1	61	n.	8	3.6		0	0			0.25	6.3	clear	
Fort Benton, Montana	27.44	697.0	30.42	772.7	—17	—27.2	49	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	28.35	720.1	30.55	776.0	—10	—23.3	57	w.	6	2.7		0	0			0	0	clear	
Fort Custer, Montana	27.12	688.8	30.50	774.7	—17	—27.2	100	se.	4	1.8		0	0			inap.	inap.	clear	
Fort Davis, Texas	24.97	634.2	29.95	760.7	48	8.9	93	s.	4	1.8			10 s		s.	0	0	cloudy	
Fort Elliott, Texas	27.21	691.1	30.14	765.5	18	— 7.8	87	n.	28	12.5			10 n		n.	inap.	inap.	light snow	
Fort Gibson, Indian T'y	29.41	747.0	30.01	762.2	35.3	1.8	89	n.	16	7.2			10 n			inap.	inap.	light rain	
Fort Grant, Arizona	25.19	639.8	30.09	764.3	31	— 0.6	53	e.	1	0.4			10 n			0.04	1.0	light snow	
Fort Griffin, Texas	28.64	727.4	30.02	762.5	42	5.6	82	n.	30	13.4			10 s		calm	0	0	cloudy	
Fort Keogh, Montana	27.84	707.1	30.52	775.2	—13	—25.0	50	sw.	1	0.4		0	0			0	0	clear	
Fort Macon, North Carolina	30.02	762.5	30.02	762.5	60	15.6	100	sw.	15	6.7		10ck;cs	fg.	sw.	calm	0	0	cloudy	
Fort McKavett, Texas	27.60	701.0	29.99	761.7	59	15.0	93	se.	6	2.7			10 s			0.08	2.0	cloudy	
Fort Missoula, Montana	27.08	687.8	30.54	775.7	— 1	—18.3	100	nw.	1	0.4		0	0			0	0	clear	
Fort St. Michaels, Alaska	29.21	741.9	29.24	742.7	20	— 6.7	100	s.	18	8.0			10 n			0.21	5.3	light snow	
Fort Shaw, Montana	26.51	673.3	30.37	771.4	—4	—20.0	68	w.	1	0.4		0	0			0.03	0.8	clear	
Fort Sill, Indian Territory	28.76	730.5	30.10	764.5	28	— 2.2	96	n.	41	18.3			10 s			0	0	cloudy	
Fort Stevenson, Dakota	28.45	722.6	30.51	774.9	—10	—23.3	57	nw.	6	2.7		0	0			0	0	clear	
Fort Verde, Arizona					25	— 3.9	88	w.			1		fg.			0.29	7.4	dense fog	
Fredericksburg, Texas																			
Galveston, Texas	29.93	760.2	29.97	761.2	67	19.4	95	s.	9	4.0			10 s		ne.	0.01	0.3	cloudy	
Grand Haven, Michigan	29.34	745.2	30.05	763.3	23.0	— 5.0	73	nw.	20	8.9			10 s		w.	0	0	cloudy	
Hatteras, North Carolina	29.99	761.7	30.01	762.2	63	17.2	93	sw.	36	16.1			9 k		s.	0	0	cloudy	
Helena, Montana	26.00	660.4	30.42	772.7	— 6	—21.1	66	calm	0	0		0	0			0.04	1.0	clear	
Henrietta, Texas	29.02	737.1	30.09	764.3	35	1.7	100	n.	30	13.4			10 n			0.04	1.0	light rain	
Huron, Dakota	28.99	736.3	30.53	775.4	— 5	—20.6	58	nw.	18	8.0		0	0			0.04	1.0	clear	
Indianapolis, Indiana	29.14	740.1	29.98	761.5	35	1.7	64	n.	9	4.0			10 s		n.	0.08	2.0	cloudy	
Indianola, Texas	29.91	759.7	29.94	760.5	68.6	20.3	100	s.	6	2.7		7 k	0	s.		0	0	fair	
Jacksboro, Texas	28.75	730.2	29.99	761.7	48	8.9	100	n.	2	0.9			10 n			inap.	inap.	thund'rst'm.	
Jacksonville, Florida	30.15	765.8	30.20	767.1	64	17.8	90	s.	10	4.5			10 s			0	0	cloudy	
Keokuk, Iowa	29.59	751.6	30.29	769.4	16.0	— 8.9	83	n.	14	6.3			10 n		n.	0.12	3.0	light snow	
Key West, Florida	30.17	766.3	30.20	767.1	71.3	21.8	83	e.	3	1.3		0	2 k;s		e.	0	0	clear	
Kittyhawk, North Carolina	29.98	761.5	30.00	762.0	52	11.1	100	sw.	3	1.3			10 n		w.	0.59	15.0	light rain	
Knoxville, Tennessee	28.95	735.3	30.03	762.7	45.5	7.5	98	ne.	3	1.3			10 n			1.22	31.0	light rain	
La Crosse, Wisconsin	29.47	748.5	30.31	769.9	2	—16.7	72	nw.	10	4.5		0	0			inap.	inap.	clear	
La Mesilla, New Mexico	26.01	660.6	30.04	763.0	34.7	1.5	82	w.	4	1.8		0	0			inap.	inap.	clear	
Leavenworth, Kansas	29.42	747.3	30.38	771.6	15	— 9.4	67	nw.	20	8.9			10 s		nw.	0.10	2.5	cloudy	
Lewiston, Idaho	29.72	754.9	30.59	777.0	14	—10.0	64	e.	4	1.8		0	0			0	0	clear	
Little Rock, Arkansas	29.55	750.6	29.88	758.9	62	16.7	100	sw.	4	1.8			10 s			0.13	3.3	cloudy	
Los Angeles, California	29.67	753.6	30.07	763.8	43.2	6.2	74	n.	5	2.2			9 s		calm	0	0	cloudy	
Louisville, Kentucky	29.28	743.7	29.87	758.7	57.0	13.9	86	sw.	6	2.7			10 s		calm	0.02	0.5	cloudy	
Lynchburg, Virginia	29.19	741.4	29.91	759.7	48.8	9.3	89	sw.	4	1.8			10 s		sw.	0.25	6.3	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.11	739.4	30.20	767.1	6	—14.4	76	nw.	22	9.8		1 cs	0	nw.		0	0	clear	
Marquette, Michigan	29.26	743.2	30.04	763.0	8	—13.3	76	nw.	11	4.9		0	2 s		nw.	0	0	clear	
Mason, Texas	28.18	715.8	29.92	760.0	61	16.1	93	calm	0	0			10 s		s.	0.02	0.5	threatening	
Memphis, Tennessee	29.56	750.8	29.92	760.0	62	16.7	100	w.	5	2.2			10 n			0.43	10.9	light rain	
Milwaukee, Wisconsin	29.34	745.2	30.14	765.5	12	—11.1	61	nw.	18	8.0		0	5 s		nw.	0	0	fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.06	763.5	30.10	764.5	64.0	17.8	93	sw.	1	0.4		7 cs	0	s.		0.05	1.3	fair	
Montgomery, Alabama	29.83	757.7	30.07	763.8	68.3	20.2	89	sw.	5	2.2			10 s			inap.	inap.	cloudy	
Moorhead, Minnesota	29.30	744.2	30.41	772.4	—13	—25.0	100	w.	12	5.4		0	0			0	0	clear	
Morgantown, W. Virginia	28.70	729.0	29.76	755.9	57.5	14.2	84	sw.	8	3.6			10 n		s.	0.21	5.3	light rain	
Mt. Washington, N. H.	23.23	590.0	29.86	758.4	17.0	— 8.3	96	nw.	60	26.8			fg		nw.	0.19	4.8	dense fog	
Nashville, Tennessee	29.36	745.7	29.92	760.0	58.9	14.9	89	calm	0	0			10ks;fg			0.46	11.7	cloudy	
New Haven, Connecticut	29.59	751.6	29.71	754.6	37	2.8	89	calm	0	0			10s;fg		w.	0.03	0.8	cloudy	
New London, Connecticut	29.71	754.6	29.76	755.9	42	5.6	82	sw.	7	3.1			10 s		sw.	0.02	0.5	cloudy	
New Orleans, Louisiana	30.01	762.2	30.07	763.8	70.0	21.1	90	s.	7	3.1		0	7 s		s.	0	0	fair	
Newport, Rhode Island	29.70	754.4	29.74	755.4	43.2	6.2	88	sw.	10	4.5			10 n		sw.	0.05	1.3	light rain	
New River, N. Carolina					57	13.9	93	sw.			4	4 ck	5 s	w.	sw.	0	0	cloudy	
New Shoreham, Rhode Isl'd	29.74	755.4	29.77	756.1	46.5	8.1	83	w.	20	8.9		10 cs	0	w.		0.10	2.5	cloudy	
New York, New York	29.60	751.8	29.80	756.9	41	5.0	92	sw.	9	4.0			10 s		sw.	0.01	0.3	cloudy	
Norfolk, Virginia	29.90	759.4	29.93	760.2	55	12.8	86	sw.	8	3.6			10 ks		w.	0.23	5.8	cloudy	
North Platte, Nebraska	27.40	695.9	30.52	775.2	5.6	—14.7	74	w.	20	8.9			10 s			0.01	0.3	cloudy	
Olympia, Washington T'y	30.37	771.4	30.41	772.4	28.0	— 2.2	84	ne.	2	0.9		0	0			0	0	clear	
Omaha, Nebraska	29.23	742.4	30.50	774.7	8.4	—13.1	55	n.	24	10.7			10 s		n.	0.01	0.3	cloudy	
Ooglaamie, Pt. Barrow, Alas-	29.90	759.4	29.92	760.0	—25.0	—31.7	82	ne.	14	6.3		0	0			0	0	clear	
Oswego, New York	29.41	747.0	29.76	755.9	34.6	1.4	83	nw.	8	3.6			10 s		nw.	0.05	1.3	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.10	764.5	30.13	765.3	67.4	19.7	96	s.	5	2.2			10 s		s.	0	0	cloudy	
Philadelphia, Pa.	29.75	755.6	29.81	757.2	46	7.8	93	w.	8	3.6			10ks;hz		w.	0.03	0.8	cloudy	
Pike's Peak, Colorado	17.22	437.4	29.92	760.0	0	—17.8	100	s.	14	6.3			10 n		s.	0.33	8.4	light snow	
Pioche, Nevada	24.01	609.8	30.21	767.3	9	—12.8	63	n.	11	4.9		0	0			0.06	1.5	clear	
Pittsburg, Pennsylvania	28.96	735.6	29.81	757.2	48.0	8.9	89	nw.	4	1.8			ton;fg		c;nw.	0.22	5.6	light rain	
Port Eads, Louisiana	30.10	764.5	30.11	764.8	63.4	17.4	93	s.	4	1.8			fg			0	0	dense fog	
Port Huron, Michigan	29.20	741.7	29.93	760.2	27.0	— 2.8	89	nw.	7	3.1			10 s		calm	0.05	1.3	cloudy	
Portland, Maine	29.65	753.1	29.70	754.4	33.5	0.8	88	sw.	3	1.3			10 n		calm	inap.	inap.	light snow	
Portland, Oregon	30.34	770.6	30.41	772.4	34.0	1.1	63	ne.	10	4.5		0	0			0	0	clear	
Portsmouth, N. Carolina					58	14.4	80	sw.	15	6.7		6 c;k	4 ks	c.; s.	sw.	0	0	cloudy	
Prescott, Arizona	24.64	625.8	30.02	762.5	14	—10.0	53	s.	2	0.9		0	0			0.15	3.8	clear	
Punta Rassa, Florida	30.19	766.8	30.20	767.1	63.5	17.5	92	e.	5	2.2		hz	1 s		calm	0	0	clear	
Red Bluff, California	29.79	756.7	30.17	766.3	43.5	6.4	34	n.	8	3.6		0	0			0	0	clear	
Rio Grande City, Texas	29.63	752.6	29.88	758.9	65	18.3	93	se.	3	1.3			10 s		se.	0	0	cloudy	
Rochester, New York	29.08	738.6	29.79	756.7	32	0.0	100	w.	6	2.7			10 n		w.	0.07	1.8	light snow	
Roseburg, Oregon	29.73	755.1	30.30	769.6	32	0.0	81	calm	0	0			10 ks			0	0	cloudy	
Sacramento, California	30.05	763.3	30.13	765.3	35.5	1.9	79	e.	4	1.8		0	0			0	0	clear	
St. Louis, Missouri	29.53	750.0	30.17	766.3	28.9	— 1.7	88	n.	25	11.2			10 s		n.	0.11	2.8	cloudy	
St. Paul, Minnesota	29.38	746.2	30.33	770.4	2.0	—16.7	72	w.	5	2.2		0	0			0	0	clear	
St. Vincent, Minnesota	29.34	745.2	30.32	770.1	—18	—27.8	100	nw.	16	7.2		0	0			0	0	clear	
Salt Lake City, Utah	25.72	653.3	30.29	769.4	8	—13.3	58	n.	4	1.8		0	0			0	0	clear	
San Antonio, Texas	29.16	740.7	29.89	759.2	64.6	18.1	93	se.	6	2.7			10 s		se.	0.02	0.5	cloudy	
San Diego, California	29.99	761.7	30.06	763.5	40.8	4.9	82	e.	4	1.8		0	0			0.05	1.3	clear	
Sandusky, Ohio	29.22	742.2	29.94	760.5	34	1.1	89	nw.	12	5.4			10 s			0.14	3.6	cloudy	
Sandy Hook, New Jersey	29.76	755.9	29.80	756.9	43.0	6.1	93	w.	10	4.5		9 k	0	w.		0	0	cloudy	
San Francisco, California	30.05	763.3	30.12	765.0	45	7.2	49	sw.	8	3.6		0	0			0	0	clear	
Santa Fé, New Mexico	23.08	586.2	30.09	764.3	21	— 6.1	87	s.	3	1.3			10 s		calm	0.03	0.8	cloudy	
Savannah, Georgia	30.03	762.7	30.13	765.3	61.5	16.4	92	sw.	4	1.8		0	4 s		s.	0	0	fair	
Shreveport, Louisiana	29.66	753.4	29.92	760.0	66	18.9	100	s.	3	1.3			10 n		calm	0.26	6.6	light rain	
Silver City, New Mexico	24.10	612.1	29.96	761.0	25	— 3.3	80	n.	6	2.7		0	0			0.16	4.1	clear	
Sitka, Alaska	29.74	755.4	29.81	757.2	45.6	7.6	78	se.	20	8.9			10 n		se.	1.10	27.9	light rain	
Smithville, North Carolina	30.03	762.7	30.07	763.8	59	15.0	93	sw.	13	5.8		6 ck	0	w.		0	0	fair	
Spokane Falls, Wash. Ter.	28.41	721.6	30.55	776.0	0	—17.8	83	calm	0	0		0	0			0	0	clear	
Springfield, Illinois	29.40	748.3	30.19	766.8	22.4	— 5.3	80	n.	10	4.5			10 n			0.11	2.8	heavy snow	
Springfield, Massachusetts	29.58	751.3	29.72	754.9	37.9	3.3	89	s.	5	2.2		8 ck	0	sw.		0.03	0.8	cloudy	
Springfield, Mo.	28.55	725.2	30.13	765.3	31	— 0.6	88	ne.	26	11.6			10 n			inap.	inap	light snow	
Stockton, Texas	26.81	681.0	29.95	760.7	52.0	11.1	85	calm	0	0			10 s		s.	0	0	cloudy	
Thatcher's Island, Mass.	29.67	753.6	29.73	755.1	40.0	4.4	94	sw.	16	7.2			10 s		w.	0	0	threatening	
Toledo, Ohio	29.22	742.2	29.90	761.0	35	1.7	79	n.	5	2.2			10 s		n.	0.07	1.8	cloudy	
Tucson, Arizona	27.58	700.5	30.08	764.0	40	4.4	92	se.	2	0.9			10 n			0.23	5.8	light rain	
Umatilla, Oregon	30.23	767.8	30.62	777.7	17.2	— 8.2	83	se.	5	2.2		0	0			0	0	clear	
Uvalde, Texas																			
Vicksburg, Mississippi	29.73	755.1	30.00	762.0	68	20.0	93	s.	10	4.5		8 k	0	s.		0.35	8.9	cloudy	
Visalia, California	29.70	754.4	30.09	764.3	28.5	— 1.9	82	se.	1	0.4		0	0			0	0	clear	
Washington, D. C.	29.72	754.9	29.84	757.9	48	8.9	86	s.	4	1.8		6 k	2 s	w.	sw.	0.02	0.5	cloudy	
West Los Animas, Colorado																			
Wickenburg, Arizona																			
Williamsport, Pa.																			
Wilmington, N. Carolina	29.14	740.1	29.78	756.4	36.5	2.5	90	calm	0	0			10 s			inap.	inap.	threatening	
Winnemucca, Nevada	29.08	761.5	30.04	763.0	63	17.2	90	w.	10	4.5		9 k	0	nw.		0	0	cloudy	
Wood's Holl, Mass.	25.82	655.8	30.30	771.1	8	—13.3	58	ne.	10	4.5		0	0			0	0	clear	
Yankton, Dakota	29.72	754.9	29.76	755.9	45	7.2	88	sw.	15	6.7			10 n		w.	0.08	2.0	light rain	
Yuma, Arizona	29.09	738.9	30.51	774.9	2	—16.7	45	nw.	13	5.8		0	0			inap.	inap.	clear	
Sub-Series.	29.92	760.0	30.07	763.8	40.9	4.9	92	n.	2	0.9		0	0			0.02	0.5	clear	
Bogota, U. S. Columbia	22.04	559.8			47.0	8.3	70	calm	0	0		0	2 s			0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.12	765.0	30.13	765.3	76	24.4	76	e.				5 k	5 ks	e.	e	0.08	2.0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.90	759.4	29.92	760.0	78	25.6	90	calm	0	0			10 n		calm	0.30	7.6	heavy rain	J. I. Plume.
Guadeloupe, W. I.	30.04	763.0	30.06	763.5	74	23.3	87	e.				5 e	0			0.1	3.		B. Bigar.
Havana, Cuba, W. I.	30.17	766.3	30.22	767.6	69	20.6	90	calm	0	0		0	2 ks		calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.10	764.5	30.11	764.8	69.7	20.9	79	n.	1	0.4		0	2 s		e.	0	0	fair	Robert Johnstone.
Navassa, W. I.	30.01	762.2	30.09	764.3	76.5	24.7	65	ne.	6	2.7		5 ck	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.05	763.3	79	26.1	87	e.			2	5 k	8 ps	e	e.	0.040	1.0	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.40	746.7	29.95	760.7	81	27.2	80	calm			0	5 ck	5 ks	calm	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua					73.4	23.0	90	ne.			5	0	1 ks		ne.	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.12	765.0	30.14	765.5	75	23.9	76	nne.	2.4	1.1		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.75	755.6	29.80	756.9	—34.0	—36.7		nw.	36	16.1			10 n		nw.	0.30	7.6		J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads. India.	29.93	760.2	78.2	25.7	82	nne.			2-4		6							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.71	780.0	49	9.4	50	ssw.			1		0							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 2° 40′ E. 101° 14′	29.89	759.2	82	27.8	78	w.			1		4	calm						d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.87	758.7	78	25.6	65	se.			4-5		0							squally	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.93	760.2	69	20.6	95	s.			1-2		8							d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.63	778.0	34	1.1		n.			2		10	nne.						snowing	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.52	775.2	62	16.7		ene.			4-9		6	e.				2	wsw.	squally	Lieut. J. L. Burr
H. M. S. Cormorant, S. 28° 10′, E. 154° 20′	29.90	759.4	78	25.6		n.			2		3	n.				2	n.	d. clouds	Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.14	765.5	42.5	5.8	83	se.			1-2		0							blue sky	Capt. S. Long.
H. M. S. Diamond, S. 30° 59′, W. 20° 58′	30.23	767.8	70	21.1	66	se.			2-3		1					2	sse.	d. clouds	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	30.27	768.8	62	16.7	64	nne.			1		8	nne.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 09′, W. 82° 21′	30.19	766.8	68.5	20.3	94	e.			1		0							misty	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 20′, W. 60° 40′	29.10	739.1	58	14.4	81	nnw.			1-2		5					1	nnw.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.96	761.0	84	28.9		ene.			3		4							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. G. Robinson.
H. M. S. Espiegle, S. 7° 49′, W. 29° 45′	30.03	762.7	78	25.6	95	ese.			3		4	ese.				2	ese.	d. clouds	Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′ E. 43° 12′	29.98	761.5	78.5	25.8	73	s.			4		2					3	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.30	769.6	38	3.3	80	nw.			1		6							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.96	761.0	59.5	15.3	94	nnw.			1		10							drizzling	Comm. E. G. Bourke.
H. M. S. Garnet, S. 50° 02′, W. 60° 13′	29.23	742.4	54	12.2	79	wnw.			6		2					4	wnw.	squally	Capt. L. Jones.
H. M. S. Iris, Off Tripoli, Syria	30.30	769.6	52	11.1	66	ne.			3		5					3	n.	d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.12	765.0	59	15.0	81	calm			0		0							blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 16′, E. 110° 39′	30.16	766.1	64.1	17.8	83	ene.			2-3		0					4	c'fd	misty	Capt. A. Carpenter.
H. M. S. Malabar, Bombay, India	29.99	761.7	79	26.1	82	w.			1		3	nw.						d. clouds	Capt. H. Hand.
H. M. S. Mutine, Tambo de Mora, Peru	29.97	761.2	70	21.1	95	calm			0		0							blue sky	Comm. F. Edwards.
H. M. S. Northampton, Barbadoes, West Indies	30.07	763.8	77.5	25.3	69	ene.			2		1							blue sky	Capt. E. Drummond
H. M. S. Orontes, S. 16° 33′, E. 60° 37′	29.91	759.7	84	28.9	79	calm			0		7	nne.						d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 21° 35′, W. 7° 19′	30.09	764.3	75	23.9	95	ene.			2		5					1	ene.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, Bushire, Persia	30.16	766.1	69.1	20.6		w.			1									d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′. W. 123° 27′	30.31	769.9	32	0.0	100	calm			0		3							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, Ind	30.06	763.5	80.5	26.9	78	nne.			2		3	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 27° 00′, E. 34° 12′	30.18	766.6	69	20.6	95	nw.			4		6	wnw.				2	wnw.	d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 36′, W. 80° 40′	30.09	764.3	78.5	25.8	82	ene.			2		1					2	ese.	blue sky	Capt. C. G. Fane.
H. M. S. Triumph, Panama Bay, Panama	29.94	760.5	77	25.0	82	nnw.			3		2	calm						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 16° 50′, E. 40° 31′	30.07	763.8	80.5	26.9	100	se.			2		1	se.				1	se.	blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.08	764.0	72	22.2		nne.			1		4							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark																			Capt. T. P. Nesham.
H. M. S. Zephyr, N. 33° 30′, E. 130° 29′	30.31	769.9	45	7.2	92	w.			1		1	w.						blue sky	Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	29.94	760.5	79.7	26.5	65	ne.			3		0					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 17° 25′, W. 62° 43′	30.13	765.2	77.7	25.4	92	ene.			3		8							overcast	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.18	766.6	69	20.6	90	ssw.	2	0.9	.....	.....	8	.....	ssw.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	29.70	754.4	30	— 1.1	.....	w.	4	1.8	.....	.....	10	.....	w.	0	0	.....	.....	cloudy	
Naval Hospital Yokohama, Japan	30.02	762.5	35	1.7	47	n.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear	
Adams, Callao, Peru	29.75	755.6	70	21.1	95	sse.	.....	.....	1-2	.....	8	.....	.....	.....	.....	gr'd	.....	cloudy	
Alaska, S. 25° 11′, W. 71° 07′	29.92	760.0	65	18.3	84	s.	.....	.....	1	.....	8	.....	.....	0	0	long	s.	cloudy	
Alert, N. 21° 26′, E. 113° 24′*	30.09	764.3	62	16.7	83	ne.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	hazy	
Alliance, Boston, Mass.*†	29.81	757.2	44	6.7	67	wsw.	.....	.....	1	.....	10	.....	.....	light	light	.....	.....	drizzling	
Ashuelot, Tientsin, China	30.24	768.1	34	1.1	100	calm	.....	.....	0	.....	10	.....	calm	.....	.....	.....	.....	overcast	
Brooklyn, S. 18° 42′, W. 38° 27′	29.98	761.5	81	27.2	87	n.	7	3.1	.....	.....	2	.....	n.	0	0	light	n.	fair	
Colorado, New York, N. Y.	29.76	755.9	43	6.1	92	sw.	6	2.7	.....	.....	10	.....	sw.	very	light	.....	.....	overcast	
Essex, N. 35° 51′, W. 59° 33′	30.27	768.8	62	16.7	77	sw.	.....	.....	2	.....	8	.....	.....	.....	.....	long	nw.	cloudy	
Franklin, Norfolk, Va.	29.92	760.0	55	12.8	93	sw.	15.6	7.0	.....	.....	10	.....	wnw.	0.14	3.6	.....	.....	cloudy	
Galena, N. 13° 54′, W. 22° 45′	30.06	763.5	73	22.8	85	ne.	.....	.....	5	.....	0	.....	.....	.....	.....	mod.	ne.	clear	
Independence, N. Yard, Mare I'd, Cal.	30.21	767.3	40	4.4	73	calm	0	0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La.	30.07	763.8	68	20.0	95	ssw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Lackawanna, Valparaiso, Chili†	30.01	762.2	62	16.7	100	nne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Lancaster, N. 44° 07′, E. 8° 33′	30.70	779.8	55	12.8	38	nw.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	nw.	fair	
Michigan, Erie, Pa.	29.81	757.2	39	3.9	.....	nw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	raining	
Minnesota, Newport, R. I.	29.77	756.1	47	8.3	85	sw.	7	3.1	.....	.....	10	.....	sw.	.....	.....	.....	.....	cloudy	
Monocacy, Yokohama, Japan	30.23	767.8	39	3.9	73	n.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Nipsic, Naples, Italy	30.72	780.3	48	8.9	56	ene.	.....	.....	3	.....	2	.....	ne.	.....	.....	sm'h	.....	squally	
Onward, Callao, Peru†	30.07	763.8	68	20.0	100	se.	.....	.....	2	.....	8	.....	n.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.24	768.1	55	12.8	93	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C.	29.82	757.4	48	8.9	70	s.	.....	.....	4	.....	5?	.....	s.	.....	.....	.....	.....	cloudy?	
Pensacola, S. 24° 10′, W. 73° 35′	30.04	763.0	67	19.4	79	sse.	.....	.....	2	.....	10	.....	se.	0	0	long	sse.	cloudy	
Powhatan, Boston, Mass.	29.75	755.6	40	4.4	82	wsw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	overcast	
Quinnebaug, Villafranca, France	30.83	783.1	58	14.4	53	ssw.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear	
Ranger, N. 17° 04′, W. 100° 34′*	29.88	758.9	75	23.9	77	calm	.....	.....	0	.....	2	.....	.....	0	0	sm'h	.....	clear	
Richmond, Pago Pago, Samoa Islands*	29.71	754.6	81	27.2	91	s.	.....	.....	1	.....	5?	.....	s.	0	0	.....	.....	cloudy.?	
Shenandoah, Montevideo, Uruguay*.	29.95	760.7	73	22.8	81	ese.	.....	.....	2	.....	5	.....	.....	.....	.....	sm'h	.....	fair	
St. Louis, League Island, Pa.	30.05	763.3	41	5.0	91	w.	5	2.2	.....	.....	8	.....	w.	0.07	1.8	.....	.....	cloudy	
Swatara, Kobe, Japan*	30.16	766.1	39	3.9	64	calm	.....	.....	0	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Tennessee, New York, N. Y.	29.76	755.9	44	6.7	?	sw.	6	2.7	.....	.....	10	.....	.....	0.01	0.3	.....	.....	overcast	
Vandalia, St. Georges, Grenada, W. I.	30.09	764.3	82	27.8	67	calm	.....	.....	0	.....	2	.....	ene.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass.	29.69	754.1	39	3.9	91	se.	8	3.6	.....	.....	10	.....	s.	0.10	2.5	.....	.....	raining	
Wachusetts, N. 51° 32′, W. 127° 56′	30.37	771.4	37	2.8	90	wsw.	.....	.....	1	.....	10	.....	wsw.	0	0	.....	.....	overcast	
Wyoming, Port Royal, S. C.	30.11	764.8	59	15.0	100	sw.	8	3.6	.....	.....	8	.....	calm	0	0	.....	.....	fair	
Yantic, Kingston, Jamaica, W. I.*	30.01	762.2	74	23.3	76	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	fair	

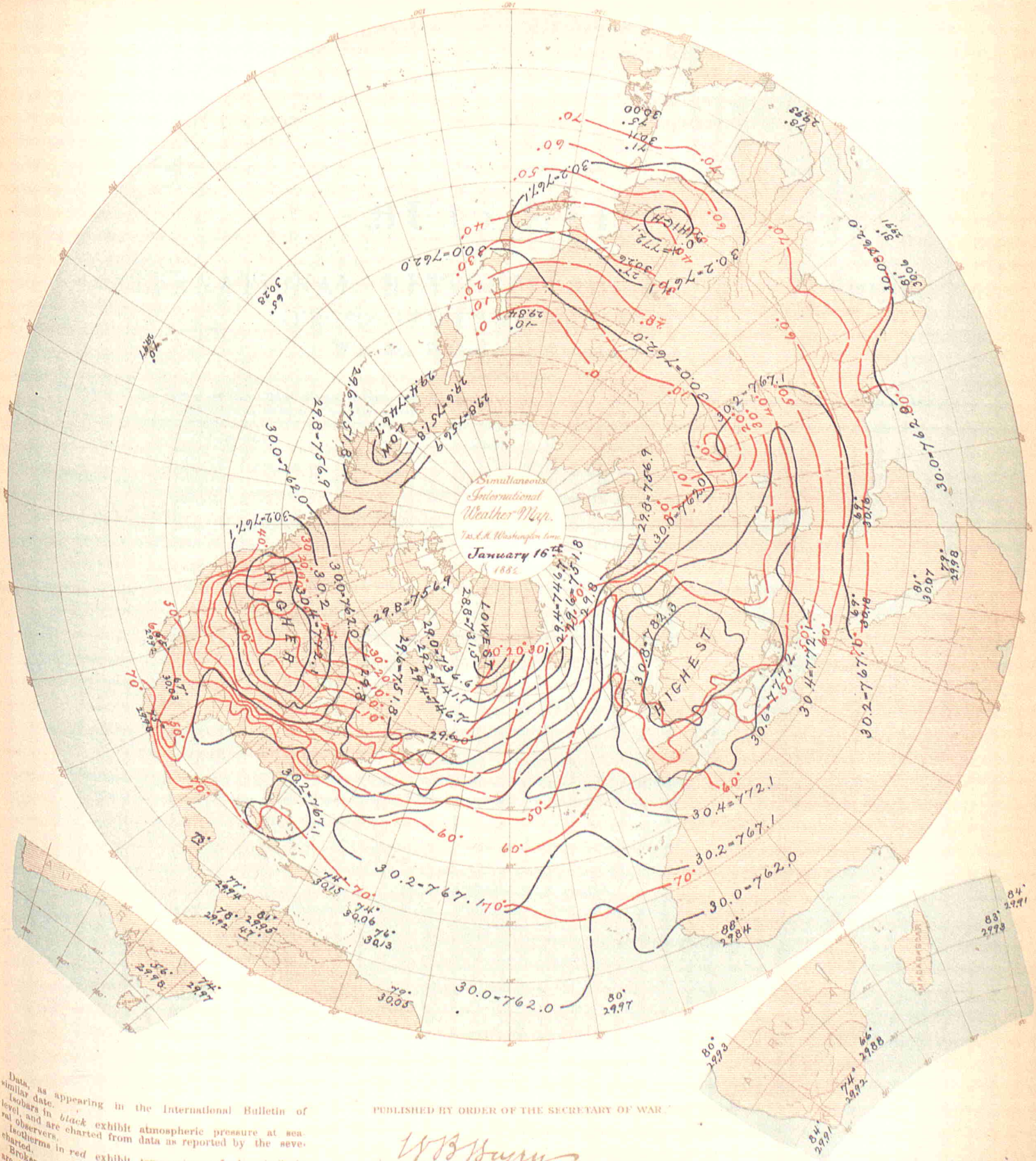
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.				Character.	Direction.		
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 46° 37′, W. 52° 35′	30.25	768.3	32	0.0	.....	sw.	6	.....	10	.....	sw.	½ h'r	snow	2–3	var.	snowing	C. Gapon, 2d Officer.
S. S. Polynesian, Capt. R. Brown, Boston, Mass*	29.44	747.8	37	2.8	.....	wsw.	1	.....	10	.....	sw.	4 h'r	4 h'r	.....	.....	cloudy	Roberts & Spark
S. S. Prussian, Capt. J. G. Stephens, N. 45° 16′, W. 59° 00′*	29.88	758.9	31	—0.6	.....	sw.	4	.....	10	.....	wsw.	.....	.....	light	sw.	hazy	J. G. Stephens.
S. S. Waldensian N. 45° 52′, W. 42° 00′*	30.27	768.8	30	—1.1	.....	w.	4	.....	.....	.....	nw.	2 h'r	snow	long	nnw.	cloudy	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, N. 41° 17′, W. 70° 23′	29.81	757.2	48	8.9	92	w.	5	.....	10	.....	w.	.....	.....	mod.	sw.	overcast	Cauffman & Morse. C. W. Walker, 2d Off.
S. S. Indiana, Capt. R. W. Sargent,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
S. S. Ohio, Capt. Henry Morrison, Liverpool, Eng*†	30.86	783.8	43	6.1	100	s.	1	.....	10	.....	sw.	.....	.....	.....	.....	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†	30.68	779.3	54	12.2	93	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown.. N. 40° 14′, W. 68° 25′†*	29.98	761.5	48	8.9	.....	sw.	5	.....	10	.....	sw.	.....	.....	sm'h	.....	overcast	J. Brown
Utopia, Capt. A. McRitchie, N. 48° 41′, W. 17° 25′*†	30.40	772.1	58	14.4	93	sw.	5	.....	8	.....	sw.	o	o	mod.	sw.	fair	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 19° 26′, W. 72° 43′*†	30.24	768.1	76	24.4	72	ne.	7	.....	4?	.....	ne.	o	o	sm'h	.....	cloudy?	C. P. Krause.
S. S. Alvo, Capt. D. W. Williams, Savanilla, U. S. C.*	29.93	760.2	77	25.0	.....	nne.	6	.....	o	.....	.....	o	o	.....	.....	very fine	J. Sandberg. W. H. Bennett.
S. S. Andes, Capt. W. P. Gladwin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. de Echevarrieta.
S. S. Arden, Capt. R. de Echevarrieta,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
S. S. Athos, Capt. C. G. Pearse N. 28° —′, W. 74° —′	29.88	758.9	.....	.....	.....	n.	2	.....	2?	.....	ne.	o	o	.....	ne.	cloudy?	Fisher & Weldon.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, N. 43° 29′, W. 69° 39′	.....	.....	46	7.8	85	wnw.	3	.....	hz	.....	.....	.....	.....	small	sw.	misty	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
Baroda, Capt. C. J. Russell N. 46° 59′, W. 12° 00′	30.09	779.5	55.5	13.1	100	sw.	3	.....	1	.....	.....	.....	.....	.....	.....	misty	.....
British Merchant, Capt. E. J. Molony, N. 5° 38′, E. 87° 10′	29.91	759.7	81	27.2	78	nne.	4	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Caldew, Capt. W. Peterson S. 26° 23′, W. 80° 10′	30.17	766.3	66.9	19.4	.....	se.	5	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Cipero, Capt. W. N. Laily N. 44° 49′, W. 17° 07′	30.52	775.2	60.4	15.8	88	ssw.	4	.....	2	.....	.....	.....	.....	3	s.	misty	.....
S. City of Agra, Capt. Thos. Young, S. 2° 58′, W. 25° 33′	29.98	761.5	81.5	27.5	.....	se.	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Glaramara, Capt. R. Morton, N. 22° 50′, W. 39° 57′	30.21	767.3	70.5	21.4	61	e.	1	.....	9	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Gordon Castle, Capt. W. Waring, N 50° 33′, W. 1° 09′	30.85	783.6	51.5	10.8	86	calm	o	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bq. Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery, S 34° 00′, W. 53° 00′	29.87	758.7	66.7	19.3	92	ene.	6	.....	9	.....	.....	.....	.....	.....	.....	raining	.....
S. Lochee, Capt. J. Raeburn, S. 15° 20′ E. 86° 05′	29.79	756.7	78.6	25.9	90	se.	8	.....	8	.....	.....	.....	.....	.....	.....	showery	.....
May Hulse, Capt. H. Youlden, S. 15° 45′, W. 35° 26′	30.03	762.7	82	27.8	74	ese.	2	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, N. 3° 20′, W. 29° 12′	29.97	761.2	80.2	26.8	86	n.	2	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. John Smith S 9° 34′, W. 25° 22′	30.05	763.3	79.0	26.1	78	e.	4	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 50° 23′, W. 64° 37′	29.46	748.3	55	12.8	100	wsw.	8	.....	9	.....	.....	.....	.....	.....	.....	threatening	.....
Queen of Cambria, Capt. M. Parry, S. 41° 57′, E. 9° 07′	30.05	763.3	51	10.6	64	s.	5	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. C. W. Pearson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge, N. 14° 15′ W. 37° 52′	30.10	764.5	73.9	23.3	90	nne.	4	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Bristol*†	30.71	780.0	51	10.6	.....	e.	1	.....	10	.....	e.	o	o	.....	.....	overcast	Wm. Fitt.
CALIFORNIA, AND MEXICAN S. S. CO.																	
J. Birmingham, Agent San Francisco.																	
S. S. Newbern, Capt. E. Rogers, Guaymax, Mexico†	30.12	765.0	54	12.2	79	calm	o	.....	o	.....	.....	o	o	.....	.....	clear	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Crowell & Henry.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Rains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer
GENERAL TRANS-ATLANTIC CO.																	
Louis de Behian, Agent, New York.																	
S. S. Canada, Capt. Frangeul, Havre, France	30.81	782.5	39.2	4.0	.....	se.	2	.....	10	.....	s.	o	o	.....	.....	.....	.....
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents. New York																	
S. S. Gellert, Capt. Kuhlewein, N. 42° 37′ W. 57° 41′*	29.59?	751.6?	37	2.8	80	wsw.	4	.....	10	.....	wsw.	o	o	mod.	w.	cloudy	P. Froehlich, 3d Off.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, S. 1° —′, W. 28° —′*†	30.19	766.8	82	27.8		ese.	2	.....	5	.....	s	o	o	light	s.	fair	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.* S. S. Iberian, Capt. E. Parry, N. 51° 30', W. 18° 07'						s.	3				w.	mist	mist	mod.	s.	overcast	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.* S. S. England, Capt. T. P. Heeley Off Liverpool Bar, England*	30.83	783.1				se.	2		10		se.	o	o			foggy	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E Ward & Co., Agents, New York.* S. S. Niagara, Capt. J. B. Baker Havana, Cuba, W. I*†	30.26	768 6	65	18.3		calm	0		0			o	o			clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, Cienfuegos, Cuba, W. I†	30.24	768.1	70	21.1		ne.	1		3		ene.	o	o			fair	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE. S. S. Ailsa, Capt. J. W. Sansom, N. 31° 41', W. 73° 48'†	30.27	768.8	72	22.2		ssw.	3								s.		
S. S. Bothnia, Capt. MacMackan, N. 51° 12', W. 14° 27'*	30.40	772.1	54	12.2		s.	5								sw.	cloudy	E. F. Stembridge, 3d off
S. S. City of Alexandria, Capt. L. F. Timmerman, Vera Cruz, Mexico*†	30.12	765.0	71	21.7		se.	3								nw.	clear	
S. S. City of Washington, Capt. J. W. Reynolds, N. 21° 20', W. 89° 38'*†	30.15	765.8	80	26.7		e.	1							sm'h		clear	
S. S. New York, Capt. R. B. Quick, N. 24° 54', W. 80° 30'*†	30.31	769.9	74	23.3		se.	4								se.		
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier,																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.* S. S. Hohenzollern, Capt. R. Sander, N. 40° 18', W. 58° 15'*	30.15	765.8	50.9	10.5		w.	3		5		w.	o	o	mod.	w.	fair	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer,																	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, N. 48° 41', W. 40° 56'*	29.99	761.7	35.5	1.9		w.	6		10		w.	o	o	high	var.	covered	
S. S. Mosel, Capt. J. Hesse, N. 49° 29', W. 16° 16'	30.52	775.2	54.5	12.5		sse.	5		7		sse.	2½h'r	2½h'r	mod.	s.	cloudy	J. Hesse.
S. S. Oder, Capt. C. Undeutsch, Weser River, Germany*	29.99	761.7	25.7	—3.5		n;sw.	1					o	o			foggy	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany			27.5	—2.5		n.	2-3		1		n.	o	o			foggy	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.* S. S. Belgic, Capt. H. Davison, San Francisco, Cal†	30.08	764.0	45	7.2	54	sw.	3		0			o	o			clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 26° 09', E. 122° 17 *†	30.32	770.1	65	18.3	68	ne.	4		5		ne.			mod.	ne.	d. clouds	
S. S. Oceanic, Capt. J. Metcalf, N. 31° 09', E. 131° 07 *	30.28	769.1	52	11.1	59	calm	0		0					sm'h		fine	
OCEAN S. S. CO. *George Young, Agent, New York.* S. S. City of Augusta, Capt. K. S. Nickerson, N. 32° 24', W. 78° 22'*†	29.81	757.2				sw.	7		2		nw.			sm'h		smoky	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 33° 32', W. 78° 03'†	29.77	756.1	69	20.6	89	sw.	6		5		wnw.	o	o	long	sse.	hazy	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.* S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.48	774.2	34	1.1	79	nw.	1		0							fair	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer N. 47° 18', W. 124° 45'*	30.40	772.1	38	3.3	80	ese.	5		2		e.	o	o	light	w.	clear	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *R. Van Ostrendorp, Agent, San Francisco.* S. S. Columbia, Capt. Fred Bolles, N. 45° 22', W. 124° 03'†	30.33	770.4	40	4.4	73	ene.	2		8		nne.			mod.	nnw.	cloudy	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†	30.04	763.0	47	8.3	92	se.	1		0							clear	G. Roese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.* S. S. Ancon, Capt. J. N. Ingalls, N. 35° 31', W. 121° 10'†	30.02	762.5	48	8.9	77	ese.	3		2		se.			sm'h		fair	
S. S. Geo. W. Elder, Capt. H. G. Morse, Tacoma, Capt. E. Alexander,																	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 42', W. 118° 14'†	30.33	770.4	32	0.0	89	se.	3		0							clear	
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.08	764.0	54	12.2	48	se.	2		8		se.	o	o	mod.	se.	cloudy	G. H. Harisson.
S. S. State of California, Capt. G. Debney, Portland, Oregon†	30.27	768.8	40	7.8	54	se.	1		0			o	o			clear	T. Wallace.
S. S. Victoria, H. M. Hayward, N. 43° 30', W. 124° 40'†	30.35	770.9	32	0.0	78	nne.	3		0			o	o			clear	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulley, Supt. New York.* S. S. Australia, Capt. ——, N. 19° 27', W. 158° 22'	30.26	768.5	45	7.2	84	nw.	4		0					mod.	nw.	clear	
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.97	761.2	70	21.1	95	n.	5		5'		n.			long	ne.	cloudy?	A. Bannerman, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 31° 28', E. 131° 30'†	29.97	761 2	74	23.3	81	s.	2		8			rain	rain			cloudy	W. H. Hawes, 2d Off.
S. S. City of Sydney, Capt. H. C. Dearborn, N. 30° 04', W. 172° 27'†	30.30	769.6	52	11.1	66	nw.	3		2		nw.	o	o	long	nw.	fine	J. M. Dow, 3d Officer. E. Le Saik.
S. S. City of Tokio, Com. J. Maury Collins, Capt. R. R. Searle,	30.28	769.1	65	18.3	78	sse.	4		10		s.	o	o	mod.	s.	cloudy	W. Thaxter.
S. S. Panama, Panama..† Grenada, Capt. M. Connolly,	29.92	760.0	77	25.0	100	nw.	3		7		nw.	o	o			cloudy	
S. S. San José, Guatemala† South Carolina, Capt. W. J. Russell,	29.87	758.7	75	23.9	72	ne.	1		2		ese.	o	o	small	ssw.	clear	
S. S. Zelandia, Capt. H. Webber, N. 23° 33', W. 111° 00'* S. 33° 51', E. 151° 18'	29.92	760.0	65	18.3	94	n.	3		5		n.	o	o	mod.	nw.	fair	
	29.89	759.2	70	21.1	72	ne.	3		8		ne.			sm'h		cloudy	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke, Barbadoes, W. I.						ene.	2		0			0	0	sm'h		clear	G. S. Locke
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 49° 30′, W. 9° 50′*†	30.87	784.1	54	12.2	86	s.	1		10		s.	0	0	r'gh	w.	cloudy	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	30.95	786.1	33	0.6	79	se.	1					0	0			foggy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 49° 53′, W. 22° 23′*†	30.44	773.2	55	12.8	87	ssw.	6		8		sw.	0	0	r'gh	sw.	overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels. N. 46° 08′, W. 42° 36′*	30.06	763.5	32	0.0		wnw.	7		10		wnw.	2 h'r	hail	h'vy	w.	cloudy	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis.																	
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub, N. 57° 42′, E. 10° 42′†	30.76	781.3	41.0	5.0		ssw.	2		10		ssw.	0	0	sm'h	ssw.	covered	J. T. Ulberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 43° 52′, W. 41° 27′*†	30.26	768.6	38	3.3		w.	5		9		w.	5 h'r	hail sleet	mod.	w.	cloudy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 48° 25′, W. 38° 55′*†	29.96	761.0	40	4.4		wsw.	6		8		w.	shr's	shr's	cross	ssw. nw.	hailing	J. Moore. W. Thomas.
S. S. Britannic, Capt. H. H. Perry,																	
S. S. Celtic, Capt. B. Gleadell N. 41° 14′, W. 60° 57′*†	29.93	760.2	54	12.2	79	w.	4		8		wsw.	0	0	sm'h		cloudy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. Liverpool, Eng.*†	30.97	786.6	42	5.6		s.	2		2?		s.	0	0			overcast?	W. A. Ward. H. Goulden, 4th Officer
S. S. Republic, Capt. P. J. Irving,																	
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 40° 28′, W. 53° 33′*	30.21	767.3	54	12.2		se.	3		6		w.	0	0	mod.		fair	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, N. 24° 22′, W. 82° 35′†	30.37	771.4	76	24.4	76	ese.	3	0	2 k		ese.	0	0	mod.	e.	fair	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona																	
Bk. Alpha, Capt. Ole Grönn, N. 39° 02′, E. 3° 40′*†	30.64	778.2	62	16.7		ene	5		1		ne.	0	0	sm'h	ne.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis. N. 33° 48′, W. 75° 26′*†	30.12	765.0	75	23.9		wsw.	3		10		sw.	0	0	r'gh	s.	cloudy	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin, S. 21° 47′, W. 36° 43′						n.					n.			light	n.	clear	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.87	784.1				ese.	1		fg.			0	0			foggy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill.																	
S. Enoch Train, Capt. H. D. Chapman. N. 50° 06′ W. 3° 50′*	30.69	779.5				se.	1		2		se.	0	0	long	wsw.	fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 42° 38′, W. 36° 31′*	30.43	772.9				nnw.	4		10		nw.	16 h'r	h'vy	h'vy	w.	cloudy	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	29.99	761.7	52	11.1	86	sw.	4		8		sw.			sm'h		cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 46° 52′, W. 64° 04′†	29.67	753.6	61	16.1		nw.	3		10		sw.	0	0	mod.	s.	cloudy	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 53° 14′, W. 17° 33′			53	11.7		s.	7		10		s.	10 h'r	light	mod.	s.	raining	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.06	738.1				ese.	2		10		se.	5 h'r	5 h'r			cloudy	D. Williams.
Bk. Geo. Booth, Capt D. Williams,																	
S. Hedwig, Capt. T. Minssen. N. 52° 39′, E. 3° 41′*	30.65	778.4	42.8	6.0	95	sse.	4		10		sse.	0	0	sm'h		hazy	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 16° 20′, W. 32° 57′*	29.82	757.4				e.	5		1			sh'rs	shr's	long	ene.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 18′, W. 10° 46′*†	30.30	769.6				se.	6					0	0	very hv'y	se.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.57	776.5	54	12.2	60				0							clear	G. S. d'Anconas.
Bk. Pilgrim, Capt. J. Connolly,																	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen.																	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 21° 30′, W. 27° 09′*	29.99	761.7	68.4	20.2	94	e.	4		4		e.			mod.	n.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.51	774.9	58	14.4	76	ene.	6		0			0	0			clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 22° 41′, W. 31° 03′*†	30.20	767.1				nnw.	4		0					hv'y	sw.		I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton, N. 33° 41′, W. 63° 08′*†	30.35	770.9				wnw. to sw.										cloudy	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.


Simultaneous
International
Weather Map.
Ten A.M. Washington time.
January 16th
1882.
HIGHEST
LOWEST
HIGHER
LOWER
30.2-767.1
30.0-762.0
30.4-772.1
30.6-777.2
30.8-782.3
29.8-756.9
29.6-751.8
29.4-746.7
29.2-741.7
29.0-736.6
28.8-731.5
29.8-756.9
29.6-751.8
29.4-746.7
29.2-741.7
29.0-736.6
28.8-731.5
30.0-762.0
30.2-767.1
30.4-772.1
30.6-777.2
30.8-782.3

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 17, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.56	776.1	59.7	15.4	66	w.			2		1			0	0	fair	Moiroud.
Algiers			30.67	779.0	55.4	13.0	85	ne.			3		9			inap.	inap.	covered	Nicolas.
La Calle			30.66	778.7	65.1	18.4	80	se.			4		6			0.020	0.5	cloudy	Fonfréde.
Tunis			30.64	778.2															Jacques.
Sfax																			Gau.
Saida																			Perès.
Tebessa			30.59	776.9	50.0	10.0	76	se.			3		3			0	0	pretty fair	Derché.
Geriville			30.62	777.8	40.6	4.8	56	ne.			3		7			0	0	very cloudy	Lonchamp.
Laghouat					39.6	4.2	80	e.			1		10			0.020	0.5	covered	Herbin.
Biskra			30.71	780.1	44.6	7.0	66	e.			1		3			0.004	0.1	pretty fair	Malau.
			30.67	779.0	57.6	14.2	37	nw.			1		6			0	0	cloudy	
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.81	757.2	29.90	759.4	64.0	17.8	73	ssw.	4	1.8			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram								w.			2		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Observatory	30.21	767.3	30.79	782.1	41.0	5.0	76	w.					10			0	0		Dr. Wierzbiski.
Eperies	30.02	762.4	30.84	783.2	35.2	1.8	67	w.	7.4	3.3						0	0		Julius Mikolik.
Gratz	29.77	756.1	30.68	779.3	45.7	7.6	32	nw.			2	cs	6s		s.	0	0		Andreas Rospini.
Hermannstadt	29.47	748.4	30.78	781.9	41.4	5.2	65	se.			2		3			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.13	739.9	30.64	778.3	36.7	2.6	74	nnw.			2		3			0	0		The Staff.
Lemberg	29.49	749.1	30.93	785.5	35.6	2.0	71	sw.			1		7k			0	0		Dr. T. Stanecki.
Pola	29.66	753.3	30.72	780.3	30.0	— 1.1	88	nw.			1		10			0	0		I. R. Hydrographic Office.
Szathmar	30.60	777.3	30.72	780.2	57.2	14.0	30	ne.			2		5			0	0		Joseph Midlinszky, S. J.
Szegedin	30.16	766.0	30.63	778.0	34.5	1.4	64	s.			1		2			0	0		Karl Stancel.
Trieste	30.40	772.2	30.70	779.8	35.2	1.8	93	nw.			2		10			0.008	0.2	snowing	Rieder.
Vienna	30.66	778.8	30.76	781.4	49.6	9.8	57	e.			1		0			0	0		I. R. Central Met. Obs'y.
	30.11	764.8	30.83	783.0	45.1	7.3	34	nw.			3		1			0	0		
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper.	Lower.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	30.58	776.7	30.68	779.3	43.0	6.1	79	w.	4	1.8			7			0	0	misty	W. Boswell.
Armagh, Observatory	30.55	776.0	30.80	782.3	45.9	7.7	87	sw.	6	2.7			10					overcast	S. Gall.
Bidston, Liverpool Obs'y			30.89	784.6	42.1	5.6	89	ese.	9	4.0			7					d. clouds	John Hartnup
Bolton, Sharples	30.33	770.4	30.89	784.6	38.8	3.8	93	n.	6	2.7			10					foggy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.43	772.9	30.83	783.1	44.7	7.1	84	w.			1		5			0	0	d. clouds	J. McLandsborough, F.R.
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	80.0	26.7	66	ne.			2		3					d. clouds	Corpl. J. Surgenor.
Cardington			30.90	784.8	37.4	3.0	91	w.			0.2		10					foggy	John McLaren.
Chatham, School M. E.	30.81	782.6	30.95	786.1	33.0	0.6	95	calm			0		10					foggy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.68	779.3	30.92	785.4	47.3	8.5	81	ese.			2		9					overcast	The Staff.
Fort Napier, Natal	27.54	699.5	29.75	755.6	77.2	25.1	69	ne.			1		3					blue sky	Pvt. E. K.Anniss.A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	84.0	28.9	79	nw.			1		5					d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.75	781.0	48	8.9	92	s.			2		2			0	0	blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.46	773.7	30.51	774.9	58.5	14.7	84	e.			8		10					showery	Cpl. O. Baldwin.
Glasgow, Observatory	30.58	776.7	30.79	782.1	46.5	8.1	84	wsw.			4		10 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.76	781.3	30.94	785.9	32.6	0.4	100	sw.			1		10					foggy	The Staff.
Guernsey	30.63	778.0	30.94	785.9	39.1	3.9	98	ese.			1		10					foggy	A. Collenette, F. M. S.
Kew, Observatory	30.91	785.1	30.95	786.1	34.3	1.3	95	sw.	6	2.7			10					misty	The Staff.
Leicester, Museum	30.63	778.0	30.90	784.8	40.0	4.4	91	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.40	772.1	30.48	774.2	52.0	11.1	59	n.			4		2					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.24	768.1	30.29	769.4	71.2	21.8	89	se.			1		5					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.36	771.1	30.92	785.4	37.9	3.3	97	w.			1		10					foggy	John Mac Email.
Oxford, Radcliffe Obs'y	30.70	779.8	30.93	785.6	34.0	1.1	99	wsw.			1		10					foggy	The Staff.
Plymouth	30.82	782.8	30.90	784.8	46.1	7.8	85	se.			1		0					blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.53	775.4	50	10.0	82	sw.	20	8.9			10					misty	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.32	770.1	30.39	771.9	36.0	2.2	90	sw.			1		9			blank	blank	misty	W. H. Lyne
Sheffield	30.56	776.2	30.86	783.8	41.2	5.1	90	w.			1		1			0	0	misty	W. F. Cooper.
Silloth Rectory	30.82	782.8	30.85	783.6	45.2	7.3	92	sw.			2		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.89	784.6	42.0	5.6	87	w.	3	1.3			10					misty	Rev. S. J. Perry.
Stratfield Turgiss					34.5	1.4	85	w.			1		10					overcast	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.80	782.3	30.85	783.6	49	9.4	85	e.			4		8					gloomy	W. Newcombe.
Valencia, Observatory	30.81	782.6	30.83	783.1	50.6	10.3	80	se.	17	7.6			5					misty	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	Upper.	Lower.	Inch.	Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.85	758.2	29.89	759.2	9	—12.8	98	wnw.	10	4.5			10 n			0.050	1.3	light snow	H. J. Cundall, C. E.
Chatham, N. B*	29.88	758.9	29.95	760.7	— 2	—18.9	100	nw.	1	0.4			10 ks		w.	0.02	0.5	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.95	760.7	29.98	761.5	— 5	—20.6	83	nw.	25	11.2		0	5 n		nw.	0.01	0.3	fair	J. McWilliams.
Fort Garry, Manitoba*	28.78	731.0	29.72	754.9	—16	—26.7	100	s.	16	7.2			10 n			0	0	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	29.76	755.9	29.89	759.2	19	— 7.2	96	n.	2	0.9			10 n			0.318	8.1	heavy snow	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.76	755.9	30.13	765.3	11	—11.7	83	ne.	7	3.1			10 ks		w.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.86	758.4	30.08	764.0	3	—16.1	60	nw.	10	4.5		0	0			0	0	clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.41	747.0	30.20	767.1	— 3	—19.4	65	n.	6	2.7		2 k	2 ks	nw.	nw.	0	0	fair	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.42	747.3	30.18	766.6	13	—10.6	100	w.	10	4.5		0	0			0	0	clear	H. Morgan.
Port Stanley, Ontario	29.51	749.5	30.22	767.6	12	—11.1	83	w.	12	5.4			8 k		nw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.63	752.3	30.00	762.0	— 8	—22.2	58	n.			1	0	2 s		n.	0.10	2.5	clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.67	753.6	30.22	767.6	—22	—30.0	70	calm	0	0		0	0			0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.35	745.5	30.12	765.0	16	— 8.9	83	n.	25	11.2			10 s			0.05	1.3	heavy snow	K. Stewart.
St. Andrews, N .B	29.87	758.7	29.92	760.0	13	—10.6	85	n.	3	1.3			10 n			0.02	0.5	light snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.78	756.4	29.84	757.9	17	— 8.3	96	nw.	2	0.9			10 n			0.04	1.0	light snow	T. C. Hill, C. E.
Toronto, Ontario*	29.72	754.9	30.14	765.5	14	—10.0	91	nw.	6	2.7		2cs	2 ks	nw.	nw.	0.01	0.3	fair	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.79	756.7	29.86	758.4	23	— 5.0	80	ne.	1	0.4			10 n			0.40	10.2	heavy snow	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.57	751.1	29.83	757.7	31	— 0.6	100	s.					10			0.20	5.1		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	Upper.	Lower.	Inch.	Mill.	Weather.	Observers.
Cape St. Francis Lt. House.	29.96	761.0	29.99	761.7	78.0	25.6	84	e.	8.6	3.8		0	2 k			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y.	29.90	759.4	29.94	760.5	82.8	28.2	64	sse.	27	12.1		0	2			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	Upper.	Lower.	Inch.	Mill.	Weather.	Observers.
Sub-Series.																			
Hankow	30.25	768.3	30.54	775.7	43.0	6.6	97	se.			1		0			0	0	clear	N. Titoushkin.
Zi-Ka-Wei, near Shanghai.	30.32	770.1	30.34	770.7	41.6	5.5	77	nw.	6.3	2.8		0	0			0.043	1.1	clear	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From	Rain-fall or melted snow in the past 24 hours Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.72	780.4	30.77	781.6	33.4	0.8	92	wnw.	9	4			10					foggy	Oversergent Fischer.
Fanöe	30.79	782.0	30.81	782.5	39.2	4.0	97	wsw.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.26	743.3	29.31	744.4	6.3	—14.3	74	e.			4		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.55	750.6	29.60	751.7	33.1	0.6		sw.			7		10					snowing	A. O. Thorlacius.
Thorshavn	30.18	766.5	30.21	767.4	45.1	7.3	83	w.	25	11			7					raining	Overloerer Bergh.
Vestervig	30.62	777.7	30.71	780.0	40.3	4.6	96	w.			4		10						Loearer Oesterboi.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	30.19	766.7	30.86	783.8	45.3	7.4	62	se.			1	0	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	30.40	772.1	30.95	785.1	30.2	—1	96	ne.			2	e	0			0	0		M. Nicot, Director.
Arras, Engineer School	30.66	778.8	30.94	785.9	29.5	—1.4	97	sse.			2		10			0	0	foggy	M. Klein, Commandant.
Avignon, Normal School	30.75	781.0	30.83	783.0	41.0	5	69	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.33	770.4	30.94	785.9	29.3	—1.5		se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.09	779.4	30.98	785.8	32.0	0	93	se.			1		10			0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.92	785.3	32.0	0	96	ne.			1		fg		e.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.56	776.3	30.84	783.3	51.3	10.7	43	e.			1		0			0	0	clear	M. Rayet, Director.
Bourges, Normal School	30.37	771.3	30.97	786.5	26.6	—3	100	ne.			1		n		ne.	0	0	light fog	M. Postel, Director.
Brest, Naval Observatory	30.65	778.5	30.89	784.7	39.2	4.0	97	sse.			1		10		sse.	0	0	misty	M. de Kennaree, Dir
Caen, Normal School	30.84	783.4	30.93	785.5	29.8	—1.2	89	sse.			1		2		sse.	0	0	slightly cl'dy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.57	776.4	30.91	785.0	27.0	—2.8	94	sse.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.40	772.1	30.95	786.1	30.2	—1		ssw.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.48	748.7	30.90	784.8	46.4	8.0	57	n.			1		0			0	0	clear	M. Allnard, Director.
Cluny, Normal School	30.04	763.0	30.95	786.0	27.3	—2.6	95	se.			2		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	30.03	762.8	30.97	786.6	28.4	—2	92	e.			1		10	e.	e.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	28.15	714.9	30.78	781.8	46.0	7.8	36	n.			4	2 e	0	e.		0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.63	752.5	30.78	781.9	54.9	12.7	40	ne.			1		2		sw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	30.11	764.9	30.94	785.9	28.8	—1.8	100	ese.			1		kn			0	0		M. Ablard, Director.
Guéret, Normal School	29.24	742.6	30.87	784.0	49.6	9.8	34	sse.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.62	777.8	30.92	785.4	36.5	2.5	93	ese.			1		1		ese.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	30.25	768.3	30.83	783.0	52.3	11.3	62	sw.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.84	783.4	30.95	786.0	40.1	4.5	93	ne.			1		mist			0	0	misty	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.82	757.3	30.97	786.6	27.1	—2.7	100	e.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.64	778.2	30.98	786.8	35.4	1.9		ese.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.45	773.4	30.72	780.3	59.2	15.1	36	s.			0.1		5		se.	0	0		M. Stephan, Director.
Montlouis Pinstituteur	25.41	645.5	30.26	768.5	41.0	5.0	34	w.	9.4	4.2			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.69	779.4	30.80	782.3	51.4	10.8	43	nne.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	30.14	765.5	30.99	787.2	28.4	—2	92	nne.			1		fg			0	0	foggy	M. Hasse, Director
Nantes, Observatory	30.77	781.5	30.93	785.6	34.3	1.3	81	nne.			0–1	0	4 kn		ne.	0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.71	780.1	30.83	783.0	50.9	10.5	57	calm	0	0			1	ese.		0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.68	550.8			22.1	—5.5		e.			2		1		e.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.79	756.6	30.95	786.0	25.5	—3.6							fg			0	0	dense fog	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.80	655.4			38.8	3.8	44	nne.			2		0			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.88	784.3	30.91	785.1	41.0	5.0	76	ene.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.62	777.8	30.85	783.7	41.5	5.3	21	wnw.			1		0			0	0	clear	M. Moullot, Director.
Rodez, Normal School	28.56	725.4	30.79	782.1	46.4	8	59	e.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.91	785.2	30.99	785.4	31.3	—0.4	97	se.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.78	781.8	30.94	785.8	20.3	—6.5	90	ssw.			1		5			0	0	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.79	782.0	30.95	785.2	28.2	—2.1	100	n.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	30.13	765.2	30.87	784.0	46.6	8.1	74	s.			1		fg	w.		0	0	light fog	M Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.43	772.8	30.92	785.4	28.8	—1.8	100	se.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	30.07	763.8	30.95	786.2	30.2	—1.0	50	calm			0	0	28			0	0	misty	Prof. Dr. Hoh.
Berlin	30.69	779.4	30.87	784.2	36.7	2.6	75	w.			1		0			0	0		Prof. Dr. Arndt.
Breslau	30.34	770.5	30.88	784.4	38.5	3.6	54	w.			2		1			0	0		Royal University Obs'y.
Carlsruhe	30.45	773.3	30.93	785.6	28.0	—2.2	100	se.			1		10			0	0	dense fog	Albert Senz.
Cassel	30.14	765.6	30.80	783.8	34.9	1.6	74	s.			1		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.56	776.2	30.96	786.3	34.0	1.1	73	ese.			1		1			0	0		Physical Society.
Friedrichshafen	29.44	747.8	31.00	787.5	27.1	—2.7	89	ne.			1		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.81	782.6	30.91	785.0	26.2	—3.2	94	w.			1	5 c	0			0	0	foggy	E. Preller.
Kiel	30.85	783.5	30.86	783.9	32.0	0.0	92	calm			0		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.47	773.8	30.91	785.1	30.7	2.6	65	ssw.			1		2			0	0		H. Leppig, Asst.
Magdeburg	30.69	779.6	30.90	784.8	37.9	3.3	55	calm			0	3 es	0			0	0	foggy	Dr. Assmann.
Memel	30.68	779.2	30.72	780.4	35.4	1.9	93	wsw.			4		10					foggy	Issermann.
Munich	29.01	736.9	30.93	785.7	24.6	—4.1	96	n.			1		10			0	0	foggy	Central Station.
Neufahrwasser	30.76	781.2	30.77	781.6	33.4	0.8	87	n.			1		2			0	0		A. Lothes.
Neustadt, Palatinate	30.40	772.3	30.95	785.1	28.4	—2.0		sw.			2		1	w.		0	0		Dicknether.
Stuttgart	29.94	760.4	30.90	784.9	32.4	0.2	92	n.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.84	783.2	30.86	783.8	30.7	—0.7	100	w.			2		10			0	0	dense fog	Profs. Brandes & Reimer.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.05	763.3	30.46	773.7	38.7	3.7		nw.			2.0		8			0.039	1.0	snowing	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.98	761.4	30.03	762.8	79.8	26.6	37	ne.					3			0	0	d. clouds	
Deesa	29.50	749.3	29.98	761.4	80.5	26.9	25	n.	9.0	4.0			0			0	0	blue sky	
Bombay	29.92	759.9	29.96	760.9	79.4	26.3	66	nnw.	12	5.4			0			0	0	blue sky	
Poona, Yarrowda	28.08	713.1	29.91	759.7	86.0	30.0	23	nne.	4	1.8			0			0	0	blue sky	
Belgaum	27.41	696.2	29.93	760.2	81.3	27.4	24	ene.	4	1.8			0			0	0	blue sky	
Lahore	29.36	745.6	30.14	765.5	57.8	14.3	88	w.	2.1	0.9			0			0	0	blue sky	
Roorkee	29.14	740.1	30.08	763.9	63.4	17.4	68	nw.	1.0	0.4			2			0	0		
Agra	29.50	749.4	30.09	764.2	68.3	20.2	56	n.	1.7	0.8						0	0		
Nagpur	28.93	734.8	29.98	761.4	80.7	27.1	34	calm	2.4	1.1			0			0	0	blue sky	
Jubbulpore	28.65	727.7	30.05	763.3	65.7	18.7	29	calm	1.3	0.6			0			0	0	blue sky	
Lucknow	29.73	755.2	30.12	765.0	70.2	21.2	43	calm	0.6	0.3			0			0	0	blue sky	
Allahabad	29.73	755.1	30.05	763.3	65.3	18.5	61	calm	0.5	0.2			0			0	0	blue sky	
Patna	29.87	758.8	30.07	763.7	66.6	19.2	63	w.	1.5	0.7			2	w.	w.	0	0		
Hazaribagh	27.97	710.5	30.02	762.6	70.3	21.3	44	calm	3.8	1.7			0			0	0	blue sky	
Cuttack	29.95	760.8	30.04	762.9	75.0	23.9	61	calm					0			0	0	blue sky	
Calcutta, Alipore	30.03	762.6	30.05	763.2	69.0	20.6	61	nnw.	4.0	1.8			0			0	0	blue sky	
Dhubri	29.92	760.0	30.05	763.2	67.4	19.7	66	calm	3.1	1.4			0			0	0	blue sky	
Chittagong	29.95	760.8	30.04	763.1	69.2	20.7	68	nw.	2.1	0.9			0			0	0	blue sky	
Sibsagar	29.73	755.1	30.08	764.1	61.9	16.6	84	ne.	1.5	0.7			0			0	0	blue sky	
Jeypore	28.58	726.0	30.06	763.5	71.7	22.1	39	wnw.	3.9	1.7			0			0	0	blue sky	
Zanzibar, Africa	29.81	757.2			84.5	29.2	78	nnw.	10.1	4.5			2			0	0	d. clouds	
Trichinopoly	29.72	754.9			79.9	26.6	59	ene.	2	0.9			6			0	0	d. clouds	
Bellary	28.58	725.9			84.0	28.9	29	e.	3.3	1.5			0			0	0	blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.35	770.9	30.78	781.7	48.2	9.0	41	calm	0	0			0			0	0		Prof. Giovanni Clodig.
Milan	30.20	768.5	30.81	782.5	34.9	1.6	74	w.	4.9	2.2			1			0	0		Prof. Schiaparelli.
Padua	30.68	779.2	30.80	782.2	38.8	3.8	78	nnw.	3.1	1.4			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.84	757.9	30.80	782.3	38.3	3.5	68	ene.	1.8	0.8			0			0	0		Prof. P. F. Denza.
Genoa	30.52	775.2	30.72	780.3	59.9	15.5	17	ne.	6.9	3.1			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.78	731.1	30.79	782.1	44.6	7.0	37	se.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.69	779.6	30.75	781.0	43.5	6.4	52	n.	19.9	8.9			1			0	0		Prof. Luigi Guidi.
Florence	30.46	773.6	30.72	780.4	54.0	12.2	26	nw.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.65	778.6	30.74	780.9	53.4	11.9	36	ne.	5.6	2.5			0			0	0		Prof. P. Monte.
Rome	30.40	772.2	30.58	776.8	55.0	12.8	35	n.	15.4	6.9			1			0	0		Prof. P. S. Ferrari.
Lecce	30.24	768.0	30.47	774.0	51.8	11.0	47	n.	17.4	7.8			1	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.61	752.2	30.54	775.8	43.2	6.2	70	nw.	3.1	1.4			10	n.		0.106	2.7		Prof. D. Conti.
Cagliari	30.43	773.0	30.63	778.1	53.4	11.9	44	wnw.			2		0			0	0		Prof. A. Pacinotti.
Palermo	30.32	770.1	30.58	776.7	52.2	11.2	46	ne.	5.6	2.5			1			0	0		Prof. G. Olacciatore.
Syracuse	30.47	774.0	30.52	775.2	53.1	11.7	54	wnw.	11.2	5.0			7	ne.		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	30.02	762.6	30.57	776.4	52.2	11.2	52	n.	3.8	1.7			1	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.70	576.6			28.0	— 2.2	30	se.			1		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.74	577.7			30.0	— 1.1	28	n.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.07	763.8	30.11	764.8	28.7	— 1.8	85	wsw.	4.7	2.1			10ks;s		wsw.	0.033	0.8	overcast	
Hakodate	30.10	764.5	30.11	764.8	30.0	— 1.1	71	nw.	3.0	1.3			10		nw.	0	0	covered	
Hiroshima, I. M. Obs'y †	30.18	766.6	30.20	767.1	39.5	4.2	89	nne.	1.4	0.6		ck	6 k;s			0	0	cloudy	K. Sasaki.
Kanazawa	30.15	765.8	30.26	768.6	37.7	3.2	94						10 n					light rain	S. Endo.
Kioto	30.01	762.2	30.19	766.8	37.9	3.3	93	ssw.	0.8	0.4		0	9 s			0.008	0.2	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.01	762.2	30.22	767.6	43.3	6.3	85	n.	1.1	0.5		0	6 s			0.021	0.5	cloudy	S. Takehayashi.
Niigata	30.06	763.5	30.09	764.3	36.2	2.3	92	s.	2.5	1.1		10 ck	0			0.190	4.8	cloudy	
Nobiru	30.09	764.3	30.10	764.5	34.8	1.6	88	nnw.	5.3	2.4		ck	10 s					snowy	H. Midzushina.
Supporo					26.5	— 3.1	78	w.	1.8	0.8			10			0.010	0.2	covered	
Tokei Obs'y, Yeddo	30.06	763.5	30.13	765.3	32.3	0.2	76	ene.	3.0	1.3		0	4 s			0	0	fair	The Staff.
Wakayama	30.04	763.0	30.09	764.3	41.9	5.5	79	sse.	3.4	1.5		0	5 s			0	0	fair	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.66	753.4	29.85	758.2	82.1	27.8	74	nw.	12.0	5.4		4 c;cs	6 k;ks	wsw.	nnw.	0	0	cloudy	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.70	602.0	29.92	760.0	50.0	10.0	89	calm	0	0		0	9 k		sw.	0	0	very cloudy	Vicente Fernandez.
Leon	24.45	621.0	30.22	767.5	53.0	11.7	80	n.			1	4 c	0	s.		0	0	foggy	Prof. M. Leal.
Mazatlan	29.75	755.8	30.02	762.5	64.0	17.8	97	wnw.			4	10 cs	0	sw.		b.039	1.0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.3	30.32	770.2	43.3	6.3	72	calm	0	0		3 c	0			0	0	clear	The Staff.
Morelia	24.32	617.8	30.58	776.9	47.8	8.8	76	se.			2	0	0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	23.97	608.7	30.07	763.7	49.3	9.6	82	wsw.			1		10 k	s.		0	0	covered	M. V de Leon, M. E.
Puebla, Catholic Institute	23.45	595.7	30.41	772.4	41.9	5.5	76	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.25	615.9	30.27	768.9	51.4	10.8	53	w.			1		10		e.	0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Oházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.97	786.6	30.97	786.6	31.3	— 0.4		ssw.			2					0	0		
Groningen	30.86	783.8	30.91	785.2	30.2	— 1.0		sw.			1					0	0		
Helder	30.91	785.2	30.91	785.2	34.9	1.6		ssw.			1					0	0		
Hellevoetsluis	30.95	786.0	30.95	786.0	31.5	— 0.3	97	ssw.			1					0	0		
Utrecht	30.91	785.2	30.96	786.4	29.7	— 1.3	92	sse.			1		hz.			0	0	hazy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen																			
Brono	30.56	776.1	30.62	777.7	42.8	6.0	97	s.	22	10			10			0.228	5.8	raining	
Christiania	30.03	762.8	30.07	763.8	43.5	6.4	90	sw.	27	12			10			0.236	6.0	raining	
Gjæsvær	30.39	771.9	30.55	775.9	33.8	1.0	98	sw.	7	3			10			0.010	0.4	foggy	
Lodingen	29.20	741.7	29.22	742.3	39.6	4.2		ssw.			8		10					raining	
	29.67	753.7	29.72	754.3	41.9	5.5	96	wsw.			7		10			0.457	11.6	rain & fog	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					51.8	11.0	87	se.	13.0	5.8			5			0.181	4.6		Dr. J. A. Sampaio.
Campo Major	29.22?	742.2?	30.24?	768.1?	52.9	11.6	57	ne.	29.3	13.1			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.26	768.5	30.34	770.7	66.0	18.9	44	e.	2.5	1.1			0			0	0		Capt. D. A. de Gunha.
Lisbon, Observatory	30.28	769.2	30.66	778.7	51.6	10.9	66	nne.	21.7	9.7			0			0	0		The Staff.
Ponta Delgada, Azores	30.39	772.0	30.47	773.8	62.6	17.6	73	ene.	8.7	3.9			3			0	0		
Saint Paul de Loando	29.71	754.6	29.91	759.7	80.2	26.8	87	w.	2.5	1.1			2	s.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.78	730.9	29.98	761.5	— 3.8	—19.9		sw.	45	20		0	0			0.091	2.3		Major K. Lasarew.
Archangel	29.89	759.3	29.91	759.8	20.2	— 3.2	87	wsw.	4	2			9 k			0	0		Capt. Sseliwerstow.
Astrakhan	30.39	771.9	30.31	769.8	28.9	— 1.7	54	w.	9	4		0	2 s			0	0		Capt. Wisganow.
Barnaul	29.57	751.0	30.11	764.9	7.2	—13.8	77	sw.	31	14			7			0	0		Meteorological Obs'y.
Dorpat	30.26	768.5	30.52	775.1	32.7	0.4	100	wsw.	11	5			10 n			0	0	light fog	Observatory.
Ekaterinburg	28.46	722.8	29.45	747.9	21.0	— 6.1	82	w.	18	8			10					snowing	Meteorological Obs'y.
Kasan	29.71	754.7	30.00	761.9	23.0	— 5.0	73	nw.	11	5			10			0	0		Observatory.
Kertch	30.39	771.8	30.41	772.3	26.8	— 2.9	94	nnw.	4	2			10 n			0	0		Lagorio & Sastyrez.
Kieff	29.90	759.5	30.58	776.8	27.7	— 2.4	100	n.	11	5			10n;ks			0	0	light fog	Observatory.
Lugan	30.20	767.0	30.42	772.6	25.9	— 3.4	87	nnw.	13	6			10			0	0		Meteorological Obs'y.
Moscow	29.90	759.5	30.42	772.6	24.4	— 4.2	77	w.	7.8	3.5		0	5 ks			0	0		Meteorological Obs'y
Nikolaiev	30.49	774.4	30.56	776.2	28.8	— 1.8	66	n.	4	2			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.82	757.3	29.90	759.5	—10.5	—23.6	78	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.08	764.0	30.22	767.6	28.2	— 2.1	67	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	30.37	771.3	30.38	771.7	28.0	— 2.2	87	wsw.	9	4			10 n			0.012	0.3		Central Physical Obs'y.
Tashkend, Laboratory	28.65	727.7	30.28	769.0	41.9	5.5	85	calm	0	0			2			0	0		Teich, A. M.
Tiflis	28.85	732.9	30.35	770.9	34.3	1.3	46	n.	13	6			0			0	0		Physical Observatory.
Warsaw	30.33	770.3	30.78	781.8	31.6	— 0.2	76	w.	4	2		0	8 k;ks						Astronomical Obs'y.
Wilna	30.28	769.0	30.73	780.5	32.7	0.4	94	sw.	2	1			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.49	749.0	29.80	757.0	6.8	—14.0	85	s.	7	3			10			0.024	0.6	snowing	M. O. Marks
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.62	777.7	50	10.0	93	ssw.			4		10			0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.66	778.7	30.76	781.2	54.7	12.6	65	e.	0.9	0.4			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.75	781.0	30.81	782.5	57.9	14.4	51	se.	5.4	2.4		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.73	704.4	30.90	784.8	36.1	2.3	50	ne.	3.4	1.5		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.47	723.0	30.79	782.1	48.7	9.3	58	ne.	8.7	3.9		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.56	776.2	30.76	781.4	53.4	11.9	78	ene.	3.8	1.7		5	5	wsw.		0.201	5.1	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.77	756.1	30.09	779.6	50.9	10.5	67	calm	0	0		0	4			0	0	cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.12	764.9	30.18	766.6	67.5	19.7	91	e.	1.3	0.6		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.95	760.8	30.01	762.2	70.9	24.9	74	ne.	3.3	1.5		0	1 ks			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.44	773.2	30.54	775.8	59.2	15.1	55	e.	9.4	4.2		0	7		e.	0.009	0.2		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I.	30.04	762.9	30.13	765.2	76.6	24.8	78	e.	13.0	5.8		7 k	4 kn	e.	e.	0	0	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.96	761.0	30.09	764.3	73.1	22.8	82	nw.	3.6	1.6			10 ks		n.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.83	757.6	29.87	758.6	35.6	2.0	78	sw.			4		2			0	0		
Umea	30.11	764.8	30.16	766.1	29.8	— 1.2	84	wsw.			2		7			0	0		
Hernosand	30.28	769.0	30.33	770.3	37.9	3.3	82	calm			0		10			0	0		
Stockholm	30.30	769.6	30.48	774.1	39.0	2.2	93	w.			2		10			0.004	0.1		
Wisby	30.53	775.5	30.59	777.0	35.6	2.0	89	w.			4		10			0	0		
Sub Series.																			
Upsala	30.34	770.6	30.43	772.8	35.7	2.0	97	wsw.	6.5	2.9			10			0	0	foggy	S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.45	747.9	30.95	786.0	30.6	— 0.8	91	s.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.45	773.3	37.8	3.2	83	nw.	3	1.5			10		n.	0.787	20.0		The Observatory.
Valona			30.43	772.9	49.6	9.8		nw.			1		2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.11	764.7	52.9	11.6	68	n.			3	0	3 k		n.	0.43	10.9		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.		
Albany, New York	29.95	760.7	30.04	763.0	25	— 3.9	73	n.	3	1.3			10 n			0.25	6.3	light snow	
Alpena, Michigan	29.52	749.8	30.23	767.8	— 1	—18.3	68	w.	5	2.2		0	0			0	0	clear	
Atlanta, Georgia	28.89	733.8	30.12	765.0	55.0	12.8	96	nw.	4	1.8			10 n		calm	0.24	6.1	light rain	
Atlantic City, New Jersey	29.99	761.7	30.00	762.0	33.3	0.7	85	n.	15	6.7			10 n			0.13	3.3	light rain	
Augusta, Georgia	29.85	758.2	30.05	763.3	65.3	19.1	93	s.	7	3.1			10 s		s.	0	0	cloudy	
Baltimore, Maryland	30.00	762 0	30.05	763.3	36	2.2	89	n.	8	3.6			10 n			0.20	5.1	light snow	
Barnegat, New Jersey	29.94	760.5	29.96	761.0	31.0	— 0.6	88	n.	32	14.3			10 s		n.	0.22	5.6	cloudy	
Bismarck, Dakota	27.97	710.4	29.97	761.2	11	—11.7	80	s.	6	2.7			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.54	699.5	30.47	773.9	11	—11.7	91	n.	2	0.9			10 s		calm	0	0	cloudy	
Boston, Massachusetts	29.79	756.7	29.96	761.0	24.0	— 4.4	93	nw.	12	5.4			10 n			0.33	8.4	light snow	
Brownsville, Texas	30.32	770.1	30.37	771.4	37	2.8	100	n.	16	7.2			10 n			0.24	6.1	light rain	
Buffalo, New York	29.33	745.0	30.13	765 3	18.2	— 7.7	75	sw.	15	6.7		0	3 s		sw.	inap	inap.	clear	
Burlington, Vermont	29.75	755.6	30.06	763.5	10.0	—12.2	80	n.	8	3.6			10 s		sw.	0.01	0.3	cloudy	
Cairo, Illinois	30.09	764.3	30.51	774.9	16.0	— 8.9	91	nw.	14	6.3			10 s		w.	0.21	5.3	cloudy	
Campo, California	27.61	701.3	30.24	768.1	33.2	0.7	81	e.	16	7.2		0	0			0	0	clear	
Camp Thomas, Arizona																			
Cape Henry, Virginia	29.94	760.5	29.96	761.0	43	6.1	93	nw.	28	12.5			10 n			0.08	2.0	light rain	
Cape May, New Jersey	29.96	761.0	29.99	761.7	37	2.8	100	nw.	13	5.8			10 n		nw.	0.12	3.0	light rain	
Castroville, Texas	29.59	751.6	30.44	773.2	31	— 0.6	74	nw.	16	7.2			10 n			0.09	2.3	light sleet	
Cedar Keys Florida	30.15	765.8	30.17	766.3	65	18.9	90	s.	10	4.5		0	1 k			0	0	clear	
Champaign, Illinois	29.60	751.8	30.47	773 9	3.5	—15.8	85	nw.	5	2.2		0	0			0.06	1.5	clear	
Charleston, S. Carolina	30.01	762.2	30.07	763.8	60	15.6	87	sw.	7	3.1		0	0			0	0	clear	
Charlotte, N. Carolina	29.11	739.4	30.00	762.0	57.0	13.9	96	sw.	2	0.9			10 s		sw.	0.98	24.9	cloudy	
Chattanooga, Tennessee	29.33	745.0	30.19	766.8	40.0	4.4	89	nw.	11	4.9			10 n		nw.	1.07	27.2	light rain	
Cheyenne, Wyoming	23.91	607.3	30.16	766.1	20.5	— 6.4	49	w.	12	5.4		0	0			0	0	clear	
Chicago, Illinois	29.65	753.1	30.40	772.1	0.6	—17.4	81	w.	8	3.6		0	0			0	0	clear	
Chincoteague, Virginia	29.96	761.0	29.98	761.5	39	3.9	89	n.	24	10.7			10 n		n.	0.14	3.6	light rain	
Cincinnati, Ohio	29.65	753.1	30.34	770.6	21	— 6.1	84	nw.	12	5.4			10 s			0.33	8.4	cloudy	
Cleveland, Ohio	29.51	749.5	30.29	769.4	15	— 9.4	83	nw.	16	7.2			10 s		nw.	0.10	2.5	cloudy	
Coleman City, Texas	28.61	726.7			17	— 8.3	83	n.	32	14.3			10 s			0.39	9.9	cloudy	
Columbus, Ohio	29.40	746.7	30.30	769.6	21	— 6.1	70	nw.	7	3.1			10 s			0.41	10.4	cloudy	
Concho, Texas	28.48	723.4	30.50	774.7	21	— 6.1	73	n.	6	2.7		0	0			0.09	2.3	clear	
Davenport, Iowa	29.78	756.4	30.50	774.7	4	—15.6	63	nw.	4	1.8		hz.	0			0	0	clear	
Dayton, Washington T'y	28.49	723.6	30.29	769.4	27.2	— 2.7	77	sw.	3	1.3			10 s			0	0	cloudy	
Deadwood, Dakota	25.16	639.1	30.10	764.5	22	— 5.6	64	sw.	8	3.6		0	0			0	0	clear	
Decatur, Texas					16	— 8.9	67	n.	12	5.4		0	0			0.13	3.3	clear	
Delaware Breakwater, Del.	29.94	760.5	29.96	761.0	38	3.3	89	n.	26	11.6			10 n		n.	0.10	2.5	light rain	
Denison, Texas	29.67	753.6	30.51	774.9	16.3	— 8.7	48	n.	6	2.7		0	0			0.45	11.4	clear	
Denver, Colorado	24.69	627.1	30.21	767.3	16.0	— 8.9	58	s.	15	6.7		0	0			inap.	inap.	clear	
Des Moines, Iowa	29.52	749 8	30.49	774.4	1	—17.2	42	nw.	3	1.3		0	0			0	0	clear	
Detroit, Michigan	29.56	750 8	30.32	770.1	17.0	— 8.3	83	w.	8	3.6		5 k	0	w.		0	0	fair	
Dodge City, Kansas	27.77	705.3	30.52	775.2	1.5	—16.9	70	w.	6	2.7		0	0			0.31	7.9	clear	
Dubuque, Iowa	29.70	754.4	30.47	773 9	— 3.2	—19.6	65	w.	2	0.9		0	0			0	0	clear	
Duluth, Minnesota	29.55	750.6	30.31	769.9	—14	—25.6	100	sw.	5	2.2		0	0			0	0	clear	
Eagle Pass, Texas	29.68	753.9	30.52	775.2	31.0	— 0.6	68	n.	18	8.0			10 n			0.01	0.3	light rain	
Eagle Rock, Idaho	25.50	647.7	30.46	773.7	—12	—24.4	60	nw.	2	0.9			10 s			0	0	cloudy	
Eastport, Maine	29.84	757.9	29.91	759.7	15	— 9.4	91	nw.	11	4.9			10 n			0.07	1.8	light snow	
El Paso, Texas	26.46	672.1	30.34	770.6	25.1	— 3.8	64	e.	6	2.7		6 k	0	e.		0	0	fair	
Erie, Pennsylvania	29.42	747.3	30.19	766.8	21	— 6.1	70	nw.	15	6.7		10 k	0	nw.		0.24	6.1	cloudy	
Escanaba, Michigan	29.57	751.1	30.29	769.4	— 8	—22.2	78	w.	6	2.7		0	0			0	0	clear	
Florence, Arizona																			
Fort Apache, Arizona	25.10	637.5	30.22	767.6	8	—13.3	63	calm	0	0		0	3 s		calm	0.56	14.2	clear	
Fort Assinnaboine, Montana	26.78	680.2	29.82	757.4	31	— 0.6	52	sw.	37	16.5			10 s		sw.	0	0	cloudy	
Fort Bennett, Dakota	28.39	721.1	30.13	765.3	1	—17.2	72	se.	1	0.4		0	7 s			0	0	fair	
Fort Benton, Montana	26.87	682.5	29.85	758.2	38	3.3	72	sw.	36	16.1			10 s		calm	0	0	cloudy	
Fort Buford, Dakota	27.69	703.3	29.89	759.2	16	— 8.9	70	s.	12	5.4			10 s		calm	0	0	cloudy	
Fort Custer, Montana	26.64	676.6	30.02	762.5	4	—15.6	70	se.	8	3.6		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.31	642.9	30.29	769.4	10	—12.2	83	n.	5	2.2		0	8 ks		n.	0	0	cloudy	
Fort Elliott, Texas	27.57	700.3	30.50	774.7	4	—15.6	28	n.	8	3.6		0	0			0.01	0.3	clear	
Fort Gibson, Indian T'y	29.94	760 5	30.54	775.7	14.0	—10.0	80	n.	5	2.2		0	0			0.06	1.5	clear	
Fort Grant, Arizona	25.30	642.6	30.20	767.1	27	— 2.8	70	w.	2	0.9		0	7 s			0.04	1.0	fair	
Fort Griffin, Texas	29.21	741.9	30.59	777.0	17	— 8.3	67	n.	14	6.3			10 s		n.	inap.	inap.	cloudy	
Fort Keogh, Montana	27.26	692.4	29.95	760.7	10	—12.2	60	se.	2	0.9		2 cs	0			0	0	clear	
Fort Macon, North Carolina	29.98	761.5	29.99	761.7	58	14.4	93	sw.	22	9.8			10 ks		sw.	0.01	0.3	cloudy	
Fort McKavett, Texas	28.13	714.5	30.52	775.2	20.1	— 6.6	87	n.	15	6.7			10 s			0.18	4.6	cloudy	
Fort Missoula, Montana	26.75	679.4	30.21	767.3	12	—11.1	100	nw.	2	0.9			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	29.30	744.2	29.33	745.0	25	— 3.9	100	s.	6	2.7			10 s			0.02	0.5	cloudy	
Fort Shaw, Montana	26.13	663.7	29.99	761.7	31	— 0 6	52	sw.	42	18.8		6 cs	0			0	0	fair	
Fort Sill, Indian Territory	29.26	743.2	30.59	777.0	11.5	—11.4	100	n.	12	5.4		0	0			0.02	0.5	clear	
Fort Stevenson, Dakota	27.82	706.6	29.88	758.9	12	—11.1	83	s.	11	4.9		0	6 s		calm	0	0	fair	
Fort Verde, Arizona					18.2	— 7.7	70	n.			2	0	0			0	0	clear	
Fredericksburg, Texas																			
Galveston, Texas	30.21	767.3	30.25	768.3	40	4.4	91	n.	30	13.4			10 ks		n.	0.41	10.4	threatening	
Grand Haven, Michigan	29.60	751.8	30.31	769.9	13.5	—10.3	89	w.	15	6.7			10 s		w.	0.04	1.0	cloudy	
Hatteras, North Carolina	29.93	760.2	29.95	760.7	60	15.6	93	sw.	28	12.5		0	9 k		sw.	0	0	cloudy	
Helena, Montana	25.69	652.5	30.12	765 0	17	— 8.3	70	calm	0	0			10 s			0	0	cloudy	
Henrietta, Texas	29.57	751.1	30.64	778.2	15	— 9.4	83	n.	12	5.4		0	0			0.09	2.3	clear	
Huron, Dakota	28.69	728.7	30.23	767.8	— 2	—18.9	68	se.	13	5.8		0	0			0	0	clear	
Indianapolis, Indiana	29.55	750.6	30.39	771.9	8	—13.3	76	nw.	8	3.6		0	4 s		sw.	0.11	2.8	fair	
Indianola, Texas	30.26	768.6	30.29	769.4	33.4	0.8	78	n.	38	17.0			10 s			0.06	1.5	cloudy	
Jacksboro, Texas	29.33	745.0	30.57	776 5	14	—10.0	80	n.	8	3.6		0	0			0.18	4.1	clear	
Jacksonville, Florida	30.12	765.0	30.17	766.3	64	17.8	90	sw.	8	3.6			fg.			0	0	dense fog	
Keokuk, Iowa	29.78	759.4	30.48	774.2	4.5	—15.3	72	nw.	3	1.3		c	0			inap.	inap.	clear	
Key West, Florida	30.17	766.3	30.20	767.1	72.0	22.2	84	se.	3	1.3		0	2 k;s			0	0	clear	
Kittyhawk, North Carolina	29.92	760.0	29.94	760.5	57	13.9	100	w.	14	6.3			10 n			0.03	0.8	light rain	
Knoxville, Tennessee	29.11	739.4	30.19	766.8	36.2	2.3	89	nw.	12	5.4			10 n			2.17	55.1	light rain	
La Crosse, Wisconsin	29.57	751.1	30.41	772.4	— 6	—21.1	100	sw.	2	0.9		0	0			0	0	clear	
La Mesilla, New Mexico	26.26	667.0	30.29	769.4	25.5	— 3.6	75	s.	2	0.9		0	2 s			0	0	clear	
Leavenworth, Kansas	29.58	751.3	30.54	775.7	5	—15.0	76	calm	0	0		0	0			0.14	3.6	clear	
Lewiston, Idaho	29.41	747.0	30.28	769.1	26	— 3.3	80	sw.	2	0.9			10 s		sw.	0	0	cloudy	
Little Rock, Arkansas	30.11	764.8	30.44	773 2	25	— 3.9	73	n.	12	5.4			10 s			1.90	48.3	cloudy	
Los Angeles, California	29.94	760.5	30.34	770.6	39.2	4.0	73	ne.	10	4.5		0	0			0	0	clear	
Louisville, Kentucky	29.77	756.1	30.36	771.1	19.0	— 7.2	84	n.	13	5.8			10 s		n.	0.12	3.0	cloudy	
Lynchburg, Virginia	29.25	742.9	29.97	761.2	44.5	6.9	80	e.	5	2.2			10 n			0.12	3.0	light rain	
Mackinac City, Michigan																			
Madison, Wisconsin	29.31	744.5	30.40	772.1	— 6	—21.1	61	nw.	9	4.0		0	0			0	0	clear	
Marquette, Michigan	29.48	748.8	30.26	768.6	— 4	—20.0	65	w.	12	5.4		0	0			0	0	clear	
Mason, Texas	28.75	730.2	30.49	774.4	22	— 5.6	73	n.	20	8.9			10 s		n.	0.22	5.6	cloudy	
Memphis, Tennessee	30.08	764.0	30.44	773.2	22	— 5.6	88	nw.	17	7.6			10 s		nw.	2.70	68.6	cloudy	
Milwaukee, Wisconsin	29.59	751.6	30.39	771.9	— 5	—20.6	62	w	6	2.7		0	sk.			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.04	763.0	30.08	764.0	67.0	19.4	93	sw.	2	0.9		10 cs	0	sw.		0	0	cloudy	
Montgomery, Alabama	29.86	758.4	30.10	764.5	59.3	15.2	93	ne.	4	1.8			10 n			0.07	1.8	light rain	
Moorhead, Minnesota	29.08	738.6	30.19	766.8	—20	—28.9	100	w.	20	8.9		0	0			0	0	clear	
Morgantown, W. Virginia	29.17	740.9	30.23	767.8	26.5	— 3.1	79	n.	11	4.9			10 n			0.58	14.7	light snow	
Mt. Washington, N. H	23.14	587.7	29.76	755.9	—12.0	—24.4	100	nw.	65	29.1			10n;fg		nw.	0.39	9.9	light snow	
Nashville, Tennessee	29.79	756.7	30.35	770.9	26.3	— 3.2	83	nw.	6	2.7			10 ks		nw.	1.09	27.7	cloudy	
New Haven, Connecticut	29.83	757.7	29.95	760.7	26	— 3.3	100	n.	12	5.4			10 n			0.17	4.3	heavy snow	
New London, Connecticut	29.88	758.9	29.93	760.2	30	— 1.1	100	n.	5	2.2			10 n		calm	0.11	2.8	light snow	
New Orleans, Louisiana	30.04	763.0	30.10	764.5	64.0	17.8	93	n.	15	6.7			10 n			0.01	0.3	light rain	
Newport, Rhode Island	29.87	758.7	29.92	760.0	30.2	— 1.0	95	n.	12	5.4			10 n		nw.	0.18	4.6	light snow	
New River, N. Carolina					56	13.3	80	sw.			1	3 ck	4 s	w.		0	0	fair	
New Shoreham, Rhode I'd.	29.88	758.9	29.90	759.4	31.0	— 0.6	88	n.	17	7.6			10 n		n.	0.11	2.8	light snow	
New York, New York	29.81	757.2	30.00	762.0	29	— 1.7	100	nw.	7	3.1			10 n			0.22	5.6	light snow	
Norfolk, Virginia	29.92	760.0	29.95	760.7	44	6.7	93	ne.	12	5.4			10 s			0.09	2.3	cloudy	
North Platte, Nebraska	27.16	689.9	30.28	769.1	— 3.6	—19.8	80	w.	12	5.4		0	0			0	0	clear	
Olympia, Washington T'y	30.31	769.9	30.35	770.9	37.5	3.1	85	s.	10	4.5		0	1 s		calm	0	0	clear	
Omaha, Nebraska	29.20	741.7	30.47	773.9	4.0	—15.6	60	s.	3	1.3		0	0			0	0	clear	
Ooglanmie, Pt. Barrow, Alas.	29.75	755.6	29.77	756.1	—14.8	—26.0	89	ene.	28	12.5		hz.	0			0	0	clear	
Oswego, New York	29.71	754.6	30.06	763.5	18.5	— 7.5	60	ne.	12	5.4			10 s		ne.	0.03	0.8	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.07	763.8	30.10	764.5	66.0	18.9	100	s.	4	1.8		1 cs	2 s	sw.	sw.	0	0	clear	
Philadelphia, Pa	29.98	761.5	30.04	763.0	28	— 2.2	100	ne.	19	8.5			10 n			0.19	4.8	heavy snow	
Pike's Peak, Colorado	17.50	444.5	30.20	767.1	1	—17.2	55	nw.	11	4.9		0	0			0.06	1.5	clear	
Ploche, Nevada	24.22	615.2	30.42	772.7	15	— 9.4	50	nw.	8	3.6		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.33	745.0	30.18	766.6	23.2	— 4.9	88	nw.	8	3.6			10 n		nw.	0.50	12.7	light snow	
Port Eads, Louisiana	30.10	764.5	30.12	765.0	62.4	16.9	97	s.	9	4.0		2 c	fg	w.		0	0	fair	
Port Huron, Michigan	29.55	750.6	30.28	769.1	7.1	—13.8	90	w.	8	3.6		0	0			0	0	clear	
Portland, Maine	29.91	759.7	29.96	761.0	21	— 6.1	84	n.	9	4.0			10 s		calm	0.05	1.3	cloudy	
Portland, Oregon	30.42	772.7	30.49	774.4	31.5	— 0.3	83	ne.	2	0.9			10 s		n.	0	0	cloudy	
Portsmouth, N. Carolina					60	15.6	81	sw.	11	4.9			10 ks		sw.	0	0	cloudy	
Prescott, Arizona	24.88	631.9	30.26	768.6	2	—18.9	48	sw.	2	0.9		0	0			inap.	inap.	clear	
Punta Rassa, Florida	30.19	766.8	30.20	767.1	64.5	18.1	92	ne.	6	2.7			fg			0	0	dense fog	
Red Bluff, California	30.01	762.2	30.39	771.9	32.5	0.3	83	n.	1	0.4		0	0			0	0	clear	
Rio Grande City, Texas	30.20	767.1	30.45	773.4	37	2.8	82	nw.	25	11.2			10 n		nw.	0.03	0.8	light rain	
Rochester, New York	29.37	746.0	30.08	764.0	20	— 6.7	84	nw.	12	5.4			10 n		nw.	0.04	1.0	light snow	
Roseburg, Oregon	29.87	758.7	30.44	773.2	31.5	— 0.3	94	calm	0	0			10 s			0	0	cloudy	
Sacramento, California	30.28	769.1	30.36	771.1	35.4	1.9	79	se.	7	3.1		0	0			0	0	clear	
St. Louis, Missouri	29.89	759.2	30.53	775.4	7.0	—13.9	94	nw.	10	4.5		0	0			0.17	4.3	clear	
St. Paul, Minnesota	29.41	747.0	30.30	771.1	— 6.0	—21.1	61	sw.	5	2.2		0	0			0	0	clear	
St. Vincent, Minnesota	28.97	735.8	29.95	760.7	— 8	—22.2	100	s.	21	9.4			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.95	659.1	30.52	775.2	8	—13.3	58	calm	0	0		0	0			0	0	clear	
San Antonio, Texas	29.65	753.1	30.38	771.6	29.7	— 1.3	68	n.	4	1.8			10 s		n.	0.01	0.3	cloudy	
San Diego, California	30.20	767.1	30.26	768.6	40.7	4.8	74	e.	3	1.3		0	0			0	0	clear	
Sandusky, Ohio	29.56	750.8	30.28	769.1	16	— 8.9	83	nw.	19	8.5			10 s		nw.	0.06	1.5	cloudy	
Sandy Hook, New Jersey	29.96	761.0	30.00	762.0	30.0	— 1.1	88	nw.	17	7.6			10 n		calm	0.21	5.3	heavy snow	
San Francisco, California	30.31	769.9	30.38	771.6	42	5.6	87	nw.	4	1.8		0	0			0	0	clear	
Santa Fé, New Mexico	23.26	590.8	30.27	768.8	10.5	—11.9	89	n.	9	4.0		0	0			0	0	clear	
Savannah, Georgia	30.00	762.0	30.10	764.5	62	16.7	84	sw.	8	3.6		0	7 ks		s.	0	0	fair	
Shreveport, Louisiana	30.12	765.0	30.37	771.4	32	0.0	100	n.	14	6.3			10 n		n.	1.40	35.6	sleeting	
Silver City, New Mexico	24.28	616.7	30.14	765.5	32	0.0	81	n.	3	1.3		0	0			0.01	0.3	clear	
Sitka, Alaska	29.98	761.5	30.05	763.3	40.2	4.6	86	se.	8	3.6			10 ks		se.	1.40	35.6	cloudy	
Smithville, North Carolina	29.98	761.5	30.02	762.5	39	3.9	87	w.	16	7.2			10 s		w.	0	0	cloudy	
Spokane Falls, Wash. Ter.	28.11	714.0	30.25	768.3	16	— 8.9	83	nw.	2	0.9			10 s		calm	0	0	cloudy	
Springfield, Illinois	29.78	756.4	30.51	774.9	12.8	—10.7	70	nw.	4	1.8		0	0			0.02	0.5	clear	
Springfield, Massachusetts	29.85	758.2	29.99	761.7	24.8	— 4.0	88	n.	8	3.6			10 n			0.15	3.8	light snow	
Springfield, Mo	28.98	736.1	30.56	776.2	6.5	—14.2	87	n.	5	2.2		0	2 s		n.	0.02	0.5	clear	
Stockton, Texas	27.35	694.7	30.49	774.4	15.2	— 9.3	83	calm	0	0		0	5 s			0	0	fair	
Thatcher's Island, Mass	29.89	759.2	29.95	760.7	25.5	— 3.6	100	n.	20	8.9			10 n			0.30	7.6	heavy snow	
Toledo, Ohio	29.56	750.8	30.30	769.6	17	— 8.3	58	w.	4	1.8		0	7 k		w.	0.02	0.5	fair	
Tucson, Arizona	27.71	703.8	30.21	767.3	30	2.2	92	se.	3	1.3		0	3 s			0.21	5.3	clear	
Umatilla, Oregon	29.99	761.7	30.38	771.6	26.5	— 3.1	86	se.	4	1.8		0	9 s			0	0	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	30.04	763.0	30.31	769.9	39	3.9	82	n.	14	6.3			10 n		n.	0.72	18.3	light rain	
Visalia, California	29.98	761.5	30.36	771.1	30	— 1.1	72	e.	1	0.4		0	0			0	0	clear	
Washington, D. C	29.94	760.5	30.06	763.5	35	1.7	100	n.	12	5.4			10 n		n.	0.26	6.6	light snow	
West Los Animas, Colorado																			
Wickenburg, Arizona					30	— 1.1	70	w.			1	0	0			1.19*	30.2*	clear	
Williamsport, Pa	29.44	747.8	30.07	763.8	27	— 2.8	77	nw.	6	2.7			10 s		calm	0.39	9.9	cloudy	
Wilmington, N. Carolina	29.93	760.2	29.99	761.7	61	16.1	87	w.	15	6.7		8 k	0	w.		0	0	cloudy	
Winnemucca, Nevada	25.94	658.9	30.48	774.2	6	—14.4	58	ne.	6	2.7		0	0			0	0	clear	
Wood's Holl, Mass	29.88	758.9	29.92	760.0	30	— 1.1	100	nw.	20	8.9			10 n			0.16	4.1	heavy snow	
Yankton, Dakota	28.86	733.0	30.28	769.1	4	—15.6	47	calm	0	0		0	0			0	0	clear	
Yuma, Arizona	30.18	766.6	30.33	770.4	39.6	4.2	55	n.	10	4.5		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559.3			48.0	8.9	63	s.	1	0.4		0	2 s			0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.07	763.8	30.08	764.0	78	25.0	77	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C	29.90	759.4	29.92	760.0	77	25.0	90	sw.	8	3.6			10 n		sw.	4.20	106.7	drizzling	J. I. Plume.
Guadeloupe, W. I	30.03	762.7	30.05	763.3	76	24.4	87	e.				2 c	0			0	0	clear	B. Bigar.
Havana, Cuba, W. I	30.18	766.0	30.23	767.8	71	21.7	100	calm	0	0		0	0			0	0	clear	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I	30.08	764.0	30.09	764.3	69.1	20.6	78	n.	1	0.4		0	0			0	0	fine	Robert Johnstone
Navassa, W. I	30.02	762.5	30.10	764.5	76	24.4	67	ne.	10	4.5		0	2 s		ne.	0	0	clear	F. M. Everett.
Paramaribo, S. A	30.04	763.0	30.04	763.0	79	26.1	82	e.			2	6 k	8 ps	e.		0.010	0.3		Dr. C. J. Hering
Puerto Berrio, U. S. Col'mba	29.36	745.7	29.91	759.7	81	27.2	85	n.			1	2 c	0	calm		0	0	clear	Miss Flora A. Nichols.
Rivas, Nicaragua					73.5	23.1	90	ne.			4	0	1 ks		ne.	0	0		Earl Flint.
Santiago de Cuba, W. I	30.10	764.5	30.13	765.3	74	23.3	72	calm	0	0		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	29.91	759.7	29.96	761.0	—28.0	—33.3		w.	28	12.5			10 n		w.	0.28	7.1		J. Fortescue & W. Wood.

* Total for 4 days.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India	29.96	761.0	77.8	25.4	83	nne.			1–2		10							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.47	773.9	55.5	13.1	60	calm			0		8							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 4° 30′, E. 99° 30′	29.92	760.0	77	25.0	86	ne.			1–2		9					2	n.	drizzling	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.91	759.7	75.5	24.2	59	ese.			5–6		4	se.						squally	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.93	760.2	69	20.6	95	s.			1		9							d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.47	773.9	36	2.2		n.			2		10							rain & snow	Capt. F. W. Egerton
H. M. S. Coquette, Gibraltar, Mediterranean	30.51	774.9	58	14.4		ene.			4–9		4	ene.				3	wsw.	raining	Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.19	766.8	47.5	8.6	85	nw.			1–2		10							overcast	Capt. S. Long.
H. M. S. Diamond, S. 32° 28′, W. 19° 13′	30.22	767.6	71	21.7	57	se.			1		1	ssw.				1	s.	blue sky	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.16	760.1	66	18.9	84	ssw.			2–3		9	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 09′, W. 82° 21′	30.20	767.1	69.5	20.8	97	e.			1		0							blue sky	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 20′, W. 60° 40′	29.60	751.8	51	10.6	78	calm			0		10					sm'h		overcast	Capt. Sir W. Wisemas.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.81	757.2	86	30.0		ne.			1–2		2	bnw.				1	ene.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.21	767.3	45	7.2		calm			0		0							blue sky	Capt. G. Robinson.
H. M. S. Espiegle, S. 9° 46′, W. 30° 01′	29.97	761.2	80	26.7	82	e.			3		2	ese.				2	e.	d. clouds	Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.91	759.7	80.5	26.9	74	s.			4		1					3	s.	blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.16	766.1	45	7.2	84				0–1		6							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.89	759.2	63	17.2	88	calm			0		10							misty	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. Jones.
H. M. S. Iris, Off Alexandria, Egypt	30.20	767.1	48	8.9	62	sw.			2		3					1	sw.	d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.16	766.1	58	14.4	93	calm			0		0							blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 20° 59′, E. 110° 35′	30.16	766.1	62.4	16.9	86	e.			1		0					1	s.	misty	Capt. A. Carpenter.
H. M. S. Malabar, Bombay, India	29.95	760.7	77	25.0	90	nw.			2		3	wnw.						d. clouds	Capt. H. Hand.
H. M. S. Mutine, Pisco, Peru	29.92	760.0	69	20.6	90	calm			0		0							blue sky	Comm. F. Edwards.
H. M. S. Northampton, Barbadoes, West Indies	30.01	762.2	78	25.6	76	ene.			3		2	ene.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 12° 50′, E. 62° 19′	29.88	758.9	83	28.3	74	calm			0		3							d. clouds	Capt. R. Kinahan.
H. M. S. Pelican, S. 19° 11′, W. 7° 23′	30.06	763.5	74.5	23.6	97	ene.			2		8					1	ese.	d. clouds	Capt. F. R. Dickens.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Ready, Bushire, Persia	30.01	762.2	69.1	20.6		se.			1									d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.29	769.4	40	4.4	91	sw.			3		1							blue sky	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.05	763.3	79.5	26.4	82	nne.			1		2	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 23° 00′, E. 37° 00′	30.05	763.3	75	23.9	72	var.			2		9	nw.				sm'h		d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 38′, W. 83° 02′	30.07	763.8	79	26.1	80	e.			2		7					2	e.	d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, Panama Bay, Panama	29.92	760.0	77	25.0	90	nw.			2		1	calm						blue sky	Capt. A. H. Markham.
H. M. S. Tyne, N. 13° 50′, E. 42° 34′	29.95	760.7	78	25.6	95	se.			5		0					4	se.	blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.10	764.5	75	23.9		nne.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark																			Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, N. 16° 42′, W. 24° 53′	29.94	760.5	70.3	21.3	79	ne.			4		0					3	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 18° 00′, W. 65° 26′	30.11	764.7	78.4	25.8	81	ene.			4		4							d. clouds	Capt. A. L. Broberg.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
N. Yard, Pensacola, Fla	30.07	763.8	68	20.0	90	sw.	10	4.5			2		sw.	0	0			fair	
N. Yard, Portsmouth, N. H.	29.92	760.0	21	— 6.1		nnw.	5	2.2			10							snowing	
Naval Hospital Yokohama, Japan	30.00	762.0	36	2.2	61	calm			0		0			0	0			hazy	
Adams, Callao, Peru	29.72	754.9	70	21.1	95	calm			0		10					gr'd		cloudy	
Alaska, S. 28° 09′, W. 71° 47′	29.89	759.2	62	16.7	88	sse.			2		8			0	0	long	s.	cloudy	
Alert, N. 19° 34′, E. 111° 54′*	30.02	762.5	70	21.1	80	ne.			4		2			0	0	long	ne.	fair	
Alliance, Boston, Mass.*†	29.93	760.2	32	0.0	79	ne.			2		10			rain&	snow			snowing	
Ashuelot, Tientsin, China	30.22	767.6	29	— 1.7	100	sse.			2		2		calm					clear	
Brooklyn, S. 21° 23′, W. 39° 37′	29.86	758.4	81	27.2	91	n.	18	8.0			5		ne.	0	0	mod.	ne.	fair	
Colorado, New York, N. Y	29.97	761.2	30	— 1.1		nw.	8	3.6			10		nw.	0.08	2.0			snowing	
Essex, N. 35° 50′, W. 55° 53′	30.16	766.1	64	17.8	68	sw.			5		10					mod.	sw.	gloomy	
Franklin, Norfolk, Va	29.92	760.0	40	7.8	77	n.	16	7.2			10		n.	0.22	5.6			cloudy	
Galena, Porto Praya, Cape Verd Ids	29.99	761.7	74	23.3	72	nne.			2		0					mod.	ne.	clear	
Independence, N. Yard, Mare I'd, Cal	30.04	763.0	40	4.4	82	calm	0	0			2			0	0			fair	
Kearsarge, New Orleans, La	30.08	764.0	66	18.9	94	n.			4		10							light rain	
Lackawanna, Valparaiso, Chili†	29.97	761.2	61	16.1	100	n.			2		10							misty	
Lancaster, Genoa, Italy	30.65	778.5	60	15.6	55	se.			1–2		2							fair	
Michigan, Erie, Pa	29.97	761.2	33	0.6		nw.			2		10							cloudy	
Minnesota, Newport, R. I	29.93	760.2	36	2.2	90	nne.	10	4.5			10		ne.					snowing	
Monocacy, Yokohama, Japan	30.16	766.1	39	3.9	82	w.			1		2		calm					fair	
Nipsic, Naples, Italy	30.59	777.0	57	13.9	47	ne.			4		2		ne.			sm'h		squally	
Onward, Callao, Peru†	30.03	762.7	68	20.0	100	sse.			1		10		nnw.			long	w.	cloudy	
Palos, Hong Kong, China	30.19	766.8	59	15.0	82	calm			0		0							clear	
Passaic, Washington, D. C	30.09	764.3	32	0.0	100	nw.			2		10							snowing	
Pensacola, S. 26° 15′, W. 72° 53′	29.95	760.7	67	19.4	74	sse.			2		10		sse.	0	0	long	s.	cloudy	
Powhatan, Boston, Mass	29.93	760.2	26	— 3.3	?	nnw.			2		10							snowing	
Quinnebaug, Villafranca, France	30.73	780.5	61	16.1	36	ssw.			1		2		calm			sm'h		clear	
Ranger, Acapulco, Mexico*	29.91	759.7	75	23.9	72	wnw.			0–1		0			0	0	sm'h		clear	
Richmond, Pago Pago, Samoa Islands*	29.69	754.1	81	27.2	91	wsw.			2		10		sw.	0.43	10.9			threatening	
Shenandoah, Montevideo, Uruguay*	29.91	759.7	72	22.2	80	nnw.			3		1					sm'h		clear	
St Louis, League Island, Pa	30.22	767.6	31	— 0.6	89	n.	12	5.4			10			0.35	8.9			snowing	
Swatara, Kobe, Japan*	30.01	762.2	47	8.3	77	wnw.			1		10					sm'h		cloudy	
Tennessee, New York, N. Y	30.00	762.0	31	— 0.6	100	nw.	12	5.4			10			0.02	0.5			snowing	
Vandalia, N. 10° 42′, W. 61° 43′	30.04	763.0	75	23.9	86	ene.			3		8		e.					fair	
Wabash, Boston, Mass	29.90	759.4	24	— 4.4		n.	6	2.7			10		n.	0.03	0.8			snowing	
Wachusetts, N. 51° 34′, W. 126° 39′	30.28	769.1	40	4.4	100	s.			1		10		calm					drizzling	
Wyoming, Port Royal, S. C	30.86	763.5	58	14.4	94	sw.	8	3.6			2		calm	0	0			clear	
Yantic, Kingston, Jamaica, W. I.*	30.03	762.7	72	22.2	90	n.			1		2							clear	

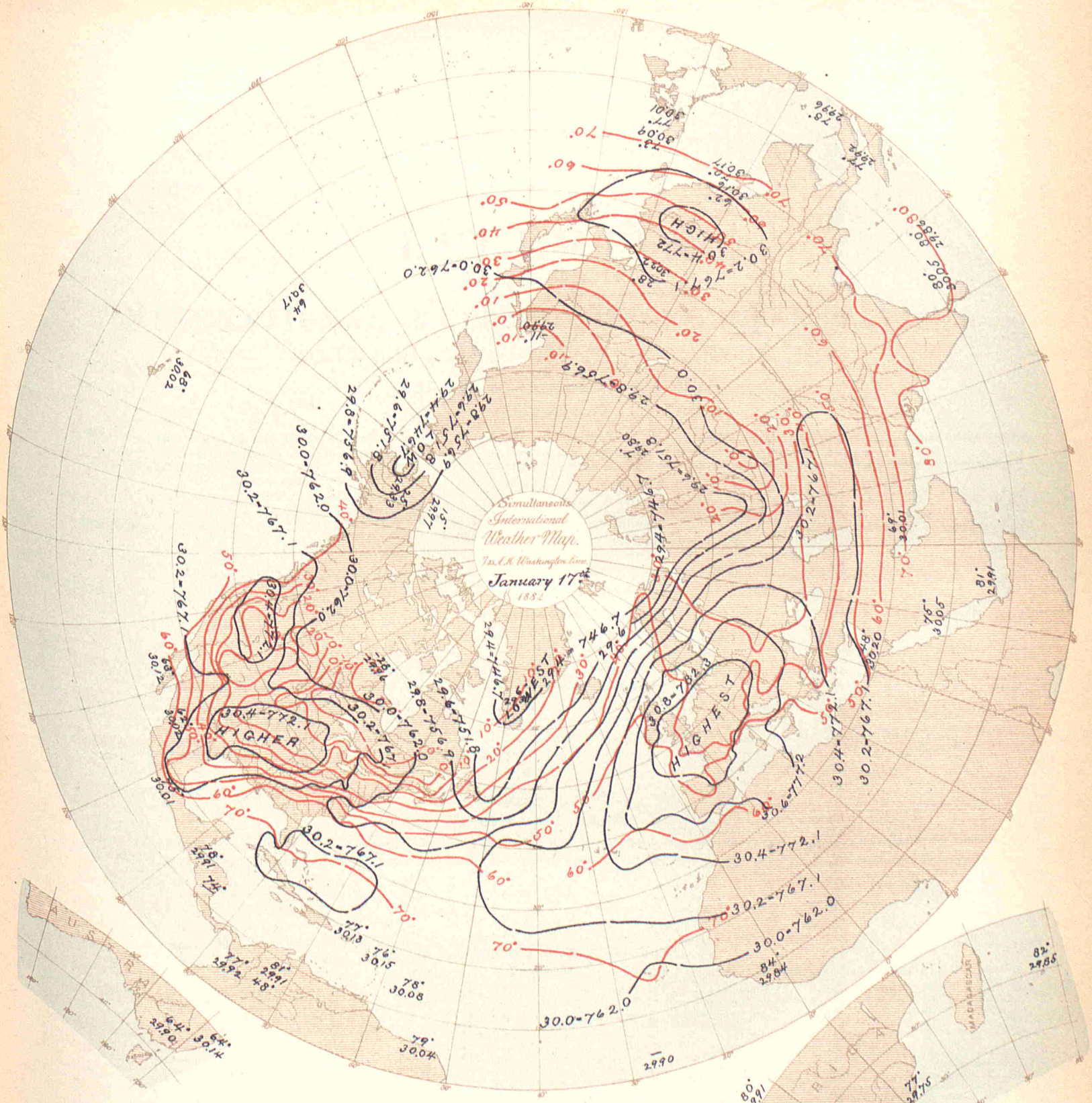
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. *Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.*																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith, N. 49° 13′, W. 46° 35′	30.14	765.5	40	4.4	100	ssw.	8	.....	10	.....	sw.	8h'r	8h'r	6	sw.	snowing	C. Gapon.
S. S. Polynesian, Capt. Robt. Brown, Boston, Mass*	29.80	756.9	26	—3.3	.....	nnw.	3	.....	10	.....	nw.	5 h'r	snow	.....	.....	cloudy	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, Off Halifax, N. S*	29.79	756.7	32	0.0	.....	ne.	3	.....	10	.....	.....	.....	.....	sm'h	sw.	light snow	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, N. 51° 15′, W. 36° 44′*	30.28	769.1	42	5.6	.....	sw.	6	.....	.....	.....	wsw.	1 h'r	1 h'r	r'gh	w.	cloudy	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, Delaware River, Del	29.89	759.2	33	0.6	89	nw.	6	.....	10	.....	n.	.....	.....	sm'h	nne.	rainy	Chadfman & Morse.
S. S. Indiana, Capt. R. W. Sargent,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England†*	30.91	785.1	42	5.6	100	calm	0	.....	9	.....	w.	.....	.....	.....	.....	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†	30.82	782.8	55	12.8	93	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
S. S. Assyria, Capt. James Brown, N. 40° 23′ W. 63° 33′°†	29.84	757.9	44	6.7	.....	ne.	6	.....	10	.....	ne.	.....	.....	mod.	.....	raining	J. Brown.
Utopia, Capt. A. McRitchie, N. 49° 22′, W. 11° 30′*†	30.64	778.2	52	11.1	93	sse.	2	.....	5	.....	sse.	0	0	sm'h	nw.	fair	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 18° 01′, W. 73° 46′†*	30.22	767.6	77	25.0	82	e.	6	.....	3?	.....	e.	0	0	long	ese.	cloudy?	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Savanilla, U. S. C*	29.92	760.0	78	25.6	.....	nne.	6	.....	0	.....	.....	0	0	.....	.....	very fine	J. Sandberg.
S. S. Athos, Capt. C. G. Pearse, N. 32° —′, W. 74° —′	30.09	764.3	.....	.....	.....	n.	2	.....	2?	.....	ne.	0	0	mod.	ne.	cloudy?	Fisher & Weldes.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, Boston, Mass†*	30.05	763 3	38	3.3	?	n: to nne.	.....	.....	.....	.....	.....	.....	.....	.....	.....	snowing	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell, N. 46° 25′, W. 12° 21′	30.79	782.1	54.8	12.7	98	e.	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
British Merchant, Capt. E. J. Molony, N. 7° 06′, E. 87° 05′	29.86	758.4	80	26.7	86	ne.	4	.....	10	.....	.....	.....	.....	.....	.....	misty	.....
Bk Caldew, Capt. W. Peterson S. 28° 25′, W. 82° 36′	30.12	765.0	77.2	25.1	.....	se	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Cipero, Capt. W. N. Lailey N. 42° 38′, W. 19° 46′	30.69	779.5	58.8	14.9	87	s.	3	.....	2	.....	.....	.....	.....	2	sse.	d. clouds	.....
S. City of Agra, Capt. Thos. Young. S. 0° 48′, W. 26° 06′	29.94	760.5	79.5	26.4	.....	sse.	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Glaramara, Capt. R. Morton, N. 23° 01′, W. 40° 23′	30.13	765.3	70.5	21.4	71	sw.	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Glencairn, Capt. R. S. Tannock,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 16° 15′. E. 82° 35′	29.89	759.2	78.6	25.9	86	se.	5	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 17° 28′, W. 35° 40′	29.95	760.7	81.6	27.6	78	ne.	2	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Minho, Capt. J. Lawson, S. 0° 24′, W. 30° 58′	29.92	760.0	81.3	27.4	82	sse.	4	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
Nalad, Capt. J. Smith, S. 7° 17′, W. 25° 41′	29.98	761.5	78.7	25.9	90	ene.	4	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 51° 10′, W. 64° 09′	29.52	749.8	51.7	10.9	93	n.	4	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Queen of Cambria, Capt. M. Parry. S. 42° 09′, E. 9° 54′	30.02	762.5	54	12.2	60	ene.	2	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Superb, Capt. Berridge. N. 16° 26′, W. 39° 06′	30.09	764.3	72.9	22.7	85	ne.	4	.....	0	.....	.....	.....	.....	.....	.....	blue sky	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent San Francisco.*																	
S. S. Newbern, Capt. E. Y. Rogers, N. 20° 44′, W. 110° 50′†	30.10	764.5	60	15.6	82	nnw.	6	.....	0	.....	.....	0	0	mod.	nnw.	clear	.....
CROMWELL LINE. *Clark & Seaman, Agents, New York.*																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Crowell & Henry.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Beblan, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, Havre, France	30.85	783.7	35.6	2.0	.....	ese.	2	.....	10	.....	ese.	0	0	.....	.....	hazy	.....
S. S. St. Laurent, Capt. A. Servan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein N. 40° 59′, W. 63° 01′*	30.11	764.8	38	3.3	63	ne.	2	.....	9	.....	n.	2 h'r	snow	sm'h	.....	cloudy	P. Froehlich, 3d Off.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson.
LAMPERT & HOLT S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 4° —′, W. 30° —′*†	30.12	705.0	82	27.8	.....	se.	3	.....	8	.....	se.	2 h'r	2 h'r	long	s.	.....	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 51° 30′, W. 24° 19′	.....	.....	.....	.....	.....	e.	1	.....	.....	.....	wsw.	0	0	mod.	ssw.; nnw.	overcast	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.00	762.0	.....	.....	.....	s.	1	.....	10	.....	s.	0	0	.....	.....	hazy	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, Havana, Cuba, W. I*†	30.26	768.6	67	19.4	.....	calm	0	.....	0	.....	.....	0	0	.....	.....	clear	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips, N. 20° 25′, W. 79° 10′†	30.22	767.6	75	23.9	.....	e.	3	.....	4	.....	e.	0	0	mod.	ese.	fair	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom N. 27° 00′, W. 73° 55′†	30.30	769.6	74.5	23.6	.....	s.	2	.....	.....	.....	.....	.....	.....	.....	se.	.....	.....
S. S. Bothnia, Capt. W. McMickan, N. 50° 56′, W. 22° 35′*	30.28	769.1	50	10.0	.....	w.	3	.....	.....	.....	.....	.....	.....	.....	w.	light rain	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Timmerman, Vera Cruz, Mexico*†	30.08	764.0	70	21.1	.....	calm	0	.....	.....	.....	.....	.....	.....	.....	nw.	.....	.....
S. S. City of Washington, Capt. J. W. Reynolds, N. 21° 55′, W. 87° 56′†*	30.15	765.8	76	24.4	.....	e.	1	.....	.....	.....	.....	.....	.....	sm'h	.....	fine	.....
S. S. Maas, Capt. T. H. Bonjer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick, N. 25° 42′, W. 84° 30′†*	30.30	769.6	74	23.3	.....	se.	1	.....	.....	.....	.....	.....	.....	sm'h	.....	rainy	.....
S. S. Olbers, Capt. J. Clarke	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Hohenzollern, Capt. R. Sander, N. 41° 13′, W. 51° 48′*	29.97	761.2	53.6	12.0	.....	wsw.	6	.....	10	.....	wsw.	rain	rain	r'gh	sw.	drizzling	G. H. Lose, 3d Off.
S. S. Leipzig, Capt. F. Pfeiffer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, N. 47° 10′, W. 47° 14′*	29.74	755.4	41.0	5.0	.....	wsw.	6	.....	10	.....	wsw.	.....	.....	high	var.	raining	.....
S. S. Mosel, Capt. J. Hesse, N. 49° 45′, W. 7° 43′	30.90	784.8	53.4	11.9	.....	ese.	2	.....	3	.....	ese.	0	0	long	wsw.	fair	J. Hesse.
S. S. Oder, Capt. Undeutsch, Weser River, Germany*	30.92	785.4	28.4	—2.0	.....	sw.	1	.....	.....	.....	.....	0	0	.....	.....	foggy	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany	.....	.....	30.2	—1.0	.....	nw.	3	.....	1	.....	n.	0	0	.....	.....	foggy	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal†	30.34	770.6	42	5.6	83	nw.	1	.....	0	.....	.....	0	0	.....	.....	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 28° 12′, E. 127° 12′*†	30.41	772.4	65	18.3	78	nne.	4	.....	10	.....	.....	.....	.....	mod.	ne.	raining	.....
S. S. Oceanic, Capt. J. Metcalf, N. 29° 31′, E. 127° 20′*	30.19	766.8	60	15.6	66	nw.	4	.....	4	.....	sw.	.....	.....	.....	.....	clear	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.86	758.4	.....	.....	.....	nw.	2	.....	0	.....	.....	.....	.....	.....	.....	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Savannah, Ga.†	29.82	757.4	64	17.8	89	sw	3	.....	10	.....	w.	0	0	.....	.....	fair	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.41	772.4	39	3.9	81	se.	1	.....	8	.....	s.	.....	.....	.....	.....	fair	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer, N. 43° 30′, W. 124° 30′*	30.41	772.4	46	7.8	85	nne.	5	.....	8	.....	n.	0	0	light	w.	overcast	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *R. Van Otterendorp, Agent, San Francisco.*																	
S. S. Columbia, Capt. F. Bolles, St. Helens†	30.44	773.2	34	1.1	90	calm.	0	.....	10	.....	.....	.....	.....	.....	.....	cloudy	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†	30.29	769.4	41	5.0	91	calm	0	.....	0	.....	.....	.....	.....	.....	.....	clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, N. 33° 55′, W. 118° 54′†	30.25	768.3	52	11.1	48	ene	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	.....
S. S. Idaho, Capt. E. Alexander, Tacoma, Washington Ter.†	30.32	770.1	37	2.8	71	e.	2	.....	10	.....	e.	.....	.....	.....	.....	raining	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 34° 27′, W. 120° 25′†	30.26	768.6	54	12.2	55	ne.	2	.....	0	.....	.....	0	0	sm'h	e.	clear	G. H. Harisson.
S. S. Senator. Capt. Thos. Wallace, San Francisco, Cal†	30.54	775.7	40	4.4	91	sw.	1	.....	0	.....	.....	0	0	.....	.....	clear	T. Wallace.
S. S. State of California, Capt. G. Delney, Astoria, Oregon†	30.43	772.9	35	1.7	100	calm	0	.....	10	.....	.....	light	light	.....	.....	raining	.....
S. S. Victoria, Capt. H. M. Hayward, N. 47° 50′, W. 125° 00′†	30.32	770.0	47	8.3	100	ne.	4	.....	10	.....	.....	.....	.....	mod.	nw.	light rain	.....
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. —— Honolulu, Sandwich Island†	30.02	762.5	68	20.0	90	nw.	2	.....	0	.....	.....	.....	.....	.....	.....	clear	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	30.14	765.5	64	17.8	79	sse.	2	.....	8	.....	.....	0	0	.....	.....	overcast	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 33° 52′, E. 137° 20′†	30.30	769.6	51	10.6	64	nw.	4	.....	0	.....	.....	0	0	long	nw.	clear	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn, N. 37° 09′, W. 124° 20′†	30.35	770.9	51	10.6	80	sw.	2	.....	8	.....	w.	0	0	mod.	w.	cloudy	E. Le Salk.
S. S. City of Tokio, Com. J. Maury, N. 30° 04′, W. 178° 05′†	30.17	766.3	64	17.8	83	nw.	3	.....	10	.....	n.	1 h'r	light	light	n.	threatening	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, Panama, Panama†	29.91	759.7	75	23.9	85	nw.	2	.....	4	.....	nw.	0	0	.....	.....	fair	.....
S. S. Grenada, Capt. M. Connolly, La Libertad, San Salvador*†	29.91	759.7	78	25.6	73	calm	0	.....	0	.....	.....	0	0	small	sse.	clear	.....
S. S. South Carolina, Capt. W. J. Russell, N. 25° 17′, W. 113° 24′*†	30.02	762.5	63	17.2	78	nnw.	5	.....	5?	.....	nw.	0	0	r'gh	nw.	cloudy.?	.....
S. S. Zealandia, Capt. H. Webber, Sydney, N. S. W	29.94	760.5	69	20.6	85	n.	2	.....	5	.....	n.	.....	.....	.....	.....	fair	.....

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke N. 11° 44′, W. 60° 39′						calm	0		0			0	0	mod.		clear	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 48° 15′, W. 17° 03′*†	30.96	786.4	57	13.9	93	s.	2		2		s.	0	0	long	w.	fair	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	31.00	787.4	33	0.6	79	sw.	1					0	0			foggy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 49° 43′, W. 15° 41′*†	30.92	785.4	55	12.8	87	sw.	1		2		wsw.	0	0	long	w.	clear	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 45° 18′, W. 48° 13′*	29.68	753.9	46	7.8		ssw.	7		10			5 h'r	5 h'r	r'gh	sw.	hazy	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis																	
THINGVALLA LINE *Funch, Edye & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub N. 56° 02′, E. 12° 37′†	30.72	780.3	36.5	2.5		ssw.	2		10		ssw.	0	0	sm'h	ssw.	covered	J. T. Uiberling
WARREN LINE. *Warren & Co, Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 42° 58′, W. 46° 57′*†	30.23	767.8	54	12.2		ssw.	6		10		ssw	1 h'r	hail sleet	mod.	ssw.	threatening.	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 46° 47′, W. 45° 50′*†			40	4.4		ssw.	6		10		ssw.	sh'rs	shr's	mod.	sw.	showery	J. Moore.
S. S. Britannic, Capt. H. H. Perry,																	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 41° 56′, W. 53° 21′*†	29.66	753.4	50	10.0	93	ssw.	2		10		ssw.	4 h'r	h'vy	mod.	sw.	raining	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. Liverpool, Eng.*†	31.07	789.2	42	5.6		s.	3		8		s.	0	0			overcast	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 41° 16′ W. 47° 45′*	30.21	767.3	48	8.9		s.	6		10			0	0	sm'h		overcast	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 25° 55′, W. 82° 50′†	30.41	772.4	75	23.9	85	se.	2	0	0			0.06	1.5	sm'h		clear	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona,																	
Bk. Alpha, Capt. Ole Grönn, N. 38° 12′, E. 0° 26′*†	30.64	778.2	55	12.8		e.	6		8		se.	2 h'r	light	sm'h	se.	raining	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis N. 32° 56′, W. 71° 15′*†	30.14	765.5	73	22.8		wsw.	4		2		sw.	shr's	shr's	r'gh	s; w.	fair	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin S. 21° 40′ W. 36° 23′*†	29.50	749.3				n.					n.			light	n.	clear	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.96	786.4				sse.	1		hz.		wsw.	0	0			hazy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 1° 56′, W. 27° 42′†	29.90	759.4				e.	1		10		ese.	rain	rain	sm'h	se; e.	rainy	
S. Enoch Train, Capt. H. D. Chapman. N. 50° 00′, W. 3° 10′*	30.80	782.3				ene.	1		3		e.	0	0	light	wsw.	fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 42° 24′, W. 34° 01′*	30.17	766.3				s.	1		3		sw.	6 h'r	light	hv'y	var.	foggy	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.02	762.5	40	4.4	91	nne.	3		10		nne.			sm'h		snowing	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 48° 42′, W. 64° 56′†	29.53	750.0	57	13.9		se.	4		10		se.	0	0	sm'h		cloudy	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 53° 24′, W. 18° 43′			52	11.1		ssw.	2		10		s.	5 h'r	light	mod.	s.	foggy	
Bk. Gamaliel, Capt. D. J. Anthony, Rio de Janeiro, Brazil*†	29.05	737.9				ese.	1		10		ese.	4 h'r	4 h'r			gloomy	
Bk. Geo. Booth, Capt. D. Williams																	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 53° 40′, E. 4° 46′*	30.66	778.7	42.3	5.7	94	sw.	4		10		sw.	0	0	short	w.	hazy	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 18° 42′, W. 31° 15′*	29.81	757.2				ene.	5		0			shr's	shr's	mod.	ene.	clear	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 57′, W. 11° 10′*†	30.65	778 5				se.	6					0	0	very hv'y	se.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.53	775.4	55	12.8	62	sw.	1		0							clear	G. S. d'Aconaz.
Bk Pilgrim, Capt. J. Connolly N. 32° 50′, W. 42° 18′*†	30.20	767.1				ene.			2		ne.	1 h'r	1 h'r				J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 19° 20′, W. 26° 27′*	30.01	762.2	66.7	19.3	97	e.	4		3		e.			mod.	ne.		
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.57	776.5	58	14.4	76	ene.	6		0			0	0			clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 24° 27′, W. 30° 06′ *†	30.10	764.5				nne.	6		8		nne.			h'vy	sw. nne.		I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton. N. 33° 00′, W. 59° 35′*†	30.25	768.3				sw.											N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 18, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.54	775.8	59.0	15.0	78	w.			3		1			0	0	fair	Moiroud.
Algiers			30.65	778.4	53.6	12.0	72	ne.			2		1			0	0	fair	Nicolas.
La Calle			30.63	778.1	65.8	18.8	62	w.			1		6			0	0	cloudy	Fonfréde.
Tunis			30.61	777.4															Jacques.
Sfax																			Gau.
Saida			30.57	776.5	46.4	8.0	78	se.			1		0			0	0	clear	Perès.
Tebessa			30.24?	768 1?	39.9	4.4	93	nw.			1		9			0	0	covered	Derché.
Gerlville					37.8	3.2	73	e.			1		10			0.020	0.5	covered	Lonchamp.
Laghouat			30.70	779.7	44.6	7.0	66	e.			1		3			0	0	pretty fair	Herbin.
Biskra			30.65	778.6	57.9	14.4	38	nw.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.67	753.6	29.76	755.9	76.2	24.6	58	ese.			4					0	0		R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.18	766.6	30.75	781.1	46.4	8.0	84	sw.			1		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Observatory	29.84	757.8	30.04	778.2	41.7	5.4	49	w.	14.8	6.6			7			0	0		Dr. Wierzbiski.
Eperies	29.63	752.7	30.55	775.9	42.8	6.0	51	calm			0	2 cs	0			0	0		Julius Mikolik.
Gratz	29.43	747.4	30.73	780.6	42.4	5.8	50	se.			1		0			0	0		Andreas Rospini.
Hermannstadt	29.09	738.9	30.61	777.5	33.8	1.0	81	nnw.			1		5			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.43	747.4	30.85	783.6	37.0	2.8	74	w.			1		0			0	0	clear	The Staff.
Lemberg	29.41	747.1	30.45	773.5	35.8	2.1	64	nw.			2		8			0	0		Dr. T. Stanecki.
Pola	30.56	776.3	30.68	779.2	57.9	14.4	39	ene.			1		3			0	0		I. R. Hydrographic Office.
Szathmar	30.11	764.7	30.50	774.8	28.4	— 2.0	70	s.			2		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.35	770.9	30.65	778.4	39.2	4.0	87	nw.			2		3			0	0		Karl Stancel.
Trieste	30.61	777.5	30.71	780.1	52.9	11.6	44	calm			0		0			0	0		Rieder.
Vienna	29.98	761.5	30.72	780.2	51.4	10.8	32	w.			4		1			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Museyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Aberdeen	30.67	779.0	30.77	781.5	51.0	10.6	78	wsw.	7	3.1		6				0	0	d. clouds	W. Boswell.
Armagh, Observatory	30.68	779.3	30.92	785.4	46.9	8 3	81	sw.	9	4.0		2						d. clouds	S. Call.
Bidston, Liverpool Obs'y			30.93	785.6	45.9	7.7	80	wsw.	3	1.3		7						d. clouds	John Hartnup.
Bolton, Sharples	30.35	770.9	30.92	785.4	43.1	6.2	95	w.				10						gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.47	773.9	30.87	784.1	46.1	7.8	85	w.			1	4				0	0	d. clouds	J.McLandsborough, F.R.
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	80.0	26.7	61	ne.			3	3						d clouds	Corpl. J. Surgenor.
Cardington			30.92	785.4	37.0	2.8	100	w.			0.2	10						dense fog	John McLaren.
Chatham, School M. E.	30.84	783.3	30.98	786.9	32.6	0 3	69	calm			0	10						foggy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.73	780.5	29.97	786.6	44.0	6.7	75	n.				10						overcast	The Staff.
Fort Napier, Natal	27.50	698.5	29.72	754.9	84.4	29.1	53	ne.			1	3						blue sky	Pvt. E. K.Anniss.A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.86	758.4	88.0	31.1	62	w.			1	4						d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.86	783.8	48	8.9	77	se.			2	2				0	0	blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.44	773.2	30.50	774.7	60.7	15.9	85	e.			6	7						d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory.	30.65	778.5	30.86	783.8	46 9	8.3	91	wsw.			3	10						overcast	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.78	781.8	30.96	786.4	32.2	0.1	95	wsw.			1	10						foggy	The Staff.
Guernsey	30.64	778.2	30.95	786.1	42.5	5.8	87	ene.			1	4						d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.93	785.6	30.97	786.6	32.8	0.4	99	w.	3	1.3		10						foggy	The Staff.
Leicester, Museum	30.67	779.0	30.94	785.9	35.2	1.8	100	sw.			1	10						foggy	J. C. Smith.
Malta, Mediterranean	30.41	772.4	30.48	774.2	54.8	12.7	63	ne.			4	6						d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.21	767.3	30.26	768.6	74.0	23.3	86	e.			1	4						d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.40	772.1	30.96	786.4	34.9	1.6	100	sw.			0-1	9						foggy	John Mac Email.
Oxford, Radcliffe Obs'y	30.73	780.5	30.96	786.4	32.0	0.0	99	wnw.			1	10						foggy	The Staff.
Plymouth	30.88	784.3	29.96	785.4	40.0	4.4	90	e.			1	10						overcast	John Merrifield.
Sandwick Manse, Orkneys			30.69	779.5	48.3	9.1	95	sw.	20	8.9		10						drizzling	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.34	770.6	30.41	772.4	35.0	1.7	96	ne.			1	10						sleeting	W. H. Lyne.
Sheffield	30.62	777.7	30.92	785.4	46.0	7.8	77	calm			0	2				0	0	misty	W. F. Cooper.
Silloth Rectory	30.87	784.1	30.90	784.8	46.8	8.2	83	sw.			2	10				0.015	0.4	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.92	785.4	42.0	5.6	94	w.	2	0.9		10						foggy	Rev. S. J. Perry.
Stratfield Turgiss					32.4	0.2	99	nw.			1	10						foggy	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.87	784.1	30.92	785.4	46	7.8	78	e.-			2	10						gloomy	W. Newcombe.
Valencia, Observatory	30.90	784.8	30.92	785.4	48.6	9.2	83	se.	10	4.5		10						misty	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.45	773.4	30.50	774.7	—11	—23.9	95	w.	1	0.4		0	0			0.025	0.6	clear	H. J. Cundall, C. E.
Chatham, N. B*	30.44	773.2	30.52	775 2	—21	—29.4	100	calm	0	0		2 cs	hz.	calm		0	0	fair	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.34	770.6	30.37	771.4	—11	—23.9	78	sw.	15	6.7		0	5 s		calm	0	0	fair	J. McWilliams.
Fort Garry, Manitoba*	29.02	737.1	29.97	761.2	—15	—20.1	100	n.	3	1.3		0	0			0.040	1.0	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.40	772.1	30.55	776.0	— 8	—22.2	95	nw.	4	1.8		0	0			0.150	3.8	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.87	758.7	30.23	767 8	19	— 7.2	96	s.	18	8 0			10 ks		s.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.10	764.5	30.32	770.1	2	—16.7	87	s.	16	7.2			10 s		sw.	0	0	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.28	743.7	30.03	762.7	18	— 7.8	70	s.	28	12.5		2 k	5 ks	sw.	sw.	0	0	fair	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.44	747 8	30.18	766.6	19	— 7.2	84	s.	21	9.4		2 k	8 n	sw.		0	0	threatening	H. Morgan.
Port Stanley, Ontario	29.48	748.8	30.17	766 3	21	— 6.1	84	s.	16	7.2			8 k		sw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	30.03	762.7	30.41	772.4	—11	—23.9	50	sw.			1		8 ks		w.	0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.58	751.3	30.09	764.3	1	—17.2	83	se.	5	2.2			10 s		se.	0	0	threatening	W. H. McIntyre.
Saugeen, Ontario*	29.27	743.4	30.05	763.3	12	—11.1	96	s.	23	10.3		0	0			0.02	0.5	clear	K. Stewart.
St. Andrews, N .B.	30.46	773.7	30.52	775.2	— 5	—20.6	85	n.	1	0.4		0	0			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.37	771.4	30.44	773.2	— 3	—19.4	79	n.	7	3.1		0	0			0.06	1.5	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.75	755.6	30.17	766.3	21	— 6.1	84	sw.	17	7.6			10 ks		sw.	0	0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.46	773.7	30.54	775.7	4	—15.6	68	e.	5	2.2			8 k		w.	0.32	8.1	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.98	761.5	30.26	768.6	— 2	—18.9		nw					10			0.30	7.6		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Cape St. Francis Lt. House	29.90	759.4	29.93	760.2	77.0	25.0	84	sw.	7.8	3.5		0	3 k			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.93	760.2	29.96	761.0	86.0	30.0	55	ssw.	16	7.2		4	4			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Sub-Series.																			
Hankow																			N. Titoushkin.
Zi-Ka-Wei, near Shanghai.	30.33	770.4	30.36	771.1	37.4	3.0	93	ese.	2.9	1.3		0	0			0	0	clear	M.Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.60	777.1	30.64	778.3	38.7	3.7	98	nw.	18	8			10					foggy	Oversergent Fischer.
Fanöe	30.72	780.3	30.74	780.8	41.4	5.2	98	w.			4		10					foggy	Overloerer Lauridsen.
Godthaab, Greenland	29.21	742.0	29.26	743.1	9.1	—12.7		sw.			7		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.59	749.4	29.55	750.5	42.4	5.8		s.			8		10					raining	A. O. Thorlacius.
Thorshavn	30.35	770.9	30.39	771.8	47.5	8.6	91	sw.	25	11			10						Overloerer Bergh.
Vestervig	30.57	776.4	30.66	778.7	43.7	6.5	99	w.			2		10						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	30.10	764.4	30.78	781.8	37.8	3.2	89	sse.			1	0	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	30.39	771.9	30.94	785.9	30.9	—0.6	96	e.			2	c	0			0	0		M. Nicot, Director.
Arras, Engineer School	30.63	778.0	30.91	785.0	30.0	—1.1	97	sse.			2		10			0	0	foggy	M. Klein, Commandant
Avignon, Normal School	30.73	780.5	30.81	782.5	41.0	5	39	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.32	770.1	30.93	785.7	24.8	—4.0		e.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.70	779.8	31.00	787.3	28.6	—1.9		ne.			1		10			0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.87	784.0	34.7	1.5	92	ne.			1		fg		e.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.50	774.6	30.77	781.6	38.7	3.7	75	ne.			1		0			0	0	clear	M. Rayet, Director.
Bourges, Normal School	30.32	770.1	30.92	785.3	26.6	—3	100	n.			1		fg			0	0	light fog	M. Postel, Director.
Brest, Naval Observatory	30.67	779.0	30.91	785.1	37.0	2.8	86	ne.			1		2		ne.	0	0		M. de Kennaree, Dir
Caen, Normal School	30.82	782.9	30.90	784.9	29.5	—1.4	96	s.			1		10			0	0	covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.57	776.5	30.91	785.2	26.1	—3.3	100	wnw.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.37	771.5	30.92	785.4	34.9	1.6		wsw.			1		c			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.41	747.0	30.90	784.9	23.0	—5.0	95	n.			1		10			0	0	foggy	M. Alluard, Director.
Cluny, Normal School	29.96	761.0	30.89	784.5	28.4	—2.0	96	se.			2		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	30.01	762.2	30.95	786.0	28.9	—1.7	94	s.			1		1c	e.	e.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	28.07	712.9	30.68	779.3	48.2	9	48									0	0		M. Jeanglrard, Director.
Grésaque, du. Rhone	29.56	750.8	30.71	779.9	59.5	15.3	20	e.			1		2		s.	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	30.06	763.5	30.89	784.5	29.8	—1.2	100	sse.			1		10			0	0	covered	M. Ablard, Director.
Guéret, Normal School	29.16	749.7	30.82	782.9	45.3	7.4	35	se.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.63	777.9	30.92	785.4	37.0	2.8	86	n.			1		5		n.	0	0	misty	M. Ollitrault, Director.
Lescar, Normal School	30.17	766.3	30.75	781.0	51.8	11	54	ssw.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.84	783.4	30.95	786.0	48.2	9.0	48						1		ne.	0	0	clear	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.76	755.8	30.91	785.0	26.4	—3.1	94	ene.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.64	778.3	30.98	787.0	26.2	—3.2	91	se.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.38	771.6	30.95	778.6	61.9	16.6	38	wsw.			0.1		3		se.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.36	644.1	30.20	767.1	42.8	6.0	29	e.	7.4	3.3			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.60	777.2	30.71	780.1	52.2	11.2	41	w.			3		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	30.08	764.0	30.93	785.7	27.3	—2.6	96	nne.			1		fg			0	0	foggy	M. Hasse, Director
Nantes, Observatory	30.76	781.3	30.92	785.4	30.7	—0.8	98	ne.			0-1	0	9 kn		ne.	0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.64	778.2	30.75	781.1	53.4	11.9	42	se.	7.4	3.3			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.68	550.7			31.3	—0.4		e.			1		1		w.	0	0	clear	Geu'l de Nansouty, Dir.
Privas, Normal School	29.74	755.3	30.89	784.5	28.0	—2.2							fg			0	0	dense fog	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.71	653.1			41.0	5.0	34	ene.			4		0			0	0	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.84	783.2	30.87	784.0	35.6	2.0	79	ne.			2		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.70	779.8	30.93	785.6	30.5	2.5	56	w.			1		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.54	724.8	30.78	781.9	43.3	6.3	51	s.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.92	785.3	30.97	786.5	28.8	—1.8	92	se.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.79	782.0	30.95	786.0	32.0	0	93	ssw.			1		10			0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.78	781.7	30.91	785.9	27.3	—2.6	100	n.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	30.06	763.4	30.80	782.2	40.8	8.2	59	se.			1		1	w.		0	0	clear	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.42	772.6	30.91	785.1	26.6	—3.0	100	ne.			1					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	30.00	761.9	30.87	784.2	28.0	—2.2	44	se.			2	0	1 s			0	0		Prof. Dr. Hoh.
Berlin	30.61	777.4	30.80	782.2	30.9	—0.6	98	nw.			2		10					light rain	Prof. Dr. Arndt.
Breslau	30.17	766.4	30.72	780.2	36.3	2.4	61	nw.			4		8	n.		0	0		Royal University Obs'y.
Carlsruhe	30.43	772.8	30.91	785.0	26.2	—3.2	100	e.			1		10			0	0	dense fog	Albert Senz.
Cassel	30.10	764.6	30.82	782.8	29.5	—1.4	84	n.			1		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.52	775.1	30.92	785.3	24.3	—4.3	95	calm			0		7			0	0		Physical Society.
Friedrichshafen	29.36	745.8	30.92	785.4	27.3	—2.0	87	ssw.			1		10			0	0	foggy	Wilhelm, Chief Tel.
Hamburg	30.72	780.2	30.81	782.0	32.7	0.4	92	wsw.			3		10			0	0	dense fog	E. Preller.
Kiel	30.74	780.8	30.76	781.2	38.8	3.8	95	w.			1		10			0.028	0.7		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.43	772.9	30.89	784.5	25.5	—3.6	100	wnw.			2		10			0	0	foggy	H. Leppig, Asst.
Magdeburg	30.06	778.7	30.87	784.0	30.2	—1.0	94	w.			2		1c ks			0	0	foggy	Dr. Assmann.
Memel	30.43	772.9	30.48	774.1	38.3	3.5	90	nw.			4	7 c	0						Isermann.
Munich	28.97	735.7	30.88	784.4	29.3	—1.5	85	n.			1		0			0	0		Central Station.
Neufahrwasser	30.58	776.0	30.59	777.0	38.3	3.5	88	nw.			2		10			0	0		A. Lothes.
Neustadt, Palatinate	30.34	770.5	30.87	784.2	26.1	—3.3		wnw.			2		10			0	0	dense fog	Dicknether.
Stuttgart	29.88	758.9	30.84	783.3	32.0	0.0	98	ne.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.72	780.2	30.74	780.8	37.2	2.9	100	wnw.			4		10			0	0	dense fog	Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.01	762.2	30.41	772.5	42.4	5.8		ne.			5.0		7 k			0.008	0.2		Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.06	763.5	30.11	764.8	80.8	27.1	35	e.					4	wsw.		0	0	d. clouds	
Deesa	29.58	751.3	30.06	763.4	81.5	27.5	28	n.	11.6	5.2			8	nnw.		0	0	d. clouds	
Bombay	29.95	760.8	29.99	761.8	81.3	27.4	74	nnw.	11	4.9			0			0	0	blue sky	
Poona, Yarrowda.	28.15	714.9	29.99	761.8	83.8	28.8	27	e.	11	4.9			1	wnw.		0	0	d. clouds	
Belgaum	27.44	697.0	29.97	761.2	80.1	26.7	25	ene.	11	4.9			0			0	0		
Lahore	29.48	748.8	30.27	768.9	54.7	12.6	94	nw	0.6	0.3			10			0	0	overcast	
Roorkee	29.25	742.9	30.19	766.9	61.2	16.2	83	nw.	2.3	1.0			2			0	0		
Agra	29.51	749.5	30.10	764.5	65.3	18.5	61	w.	3.0	1.3						0	0		
Nagpur	29.02	737.2	30.07	763.9	81.7	27.6	28	ne.	2.8	1.2			0			0	0	blue sky	
Jubbulpore	28.77	730.8	30.18	766.6	65.8	18.8	28	ne.	1.3	0.6			0			0	0	blue sky	
Lucknow	29.77	756.1	30.16	766.0	73.2	22.9	34	wnw.	1.7	0.8			0			0	0	blue sky	
Allahabad	29.84	757.9	30.16	766.2	64.8	18.2	64	calm	0.7	0.3			0			0	0	blue sky	
Patna	29.96	761.1	30.16	766.0	68.5	20.3	56	w.	1.7	0.8			2	w.	w.	0	0		
Hazaribagh	28.07	713.0	30.14	765.4	68.8	20.4	41	nnw.	4.5	2.0			0			0	0	blue sky	
Cuttack	30.03	762.7	30.11	764.8	76.8	24.9	57	calm					3			0	0	d. clouds	
Calcutta, Alipore	30.08	764.0	30.10	764.6	71.5	21.9	59	n.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.98	761.6	30.11	764.7	69.6	20.9	60	calm	2.8	1.2			0			0	0	blue sky	
Chittagong	30.02	762.5	30.11	764.8	71.7	22.1	69	wnw.	2.2	1.0			0			0	0	blue sky	
Sibsagar	29.79	756.7	30.14	765.7	62.3	16.8	80	ne.	2.3	1.0			0			0	0	blue sky	
Jeypore	28.71	729.2	30.20	766.9	69.8	21.0	53	calm	2.8	1.2			0			0	0	blue sky	
Zanzibar, Africa	29.83	757.7			86.7	30.4	67	nne.	8.9	4.0			6			0	0	d. clouds	
Trichinopoly	29.74	755.4			81.7	27.6	50	ene.	2	0.9			6			0	0	d. clouds	
Bellary	28.52	724.4			82.0	27.8	36	e.	4.3	1.9			2			0	0	d. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.28	769.2	30.71	780.0	53.8	12.1	35	calm	0	0			1			0	0		Prof. Giovanni Clodig.
Milan	30.22	767.5	30.77	781.5	40.8	4.9	76	w.	2.5	1.1			1			0	0		Prof. Schiaparelli.
Padua	30.61	777.4	30.72	780.4	45.3	7.4	59	sw.	0.7	0.3			1			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.82	757.3	30.78	781.7	37.9	3.3	69	e.	1.8	0.8			0			0	0		Prof. P. F. Denza.
Genoa	30.48	774.1	30.68	779.2	60.8	16.0	43	calm	0	0			2	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.76	730.4	30.76	781.4	47.3	8.5	32	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.65	778.4	30.70	779.8	46.9	8.3	57	n.	15.4	6.9			9			0	0		Prof. Luigi Guidi.
Florence	30.42	772.6	30.69	779.4	58.1	14.5	19	ne.			4		0			0	0		Prof. Costantino Pitter.
Leghorn	30.57	776.5	30.66	778.8	57.2	14.0	28	ne.	7.4	3.3			6			0	0		Prof. P. Monte.
Rome	30.43	772.9	30.61	777.5	55.0	12.8	42	nne.	4.2	1.9			10			0	0		Prof. P. S. Ferrari.
Lecce	30.31	769.9	30.54	775.6	51.8	11.0	54	nnw.	19.2	8.6			5	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.64	752.8	30.57	776.4	48.6	9.2	73	ne.	2.5	1.1			5	e.		0	0		Prof. D. Conti.
Cagliari	30.39	771.8	30.59	776.9	54.9	12.7	49	nw.			2		0			0	0		Prof. A. Pacinotti.
Palermo	30.31	769.9	30.57	776.5	54.5	12.5	49	ne.	6.9	3.1			5	ne.		0.067	1.7		Prof. G. Cincciatore.
Syracuse	30.41	772.5	30.46	773.7	54.7	12.6	55	ene.	22.4	10.0			6	ne.		0.157	4.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	30.02	762.5	30.56	776.2	54.3	12.4	55	ne.	7.4	3.3			9	nne.		0	0		Prof. T. Brioschi.
Stelvio	22.68	576.0			30.4	— 0.9	56	ne.			1		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.73	577.4			32.4	0.2	24	se.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.11	764.8	30.14	765.5	30.5	— 0.8	86	s.	11.0	4.9			10 s			0.015	0.4	covered	
Hakodate	30.10	764.5	30.11	764.8	31.5	— 0.3	59	nnw.	13.8	6.2			10		nnw.	0	0	overcast	
Hiroshima, I. M. Obs'y	30.24	768.1	30.25	768.3	43.5	6.4	78	nne.	3.5	1.6		ck	10 s			0.032	0.8	very cloudy	K. Sasaki.
Kanazawa	30.16	766.0	30.26	768.6	36.2	2.3	91					6 ck	0	nw.				cloudy	S. Endo.
Kioto	30.07	763.8	30.26	768.6	38.9	3.8	86	nw.	2.0	0.9		0	2 s			0	0	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.08	764.0	30.28	769.1	47.4	8.6	77	ne.	0.7	0.3		0	5 s			0	0	fair	S. Takehayashi.
Niigata	30.20	767.1	30.24	768.1	38.3	3.5	75	w.	3.9	1.7		ck	10 k			0.035	0.9	cloudy	
Nobiru	30.13	765.3	30.14	765.5	30.9	— 0.6	76	nnw.	4.6	2.1		0	0			0	0	clear	H. Midzushina.
Supporo					27.1	— 2.7	77	w.	8.4	3.8			10			0	0	covered	
Tokei Obs'y, Yeddo	30.09	764.3	30.16	766.0	38.6	3.7	82	n.	3.5	1.6		0	0			0	0	clear	The Staff.
Wakayama	30.18	766.6	30.24	768.1	41.2	5.1	83	e.	1.5	0.7		0	0			0	0	clear	Y. Kuwamuea
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.72	754.9	29.90	759.4	82.1	27.8	78	nnw.	8.5	3.8		4c;cs	6 k;ks	w.	nw.	0.1	3.	cloudy	Oliver & Figot
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez
Leon	24.45	621.0	30.20	767.0	54.5	12.5	87	nw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.72	754.9	29.98	761.6	61.5	16.3	85	nnw.			2	4 cs	0	sw.		inap.	inap.	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.09	586.4	30.26	768.7	45.0	7.2	74	calm	0	0		0	0			0	0		The Staff.
Morelia	24.33	617.9	30.57	776.7	48.2	9.0	78	se.			3	0	0			0	0	blue sky	M. Tena, M. D.
Pabellon, Aguascalientes	23.93	607.7	30.02	762.5	51.1	10.6	82	calm			0	0	2 ks		ssw.	0	0	clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.46	595.9	30.36	771.0	45.5	7.5	70	calm	0	0		0	0			0	0	fair	Prof. P. Spina.
San Luis Potosi	24.24	615.7	30.27	768.9	50.5	10.3	61	se.			1	2	2	w.	e.	0	0	clear	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.56	573.1	30.39	772.0	43.3	6.3	74	sw.	6.4	2.9		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.95	786.2	30.95	786.2	34.2	1.2		ssw.			3					0	0		
Groningen	30.81	782.6	30.87	784.0	37.0	2.8		sw.			1					0	0		
Helder	30.89	784.5	30.89	784.5	40.6	4.8		w.			1					0	0		
Hellevoetsluis	30.91	785.0	30.91	785.0	34.7	1.5	93	ssw.			1					0	0		
Utrecht	30.88	784.3	30.93	785.5	32.5	0.3	89	ssw.			1		bz.			0	0	hazy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.60	777.2	30.66	778.8	40.6	4.8	100	sse.	7	3			8			0.220	5.6	foggy	
Brono	30.09	764.2	30.13	765.2	42.1	5.6	49	nw.	36	16			8			0.638	16.2		
Christiania	30.33	770.3	30.48	774.3	30.7	— 0.7	100	nw.	0	0			10			0.004	0.1	foggy	
Gjæsvær	29.06	738.0	29.08	738.6	31.6	— 0.2		wnw.			8		8						
Lodingen	29.55	750.6	29.60	751.8	29.3	— 1.5	86	nw.			8		10			0.230	6.0	snowing	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.0	15.0	75	ese.	10.5	4.7			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.187	741.27	30.20?	767.17	52.7	11.5	53	ene.	10.5	4.7			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.26	768.7	30.35	771.0	63.0	17.2	57	calm	0	0			4			0.020	0.5		Capt. D. A. de Cunha.
Lisbon, Observatory	30.26	768.7	30.64	778.2	50.2	10.1	55	nne.	21.0	9.4			0			0	0		The Staff.
Ponta Delgada, Azores	30.45	773.4	30.52	775.2	61.9	16.6	72	ese.	10.5	4.7			4			0	0		
Saint Paul de Loando	29.64	752.9	29.84	758.0	80.2	26.8	86	w.	2.5	1.1			5	n.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.56	725.4	29.73	755.2	4.5	—15.3		sw.	31	14			10 n			0.047	1.2		Major K. Lasarew.
Archangel	28.93	734.8	28.95	735.3	31.3	— 0.4	100	nw.	9	4			10			0.335	8.5		Capt. Sselliwerstow.
Astrakhan	30.35	770.8	30.26	768.7	25.3	— 3.7	65	w.	7	3		c	10 ks			blank	blank	light clouds	Capt. Wisganow.
Barnaul	29.13	739.8	29.65	753.2	19.8	— 6.8	89	sw.	31	14			10			0.020	0.5		Meteorological Obs'y.
Dorpat	29.91	759.7	30.16	766.1	39.2	4.0	70	w.	11	5		0	0			0	0		Observatory.
Ekaterinburg	28.39	721.2	29.40	746.7	11.8	—11.2	71	sw.	11	5		10 ck	0			0	0	light clouds	Meteorological Obs'y.
Kasan	29.21	742.0	29.49	749.1	24.6	— 4.1	91	wsw.	18	8			10			0	0		Observatory.
Kertch	30.33	770.4	30.35	770.9	25.7	— 3.5	91	n.	2	1			10 n			0	0		Lagorio & Sastyrez.
Kieff	29.56	750.8	30.23	767.8	31.3	— 0.4	87	nw.	13	6		c	10 ks			0	0		Observatory.
Lugan	30.04	763.0	30.26	768.6	25.2	— 3.8	78	wsw.	34	15			10			0	0		Meteorological Obs'y.
Moscow	29.25	743.0	29.75	755.6	31.1	— 0.5	90	s.	13	6			10 s			0	0		Meteorological Obs'y
Nikolaiev	30.37	771.5	30.45	773.3	25.9	— 3.4	82	wsw.	9	4			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.80	756.9	29.89	759.1	— 2.2	—19.0	70	w.	2	1			10			0	0		Lieut. Iwanow.
Pekin, China	30.00	762.0	30.14	765.6	26.2	— 3.2	89	calm	0	0		0	2 k			0	0		Physical Observatory.
St. Petersburg	29.81	757.1	29.82	757.5	36.3	2.4	77	wnw.	29	13		0	0			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.58	726.0	30.22	767.7	37.0	2.8	86	calm	0	0			10			0.465	11.8	raining	Teich, A. M.
Tiflis	28.89	733.7	30.37	771.5	36.9	2.7	52	calm	0	0			0			0	0		Physical Observatory.
Warsaw	30.13	765.2	30.58	776.7	30.2	— 1.0	98	w.	11	5			10					foggy	Astronomical Obs'y.
Wilna	29.91	759.8	30.36	771.1	35.6	2.0	94	nw.	7	3			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.22	742.1	29.52	749.8	15.4	— 9.2	84	sw.	13	6			10			0.047	1.2	snowing	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.74	780.8	51	10.6	93	ssw.			4		10			0.2	5.	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.59	776.9	30.69	779.4	54.5	12.5	73	e.	0.9	0.4			2			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.75	781.0	30.81	782.5	50.7	10.4	64	s.	2.9	1.3		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.63	701.7	30.71	780.1	47.8	8.8	25	ne.	3.1	1.4		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.42	721.9	30.74	780.7	50.5	10.3	43	ne.	8.9	4.0		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.57	776.4	30.72	780.4	55.2	12.9	76	ene.	4.3	1.9		5	4	wsw.		0.205	5.2	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.73	755.2	30.66	778.7	54.0	12.2	53	calm	0	0		0	0			0	0	clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.07	763.9	30.14	765.6	66.9	19.4	84	ese.	3.1	1.4		0	0			0	0	clear	Benito Vines, S. J.
Manila, Philippine Islands	30.02	762.5	30.08	763.9	79.1	26.2	75	ne.	0	0		0	1 ks			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.43	772.9	30.53	775.5	55.6	13.1	55	ene.	9.1	4.1		0	7		e.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I.	30.02	762.5	30.11	764.8	73.4	23.0	95	e.	13.9	6.2		6 k	3 k	e.	e.	0.031	0.8	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.00	762.0	30.13	765.3	72.9	22.7	82	nw.	3.3	1.5		0	1 s		n.	0	0	clear	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.61	752.2	29.65	753.2	32.0	0.0	96	nw.			6		0			0	0		
Umea	29.89	759.3	29.95	760.6	36.0	2.2	72	nw.			4		1			0.016	0.4		
Hernosand	30.04	763.1	30.10	764.4	43.7	6.5	47	wnw.			6		0			0	0		
Stockholm	30.23	767.9	30.41	772.4	36.7	2.6	85	w.			2		9			0	0		
Wisby	30.39	771.9	30.45	773.4	39.6	4.2	90	s.			2		3			0	0		
Sub Series.																			
Upsala	30.28	769.1	30.37	771.3	39.2	4.0	74	w.	6.5	2.9			7	nw.		0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.39	746.5	30.89	784.5	31.0	— 0.5	86	nne.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.46	773.6	35.8	2.1	95	n.	9	4.0			10		n.	0.260	6.6		The Observatory.
Valona			30.46	773.6	50.4	10.2		nw.			1		2			0	0	slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.09	764.3	52.2	11.2	55	nw.			1	10 cs	0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.39	771.9	30.48	774.2	6	—14.4	52	s.	1	0.4			10 s			inap.	inap.	cloudy	
Alpena, Michigan	29.21	741.9	29.92	760.0	10	—12.2	80	sw.	15	6.7		0	9 s			0	0	cloudy	
Atlanta, Georgia	28.98	736.1	30.21	767.3	45.5	7.5	95	e.	9	4.0			10 s		calm	0.05	1.3	cloudy	
Atlantic City, New Jersey	30.44	773.2	30.45	773.4	27.2	— 2.7	74	n.	5	2.2		5 ck	4 k	w.		0.06	1.5	cloudy	
Augusta, Georgia	30.06	763.5	30.26	768.6	49.0	9.4	86	ne.	6	2.7			10 s			0.08	2.0	cloudy	
Baltimore, Maryland	30.40	772.1	30.45	773.4	29	— 1.7	67	e.	6	2.7			10 s		sw.	0.05	1.3	cloudy	
Barnegat, New Jersey	30.40	772.1	30.42	772.7	32.0	0.0	78	se.	12	5.4			10 s		s.	0.08	2.0	cloudy	
Bismarck, Dakota	28.15	715.0	30.15	765.8	— 3	—19.4	68	nw.	8	3.6		0	0			0.01	0.3	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.16	689.9	30.09	764.3	13	—10.6	91	n.	2	0.9			10 s		calm	0	0	cloudy	
Boston, Massachusetts	30.37	771.4	30.54	775.7	40	4.4	72	w.	4	1.8		2 cs	hz.	w.		0.10	2.5	clear	
Brownsville, Texas	30.07	763.8	30.12	765.0	40	4.4	100	calm	0	0			10 s			0.13	3.3	cloudy	
Buffalo, New York	29.43	747.5	30.23	767.8	14	—10.0	80	se.	16	7.2		0	3 s		s.	inap.	inap.	clear	
Burlington, Vermont	30.06	763.5	30.37	771.4	4.7	—15.2	84	s.	11	4.9		0	0			0	0	clear	
Cairo, Illinois	29.80	756.9	30.22	767.6	26.0	— 3.3	82	e.	6	2.7			10 s		calm	0	0	cloudy	
Campo, California	27.49	698.2	30.12	765.0	16.2	— 8.8	83	e.	1	0.4		0	0			0	0	clear	
Camp Thomas, Arizona																			
Cape Henry, Virginia	30.36	771.1	30.38	771.6	39	3.9	73	ne.	11	4.9			10 s			0.06	1.5	cloudy	
Cape May, New Jersey	30.40	772.1	30.43	772.9	24	— 4.4	61	ne.	7	3.1			10 s		w.	0.01	0.3	cloudy	
Castroville, Texas	29.29	744.0	30.14	765.5	35	1.7	79	nw.	8	3.6			10 s			0.06	1.5	threatening.	
Cedar Keys Florida	30.17	766.3	30.19	766.8	65	18.3	93	e.	4	1.8			fg.			0	0	dense fog	
Champaign, Illinois	29.28	743.7	30.15	765.8	9.8	—12.3	69	s.	9	4.0			10 s		sw.	0	0	cloudy	
Charleston, S. Carolina	30.18	766.6	30.24	768.1	53	11.7	93	ne.	8	3.6			10 s		calm	inap.	inap.	threatening.	
Charlotte, N. Carolina	29.41	747.0	30.30	769.6	38.0	3.3	89	ne.	5	2.2			10n;fg			0.07	1.8	light rain	
Chattanooga, Tennessee	29.36	745.7	30.22	767.6	39.0	3.9	89	e.	3	1.3			10 s		calm	inap.	inap.	cloudy	
Cheyenne, Wyoming	23.92	607.6	30.17	766.3	11.9	—11.2	76	nw.	4	1.8		0	0			0	0	clear	
Chicago, Illinois	29.30	744.2	30.05	763.3	15.8	— 9.0	62	sw.	10	4.5		0	1 s			0	0	clear	
Chincoteague, Virginia	30.40	772.1	30.42	772.7	32	0.0	88	n.	13	5.8			10 ks		w.	0.03	0.8	cloudy	
Cincinnati, Ohio	29.53	750.0	30.22	767.6	25.2	— 3.8	88	se.	3	1.3			10 s			0	0	cloudy	
Cleveland, Ohio	29.42	747.3	30.20	767.1	11	—11.7	89	se.	11	4.9			10 s			0	0	cloudy	
Coleman City, Texas	28.21	716.5			30	— 1.1	80	s.	7	3.1			10 s			0	0	cloudy	
Columbus, Ohio	29.31	744.5	30.21	767.3	21	— 6.1	84	se.	4	1.8			10 s			0	0	cloudy	
Concho, Texas	28.06	712.7	30.08	764.0	31	— 0.6	96	sw.	4	1.8		0	0			0	0	clear	
Davenport, Iowa	29.31	744.5	30.02	762.5	18	— 7.8	67	sw.	16	7.2		0	0			0	0	clear	
Dayton, Washington T'y	28.23	717.0	30.03	762.7	34.3	1.3	80	sw.	8	3.6			10 s		sw.	0	0	cloudy	
Deadwood, Dakota	25.23	640.8	30.18	766.6	18	— 7.8	87	sw.	6	2.7		0	0			0.04	1.0	clear	
Decatur, Texas					30	— 1.1	68	w.	6	2.7			10 n			0.08	2.0	light rain	
Delaware Breakwater, Del.	30.42	772.7	30.44	773.2	31	— 0.6	88	ne.	9	4.0		9ck;cs	1 s	w.		0.03	0.8	cloudy	
Denison, Texas	29.23	742.4	30.07	763.8	28.8	— 1.8	100	s.	4	1.8			10 n			0.03	0.8	light rain	
Denver, Colorado	24.72	627.9	30.24	768.1	22.0	— 5.6	76	s.	4	1.8		0	0			inap.	inap.	clear	
Des Moines, Iowa	28.99	736.3	29.96	761.0	19	— 7.2	84	w.	12	5.4		0	3 s			0	0	clear	
Detroit, Michigan	29.41	747.0	30.17	766.3	24.0	— 4.4	88	s.	14	6.3		0	0			0	0	clear	
Dodge City, Kansas	27.30	693.4	30.05	763.3	24	— 4.4	88	n.	23	10.3		0	9 s		n.	0	0	cloudy	
Dubuque, Iowa	29.19	741.4	29.96	761.0	11.5	—11.4	75	s.	8	3.6		0	2 s		s.	0	0	clear	
Duluth, Minnesota	29.06	738.1	29.82	757.4	22	— 5.6	87	w.	7	3.1			10 s		w.	0	0	cloudy	
Eagle Pass, Texas	29.32	744.7	30.16	766.1	33.1	0.6	88	se.	5	2.2		0	0			inap.	inap.	clear	
Eagle Rock, Idaho	25.32	643.1	30.28	769.1	—16	—26.7	52	n.	5	2.2			10 s		nw.	0	0	cloudy	
Eastport, Maine	30.45	773.4	30.52	775.2	— 1	—18.3	65	n.	5	2.2		1 c	0			0.05	1.3	clear	
El Paso, Texas	26.36	669.5	30.24	768.1	30.2	— 1.0	80	nw.	10	4.5		0	0			0	0	clear	
Erie, Pennsylvania	29.42	747.3	30.19	766.8	14	—10.0	80	se	7	3.1		10 cs	0			0	0	cloudy	
Escanaba, Michigan	29.04	737.6	29.76	755.9	13	—10.6	80	s.	13	5.8			10 s			0	0	cloudy	
Florence, Arizona																			
Fort Apache, Arizona	25.04	636.0	30.16	766.1	8	—13.3	63	ne.	1	0.4		0	0			0	0	clear	
Fort Assinnaboine, Montana	26.94	684.3	29.98	761.5	25	— 3.9	53	sw.	16	7.2			10 s		sw.	0	0	cloudy	
Fort Bennett, Dakota	28.45	722.6	30.19	766.8	7	—13.9	80	calm	0	0		0	0			0.02	0.5	clear	
Fort Benton, Montana	27.07	687.6	30.05	763.3	28	— 2.2	67	sw.	16	7.2			10 s		calm	0	0	cloudy	
Fort Buford, Dakota	27.91	708.9	30.11	764.8	4	—15.6	76	s.	2	0.9			10 s		calm	0.09	2.3	cloudy	
Fort Custer, Montana	26.70	678.2	30.08	764.0	12	—11.1	83	se.	4	1.8		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.08	637.0	30.06	763.5	32	0.0	65	s.	8	3.6		0	0			0	0	clear	
Fort Elliott, Texas	27.28	692.9	30.21	767.3	4	—15.6	28	n.	24	10.7		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.45	748.0	30.05	763.3	25.0	— 3.9	88	se.	6	2.7			10 s			0	0	cloudy	
Fort Grant, Arizona	25.26	641.6	30.16	766.1	23	— 5.0	64	se.	2	0.9		5 cs	0			0	0	fair	
Fort Griffin, Texas	28.71	729.2	30.09	764.3	30	— 1.1	88	s.	4	1.8		0	0			0	0	clear	
Fort Keogh, Montana	27.37	695.2	30.06	763.5	13	—10.6	66	s.	2	0.9		2 cs	0			0	0	clear	
Fort Macon, North Carolina	30.29	769.4	30.30	769.6	42	5.6	100	ne.	19	8.5			10 n		ne.	0.03	0.8	light rain	
Fort McKavett, Texas	27.74	704.6	30.14	765.5	31.3	— 0.4	88	sw.	10	4.5		0	0			0	0	clear	
Fort Missoula, Montana	26.58	675.1	30.04	763.0	18	— 7.8	87	nw.	2	0.9			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	29.27	743.4	29.30	744.2	28	— 2.2	100	s.	19	8.5			10 s			0	0	cloudy	
Fort Shaw, Montana	26.13	663.7	29.99	761.7	28	— 2.2	59	sw.	28	12.5		0	9 s			0	0	cloudy	
Fort Sill, Indian Territory	28.73	729.7	30.06	763.5	22	— 5.6	91	se.	2	0.9		0	0			0	0	clear	
Fort Stevenson, Dakota	28.10	713.7	30.16	766.1	— 4	—20.0	68	nw.	5	2.2		0	0			0.03	0.8	clear	
Fort Verde, Arizona					8.4	—13.1	58	n.			1	0	0			0	0	clear	
Fredericksburg, Texas																			
Galveston, Texas	30.02	762.5	30.06	763.5	42.5	5.8	100	nw.	4	1.8			10 n		ne.	0.42	10.7	light rain	
Grand Haven, Michigan	29.29	744.0	30.00	762.0	24.5	— 4.2	80	s.	20	8.9		0	0			0.02	0.5	clear	
Hatteras, North Carolina	30.28	769.1	30.30	769.6	47	8.3	100	ne.	19	8.5			9 s			0.08	2.0	cloudy	
Helena, Montana	25.62	650.7	30.05	763.3	19	— 7.2	70	w.	4	1.8		0	0			0.07	1.8	clear	
Henrietta, Texas	29.02	737.1	30.09	764.3	29	— 1.7	77	sw.	9	4.0		0	4 s			0	0	fair	
Huron, Dakota	28.63	727.2	30.17	766.3	5.8	—14.6	58	nw.	14	6.3		0	0			0	0	clear	
Indianapolis, Indiana	29.31	744.5	30.15	765.8	17	— 8.3	83	sw.	5	2.2			10 s		sw.	0	0	cloudy	
Indianola, Texas	30.08	764.0	30.11	764.8	33.8	1.0	88	nw.	12	5.4			10 s			0.44	11.2	cloudy	
Jacksboro, Texas	28.83	732.3	30.07	763.8	27	— 2.8	88	sw.	8	3.6			10 s			0	0	cloudy	
Jacksonville, Florida	30.16	766.1	30.21	767.3	62	16.7	96	sw.	5	2.2			fg.			0	0	dense fog	
Keokuk, Iowa	29.34	745.2	30.04	763.0	15.5	— 9.2	73	s.	9	4.0		0	0			0	0	clear	
Key West, Florida	30.13	765.3	30.16	766.1	72.0	22.2	73	e.	9	4.0		0	4 k		e.	0	0	fair	
Kittyhawk, North Carolina	30.35	770.9	30.37	771.4	43	6.1	74	ne.	19	8.5			10 s			0.14	3.6	cloudy	
Knoxville, Tennessee	29.15	740.4	30.23	767.8	35.5	1.9	84	ne.	2	0.9			10 s			0.03	0.8	cloudy	
La Crosse, Wisconsin	29.02	737.1	29.86	758.4	19	— 7.2	84	s.	16	7.2			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.18	665.0	30.21	767.3	22.5	— 5.3	86	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.14	740.1	30.10	764.5	18	— 7.8	67	calm	0	0		0	0			0	0	clear	
Lewiston, Idaho	29.18	741.2	30.05	763.3	27.7	— 2.4	67	e.	2	0.9			10 s		e.	0	0	cloudy	
Little Rock, Arkansas	29.77	756.1	30.10	764.5	27	— 2.8	88	ne.	4	1.8			10 n			0.15	3.8	sleeting	
Los Angeles, California	29.77	756.1	30.17	766.3	38.3	3.5	82	e.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	29.58	751.3	30.17	766.3	27.0	— 2.8	64	se.	2	0.9			10 s		calm	0	0	cloudy	
Lynchburg, Virginia	29.66	753.4	30.38	771.6	36.0	2.2	61	e.	3	1.3			10 s			0.03	0.8	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	28.84	732.5	29.93	760.2	14	—10.0	64	s.	16	7.2		0	0			0	0	clear	
Marquette, Michigan	28.88	733.5	29.66	753.4	13	—10.6	61	sw.	14	6.3			10 s		sw.	0	0	cloudy	
Mason, Texas	28.34	719.8	30.08	764.0	31	— 0.6	88	calm	0	0			10 s		calm	0	0	cloudy	
Memphis, Tennessee	29.81	757.2	30.17	766.3	29	— 1.7	88	ne.	3	1.3			10 n			0.01	0.3	light rain	
Milwaukee, Wisconsin	29.14	740.1	29.94	760.5	12	—11.1	80	sw.	22	9.8		0	1 s			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.06	763.5	30.10	764.5	48.0	8.9	93	ne.	7	3.1	.....	.....	10 s	.....	n.	0.18	4.6	cloudy	
Montgomery, Alabama	29.92	760.0	30.16	766.1	47.5	8.6	88	ne.	2	0.9	.....	.....	10 s	.....	.....	0.12	3.0	cloudy	
Moorhead, Minnesota	28.95	735.3	30.06	763.5	0	—17.8	68	nw.	8	3.6	.....	0	0	.....	.....	0.03	0.8	clear	
Morgantown, W. Virginia	29.17	740.9	30.23	767.8	18.5	— 7.5	75	calm	0	0	.....	2 cs	4 s	.....	.....	0.02	0.5	fair	
Mt. Washington, N. H	23.62	599.9	30.25	768.3	— 6.0	—21.1	74	nw.	36	16.1	.....	0	2 s	.....	.....	0.03	0.8	clear	
Nashville, Tennessee	29.62	752.3	30.18	766.6	30.5	— 0.8	80	e.	2	0.9	.....	.....	10 ks	.....	e.	0	0	cloudy	
New Haven, Connecticut	30.37	771.4	30.49	774.4	9	—12.8	87	ne.	3	1.3	.....	9 c	0	w.	.....	0.06	1.5	cloudy	
New London, Connecticut	30.50	774.7	30.55	776.0	13	—10.6	61	n.	6	2.7	.....	6 c	2 ks	calm	n.	0.17	4.3	cloudy	
New Orleans, Louisiana	29.99	761.7	30.05	763.3	55.5	13.1	92	se.	13	5.8	.....	.....	10 n	.....	.....	0.31	7.9	light rain	
Newport, Rhode Island	30.48	774.2	30.53	775.4	15.5	— 9.2	45	n.	5	2.2	.....	3 c	2 s;sk	calm	calm	0.21	5.3	fair	
New River, N. Carolina	.....	.....	.....	.....	40	4.4	100	ne.	.....	.....	1	.....	10 n	.....	.....	0.05	1.3	light rain	
New Shoreham, Rhode I'd	30.50	774.7	30.52	775.2	23.0	— 5.0	73	n.	3	1.3	.....	0	7 k	.....	w.	0.22	5.6	fair	
New York, New York	30.29	769.4	30.48	774.2	21	— 6.1	76	ne.	13	5.8	.....	.....	10 s	.....	sw.	0.08	2.0	cloudy	
Norfolk, Virginia	30.36	771.1	30.40	772.1	36	2.2	69	ne.	6	2.7	.....	.....	10 s	.....	.....	0.10	2.5	cloudy	
North Platte, Nebraska	27.07	687.6	30.19	766.8	19.6	— 6.9	74	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Olympia, Washington T'y	29.98	761.5	30.02	762.5	39.0	3.9	82	sw.	12	5.4	.....	0	8 n	.....	calm	0.05	1.3	light rain	
Omaha, Nebraska	28.79	731.3	30.06	763.5	22.0	— 5.6	87	nw.	8	3.6	.....	0	6 s	.....	.....	0	0	fair	
Oogkamie, Pt. Barrow, Alas-	29.74	755.4	29.76	755.9	—12.0	—24.4	100	e.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	29.93	760.2	30.28	769.1	14.3	— 9.8	57	s.	8	3.6	.....	0	0	.....	.....	0.11	2.8	clear	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	30.08	764.0	30.11	764.8	52.0	11.1	100	n.	7	3.1	.....	.....	10s;fg	.....	ne.	0.05	1.3	cloudy	
Philadelphia, Pa	30.42	772.7	30.48	774.2	20.5	— 6.4	82	e.	4	1.8	.....	0	8 s	.....	w.	0.04	1.0	cloudy	
Pike's Peak, Colorado	17.33	440.2	30.13	765.3	—10	—23.3	84	nw.	13	5.8	.....	0	5 s	.....	.....	0.07	1.8	fair	
Ploche, Nevada	24.11	612.4	30.31	769.9	18	— 7.8	61	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.38	746.2	30.23	767.8	16.8	— 8.4	83	ne.	4	1.8	.....	.....	10s;fg	.....	ne.	0.01	0.3	cloudy	
Port Eads, Louisiana	30.04	763.0	30.05	763.3	59.2	15.1	100	e.	8	3.6	.....	.....	fg	.....	calm	inap.	inap.	dense fog	
Port Huron, Michigan	29.41	747.0	30.14	765.5	13.3	—10.4	83	s.	14	6.3	.....	3 cs	0	calm	.....	0	0	clear	
Portland, Maine	30.47	773.9	30.52	775.2	6	—14.4	76	nw.	8	3.6	.....	0	3 s	.....	sw.	0	0	clear	
Portland, Oregon	30.11	764.8	30.18	766.6	39.0	3.9	82	s.	4	1.8	.....	.....	10 s	.....	s.	0.01	0.3	cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	45	7.2	100	ne.	22	9.8	.....	.....	10 n	.....	ne.	0.03	0.8	light rain	
Prescott, Arizona	24.76	628.9	30.14	765.5	4	—15.6	36	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Punta Rassa, Florida	30.16	766.1	30.17	766.3	64.5	18.1	92	ne.	4	1.8	.....	hz	0	.....	.....	0	0	clear	
Red Bluff, California	29.82	757.4	30.20	767.1	32.0	0.0	88	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Rio Grande City, Texas	29.75	755.6	30.00	762.0	36	2.2	89	nw.	5	2.2	.....	.....	10 s	.....	nw.	0.04	1.0	cloudy	
Rochester, New York	29.54	750.3	30.25	768.3	11	—11.7	80	s.	11	4.9	.....	1 cs	0	calm	.....	0.04	1.0	clear	
Roseburg, Oregon	29.71	754.6	30.28	769.1	32	0.0	92	e.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
Sacramento, California	30.08	764.0	30.16	766.1	36.2	2.3	79	se.	5	2.2	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.51	749.5	30.15	765.8	14.9	— 9.5	83	s.	9	4.0	.....	.....	10 s	.....	.....	0	0	cloudy	
St. Paul, Minnesota	28.82	732.0	29.77	756.1	28.2	— 2.1	91	w.	12	5.4	.....	.....	10 s	.....	w.	0	0	cloudy	
St. Vincent, Minnesota	29.03	737.3	30.01	762.2	—12	—24.4	100	nw.	7	3.1	.....	0	0	.....	.....	0.07	1.8	clear	
Salt Lake City, Utah	25.77	654.5	30.34	770.6	9	—12.8	60	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	
San Antonio, Texas	29.41	747.0	30.14	765.5	33.7	0.9	89	calm	0	0	.....	.....	10 s	.....	n.	inap.	inap.	cloudy	
San Diego, California	30.01	762.2	30.08	764.0	40.6	4.8	74	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Sandusky, Ohio	29.45	748.0	30.17	766.3	16.2	— 8.8	83	s.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	
Sandy Hook, New Jersey	30.44	773.2	30.48	774.2	28.0	— 2.2	77	se.	11	4.9	.....	.....	10 ks	.....	calm	inap.	inap.	cloudy	
San Francisco, California	30.11	764.8	30.18	766.6	44	6.7	93	w.	6	2.7	.....	.....	fg	.....	.....	0	0	dense fog	
Santa Fé, New Mexico	23.09	586.5	30.10	764.5	12.4	—19.9	82	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Savannah, Georgia	30.12	765.0	30.22	767.6	57	13.9	93	ne.	10	4.5	.....	.....	fg	.....	.....	0	0	dense fog	
Shreveport, Louisiana	29.86	758.4	30.11	764.8	33	0.6	100	calm	0	0	.....	.....	10 n	.....	calm	1.11	28.2	sleeting	
Silver City, New Mexico	24.19	614.4	30.05	763.3	26	— 3.3	70	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sitka, Alaska	30.00	762.0	30.07	763.8	38.2	3.4	86	nw.	3	1.3	.....	0	3 s	.....	calm	0.59	15.0	clear	
Smithville, North Carolina	30.25	768.3	30.29	769.4	44	6.7	83	ne.	10	4.5	.....	.....	10 s	.....	.....	0	0	cloudy	
Spokane Falls, Wash. Ter.	27.86	707.6	30.00	762.0	30	— 1.1	80	w.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	
Springfield, Illinois	29.40	746.7	30.13	765.3	19.3	— 7.1	76	s.	7	3.1	.....	0	1 s	.....	.....	0	0	clear	
Springfield, Massachusetts	30.40	772.1	30.54	775.7	2.0	—16.7	72	e.	1	0.4	.....	3 c	0	sw.	.....	0.05	1.3	clear	
Springfield, Mo	28.58	725.9	30.16	766.1	19	— 7.2	76	s.	6	2.7	.....	0	2 s	.....	.....	0	0	clear	
Stockton, Texas	26.92	683.8	30.06	763.5	32.0	0.0	88	s.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Thatcher's Island, Mass	30.49	774.4	30.55	776.0	14.0	—10.0	72	n.	1	0.4	.....	2 k	0	.....	.....	0.20	5.1	clear	
Toledo, Ohio	29.43	747.5	30.17	766.3	15	— 9.4	76	sw.	12	5.4	.....	2 cs	0	sw.	.....	0	0	clear	
Tucson, Arizona	27.66	702.6	30.16	766.1	32	0.0	88	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Umatilla, Oregon	29.69	754.1	30.08	764.0	34.8	1.6	80	nw.	3	1.3	.....	0	9 s	.....	.....	0	0	cloudy	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.81	757.2	30.08	764.0	36	2.2	100	ne.	5	2.2	.....	.....	10 n	.....	calm	0.45	11.4	heavy rain	
Visalia, California	29.77	756.1	30.16	766.1	33	0.6	64	se.	3	1.3	.....	0	2 s	.....	.....	0	0	clear	
Washington, D. C	30.32	770.1	30.44	773.2	27	— 2.8	77	e.	2	0.9	.....	.....	10 s	.....	sw.	0.02	0.5	cloudy	
West Los Animas, Colorado	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wickenburg, Arizona	.....	.....	.....	.....	28	— 2.2	70	calm	.....	.....	0	0	0	.....	.....	0	0	clear	
Williamsport, Pa	29.76	755.9	30.40	772.1	11.5	—11.4	91	n.	1	0.4	.....	0	3 ks	.....	.....	inap.	inap.	fair	
Wilmington, N. Carolina	30.24	768.1	30.30	769.6	43	6.1	74	ne.	8	3.6	.....	.....	10 s	.....	calm	inap.	inap.	cloudy	
Winnemucca, Nevada	25.73	653.5	30.27	768.8	6	—14.4	58	ne.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass	30.49	774.4	30.53	775.4	16	— 8.9	83	n.	6	2.7	.....	0	9 s	.....	.....	0.14	3.6	cloudy	
Yankton, Dakota	28.70	729.0	30.12	765.0	15	— 9.4	67	nw.	14	6.3	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	30.01	762.2	30.16	766.1	37.2	2.9	81	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559.3	.....	.....	50.0	10.0	72	ne.	2	0.9	.....	4 ck;k	0	w.	.....	0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.08	764.0	30.09	764.3	78	25.6	69	ne.	.....	.....	.....	5 k	2 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C	29.91	759.7	29.93	760.2	77	25.0	90	se.	2	0.9	.....	.....	10 n	.....	se.	4.90	124.5	heavy rain	J. I. Plume.
Guadeloupe, W. I	30.00	762.0	30.02	762.5	74	23.3	86	e.	.....	.....	.....	5 c	0	.....	.....	0.1	3.	.....	B. Bigar.
Havana, Cuba, W. I	30.13	765.3	30.18	766.6	70	21.1	100	calm	0	0	.....	0	2 ks	.....	calm	0	0	fair	A. Van Ganeghem, Ass't
Kingston, Jamaica, W. I	30.05	763.3	30.06	763.5	69.0	20.6	88	calm	0	0	.....	0	0	.....	.....	0	0	.....	Robert Johnstone.
Navassa, W. I	29.97	761.2	30.05	763.3	77	25.0	75	e.	12	5.4	.....	8 k	5 s	se.	e.	0	0	cloudy	F. M. Everett.
Paramaribo, S. A	30.02	762.5	30.02	762.5	77	25.0	91	e.	.....	.....	2	.....	8 k	e.	e.	0	0	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.40	746.7	29.96	761.0	77	25.0	85	calm	.....	.....	0	.....	10 ks	.....	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	73.2	22.9	90	ne.	.....	.....	5	0	d	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I	30.07	763.8	30.10	764.5	74	23.3	81	n.	6	2.7	.....	0	0	.....	.....	0.06	1.5	clear	Robert Mason.
St. Thomas, W. I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A	29.82	757.4	29.87	758.7	—37.0	—38.3	.....	sw.	18	8.0	.....	4 k	5 s	sw.	sw.	0.10	2.5	threatening	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 21° 47′, E. 113° 23′	30.24	768.1	64	17.8		ene.			2–3		0					3	e.	blue sky	Comm. A. J. Errington.
H. M. S Alert, Singapore Roads, India	29.97	761.2	80.5	26 9	76	nne.			2–3		5							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.37	771.4	58	14.4	69	sse.			1		4							d. clouds	Capt. O. F. Hotham.
H. M. S. Bacchante, N. 6° 10′, E. 96° 05′	29.93	760.2	81	27.2	82	ne.			2–3		3					3	nne.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.95	760.7	76	24.4	67	ssw.			2–3		6	w.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.87	758.7	69	20.6	95	se.			1–2		4							d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey.	30.28	769.1	36	2.2		n.			1		10							rain & snow.	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.48	774.2	60	15.6		ene.			4–6		3	ene.				3	wsw.	squally	Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, Shanghai, China	30.25	768.3	42.5	5.8	91	calm			0		0							blue sky	Capt. S. Long.
H. M. S. Diamond, S. 33° 24′, W. 16° 57′	30.03	762.7	69	20.6	70	ne.			4–5		7	ene.				3	ssw.	d. clouds.	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.24	768.1	64	17.8	94	nne.			1–2		9	nne.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 02′, W. 81° 37′	30.19	766.8	70.5	21.4	97	ese.			1		0							blue sky	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 17′, W. 60° 33′	29.52	749.8	52.2	12.2	93	ene.			1–2		10					1	ene.	overcast.	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.83	757.7	82	27.8		nne.			1–2		4	nnw.				1		d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald																			Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.21	767.3	44	6.7		nnw.			3		0							blue sky	Capt. G. Robinson.
H. M. S. Espiegle, S. 9° 46′, W. 29° 45′	29.98	761.5	79	26.1	86	ene.			3–4		1					3	ene.	blue sky	Capt C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.85	758.2	78.5	25.8	71	ssw.			4		1					3	ssw.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.22	767.6	48	8.9	71	calm			0		4							misty	Capt. R. F. Hoskyn.
H. M S. Gannet, Coquimbo, Chili	29.95	760.7	64.5	18.1	83	e.			1		10							drizzling	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 40′, W. 59° 33′	29.54	750.3	53	11.7	86	nne.			1		10							misty	Capt. L. Jones.
H. M. S. Iris, Ayas Bay, Asiatic Turkey	30.11	764.8	48	8.9	62	nne.			1–2		0							blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.24	768.1	61	16.1	88	calm			0		0							blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 21° 01′, E. 110° 43′	30.18	766.6	64.9	18.3	81	ene.			1–2		0					2	ese.	misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 17° 56′, E 68° 35′	30.05	763.3	78	25.6	90	ne.			1–2		2	ne.				2	ne.	d. clouds	Capt. H. Hand.
H. M. S. Mutine, S. 12° 20′, W. 77° 17′	29.94	760.5	70	21.1	90	se.			1		4							misty	Comm. F. Edwards.
H. M. S. Northampton, Barbadoes, West Indies	30.00	762.0	78	25.6	73	ne.			2		1	ne.						blue sky	Capt. E. Drummond.
H. M. S. Orontes, S. 9° 00′, E. 63° 51′	29.85	758.2	83	28.3	83	calm			0		2							d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 17° 08′, W. 8° 14′	30.05	763.3	74	23.3	95	e.			3		10					2	ese.	overcast	Capt. F. R. Dicken.
H M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, Bushire, Persia	30.13	765.3	64.1	17.8		ne.			1									drizzling	Capt. W. H. Edwards.
H. M S. Rocket, N. 48° 27′, W. 123° 27′	30.11	764.8	39	3.9	?	wsw.			2		3							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.12	765.0	76.5	24.7	86	nne.			3		8	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 18° 50′, E 39° 18′	30.01	762.2	80	26.7	95	e.			1		9	s.				sm'h		d. clouds	Capt. G. O. Twiss.
H M. S. Tenedos, N. 17° 22′, W. 85° 30′	30.02	762.5	79	26.1	82	ene.			3		2					2	e.	d. clouds	Capt. C. G. Fane.
H. M. S Triumph, Off Panama, Panama	29.91	759.7	77	25.0	77	nnw.			1		3	calm						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 12° 16′, E. 45° 22′	30.01	762 2	77	25.0	90	e.			3		0					3	ene.	blue sky	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.05	763.3	74	23.3		nnw.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark																			Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, St. Vincent, Cape Verd Id.	29.97	761.2	72.5	22.5	78	ne.			3		0					2	ne.	blue sky	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 17° 57′, W. 67° 22′	30.08	764.1	76.6	24.8	97	e.			1		2							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.16	766.1	56	13.3	87	ne.	7	3.1	.....	.....	10	.....	.....	0	0	.....	.....	cloudy	
N. Yard, Portsmouth, N. H.	30.61	777.5	1	—17.2	.....	nw.	10	4.5	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Naval Hospital Yokohama, Japan	29.96	761.0	42.5	5.8	62	n.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	clear	
Adams, Callao, Peru	29.72	754.9	70	21.1	90	se.	.....	.....	1	.....	8	.....	.....	.....	.....	gr'd	.....	cloudy	
Alaska, S. 30°42′, W. 71° 59′	29.87	758.7	62	16.7	94	se.	.....	.....	1	.....	10	.....	.....	0	0	long	s.	cloudy	
Alert, N. 17° 38′, E. 110° 52′*	30.02	762.5	73	22.8	72	ne.	.....	.....	4	.....	2	.....	ne.	0	0	long	ne.	clear	
Alliance, Boston, Mass.*†	30.46	773.7	13	—10.6	64	nw.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear	
Ashuelot Tientsin, China	30.25	768.3	29	— 1.7	100	ssw.	.....	.....	1	.....	8	.....	calm	.....	.....	.....	.....	cloudy	
Brooklyn, S. 23° 40′, W. 40° 30′	29.79	756.7	78	25.6	95	sw.	12	5.4	.....	.....	10	.....	s.	0.34	8.6	mod	sw.	cloudy	
Colorado, New York, N. Y.	30.42	772.7	22	— 5.6	.....	calm	0	0	.....	.....	10	.....	sw.	0	0	.....	.....	cloudy	
Essex, N. 35° 56′, W. 52° 16′	30.07	763.8	64	17.8	94	ne.	.....	.....	6	.....	10	.....	sw.	.....	.....	r'gh	sw.	cloudy	
Franklin, Norfolk, Va	30.38	771.6	36	2.2	80	ene.	8	3.6	.....	.....	10	.....	ne.	0	0	.....	.....	cloudy	
Galena, N. 15° —′, W. 23° 25′	30.01	762.2	72	22.2	80	nne.	.....	.....	2	.....	2	.....	.....	.....	.....	mod.	nne.	fair	
Independence, N. Yard, Mare I'd, Cal.	29.90	759.4	42	5.6	74	nnw.	1.2	0.5	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La	30.04	763.0	55	12.8	93	ene.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	drizzling	
Lackawanna, Valparaiso, Chili†	30.01	762.2	63	17.2	100	nw.	.....	.....	2	.....	10	.....	nw.	.....	.....	.....	.....	cloudy	
Lancaster, Genoa, Italy	30.59	777.0	63	17.2	57	s.	.....	.....	0–1	.....	2	.....	.....	.....	.....	.....	.....	fair	
Michigan, Erie, Pa	30.14	765.5	12	—11.1	.....	sw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Minnesota, Newport, R. I.	30.52	775.2	24	— 4.4	87	ne.	2	0.9	.....	.....	5	.....	.....	.....	.....	.....	.....	fair	
Moncacy, Yokohama, Japan	30.14	765.5	44	6.7	76	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Nipsic, Naples, Italy	30.59	777.0	58	14.4	53	ne.	.....	.....	4	.....	8	.....	ne.	.....	.....	sm'h	.....	squally	
Onward, Callao, Peru†	30.03	762.7	68	20.0	95	se.	.....	.....	2	.....	8	.....	nnw.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.27	768.8	60	15.6	88	ese.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C.	30.45	773.4	26	— 3.3	?	nw.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Pensacola, S. 28° 34′, W. 72° 31′	29.97	761.2	62	16.7	94	e.	.....	.....	1	.....	10	.....	s.	sl't	sl't	long	s.	cloudy	
Powhatan, Boston, Mass.	30.53	775.4	7	—13.9	100	w.	.....	.....	2	.....	5?	.....	.....	.....	.....	.....	.....	cloudy ?	
Quinnebaug, Villafranca, France	30.67	779.0	64	17.8	58	calm	.....	.....	0	.....	5	.....	calm	.....	.....	sm'h	.....	fair	
Ranger, N. 17° 17′, W. 101° 07′*	29.87	758.7	76	24.4	77	n.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, Pago Pago, Samoa Islands*	29.71	754.6	80	26.7	96	calm	.....	.....	0	.....	5	.....	n.	0.80	20.3	.....	.....	fair	
Shenandoah, Montevideo, Uruguay*.	29.89	759.2	72	22.2	67	nne.	.....	.....	3	.....	1	.....	.....	.....	.....	sm'h	.....	clear	
St. Louis, League Island, Pa	30.67	779.0	19	— 7.2	?	calm	0	0	.....	.....	2	.....	.....	0	0	.....	.....	clear	
Swatara, Kobe, Japan*	30.11	764.8	49	9.4	64	n.	.....	.....	1	.....	5	.....	sse.	.....	.....	sm'h	.....	fair	
Tennessee, New York, N. Y	30.48	774.2	20	— 6.7	?	ese.	6	2.7	.....	.....	10	.....	.....	0	0	.....	.....	cloudy	
Vandalia, Port Spain, Trinidad, W.I.	29.99	761.7	78	25.6	73	se.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear	
Wabash, Boston, Mass	30.52	775.2	5	—15.0	.....	w.	1	0.4	.....	.....	5	.....	w.	0	0	.....	.....	fair	
Wachusetts, N. 49° 14′, W. 123° 47′	30.22	767.6	35	1.7	100	ene.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Wyoming, Port Royal, S. C.	30.20	767.1	54	12.2	100	ne.	8	3.6	.....	.....	10	.....	e.	0	0	.....	.....	overcast	
Yantic, Kingston, Jamaica, W.I.*	29.98	761.5	74	23.3	86	nw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear	

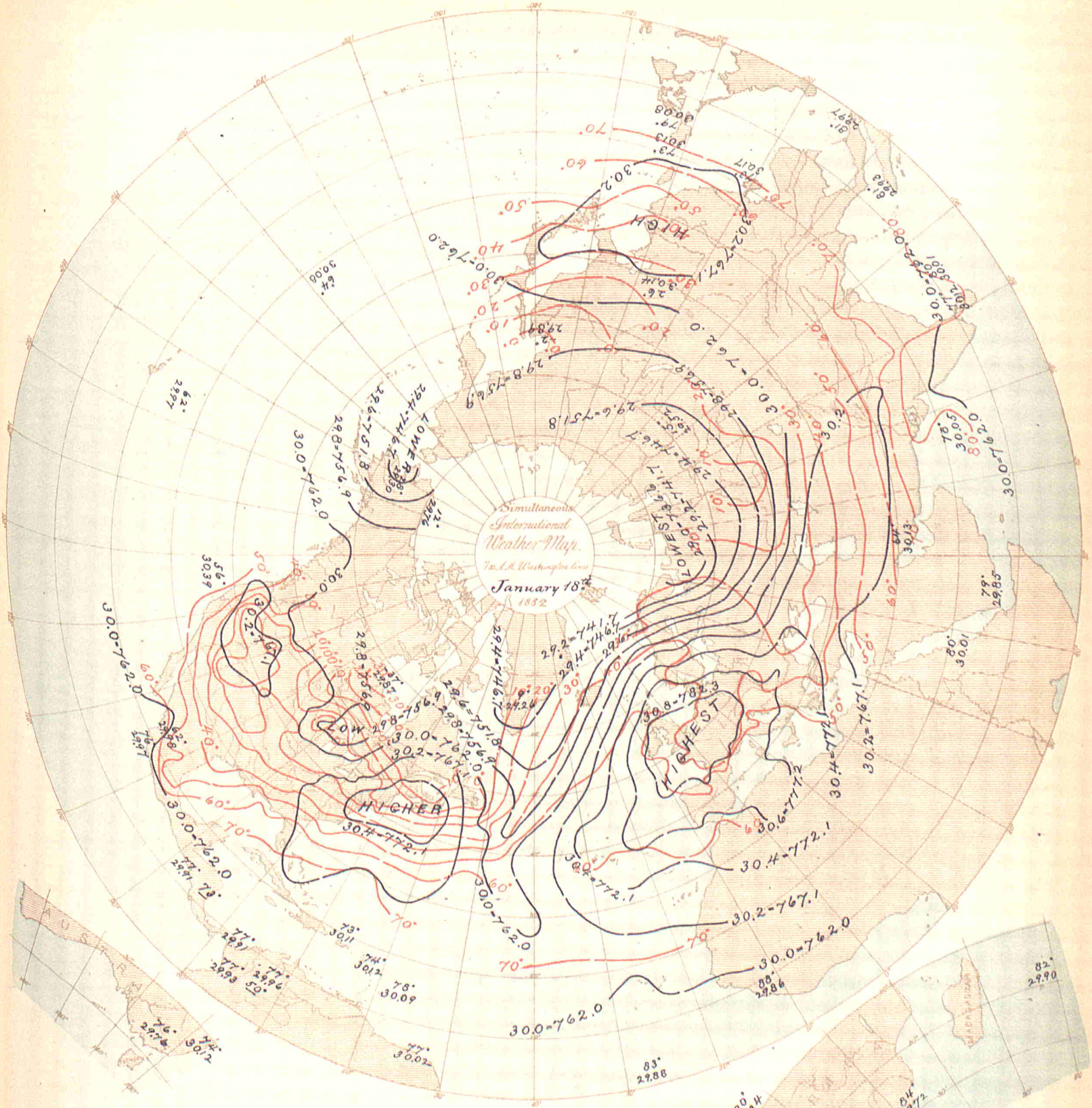
Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith, N. 51° 16′, W. 40° 23′	29.95	760.7	49	9.4	100	ssw.	9		10		sw.	18 h'r	18 h'r	7	sw.	squally	C. Gapon, 2d Officer.
S. S. Polynesian, Capt. R. Brown, Boston, Mass*	30.37	771.4	5	—15.0		wnw.	1		2			3 h'r	snow			hazy	Roberts & Spark
S. S. Prussian, Capt. J. G. Stephens, Hailfax, N. S *	30.01	762.2	12	—11.1		n.	2		2		n.					fair	J. G. Stephens.
S. S. Waldensian N. 52° 51′, W. 30° 20′*	30.00	762.0	46	7.8		ssw	5				sw.	0	0	mod.	sw.	foggy	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	30.29	769.4	18	—7.8	100	nne.	2		2		ene.					clear	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent,																	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, Eng*†	30.95	786.1	45	7.2	100	nw.	1		0							fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†	30.88	784.3	55	12.8	93												W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Assyria, Capt. J. Brown.. N. 41° 48′, W. 61° 06′†*	30.48	774.2	26	—3.3		n.	6		10		n.			mod.	n.	snowing	J. Brown.
Utopia, Capt. A. McRitchie, Off Wolf Rock, Eng*†	30.71	780.0	49	9.4	93	se.	2		9		ese.	0	0	sm'h	wnw.	cloudy	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 18° 11′, W. 73° 46′*†	30.18	766.6	77	25.0	86	calm	0		5		se.	0	0	sm'h		hazy	C. P. Krause.
S. S. Alvo, Capt. D. W. Williams, Savanilla, U. S. C.*	29.89	759.2	78	25.6		nne.	4		0			0	0			very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin																	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta,																	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse N. 36° —′, W. 74° —′	30.20	767.1				ne.	5		9		ne.	0	0	mod.	ne.	cloudy	Fisher & Weldon.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright,																	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell N. 44° 20′, W. 13° 45′	30.78	781.8	56.6	13.7	93	e.	4		7							d. clouds.	
British Merchant, Capt. E. J. Molony, N. 10° 14′, E. 85° 51′	30.01	762.2	79.8	26.6	76	ne.	5		3							misty	
Bk. Caldew, Capt. W. Peterson S. 28° 49′, W. 83° 57′	30.13	765.3	69	20.6		calm	0		2							d. clouds	
S. S. Cipero, Capt. W. N. Laily N. 40° 11′, W. 22° 19′	30.65	778.5	58	14.4	57	sse.	3		9							overcast	
S. City of Agra, Capt. Thos. Young, N. 1° 10′, W. 26° 33′	29.88	758.9	82.5	28.1		sse.	3		5							d. clouds	
Bk. Glaramara, Capt. R. Morton, N. 23° 47′, W. 40° 12′	30.08	764.0	69	20.6	75	nw.	2		5							d. clouds	
S. S. Gordon Castle, Capt. W. Waring,																	
Bq. Hermine, Capt. S. G. Jones,																	
S. S. Humboldt, Capt. A. W. Jeffery,																	
S. Lochee, Capt. J. Raeburn, S. 17° 48′ E. 78° 33′	29.95	760.7	80	26.7	82	se.	4		2							d. clouds	
May Hulse, Capt. H. Youlden, S. 19° 44,′ W. 36° 04′	29.89	759.2	82.2	27.9	83	n.	4		7							d. clouds	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, S. 4° 32′, W. 32° 56′	29.94	760.5	80.8	27.1	82	se.	4		7							d. clouds	
Naiad, Capt. John Smith S. 4° 56′, W. 26° 37′	29.98	761.5	80.0	26.7	76	ese.	4		8.							d. clouds	
Pole Star, Capt. F. Norman, S. 53° 11′, W. 64° 47′	29.51	749.5	58.9	14.9	70	wsw.	3		8							gloomy	
Queen of Cambria, Capt. M. Parry, S. 42° 32′, E. 14° 11′	29.74	755.4	56	13.3	68	sw.	7		6							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson,																	
S. Superb, Capt. Berridge, N. 17° 23′ W. 40° 32′	30.06	763.5	73	22.8	90	nne.	4		7							d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham,																	Wm. Fitt.
CALIFORNIA, AND MEXICAN S. S. CO. *J. Birmingham, Agent San Francisco.*																	
S. S. Newbern, Capt. E. Rogers, La Paz, Lower Calf	30.02	762.5	58	14.4	81	nne.	3		10			0	0	light	nnw.	cloudy	
CROMWELL LINE. *Clark & Seaman, Agents, New York.*																	
S. S. Hudson, Capt. H. R. Freeman																	Crowell & Henry.
CUNARD LINE. *Vernon H. Brown & Co., Agents. New York.*																	
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d Officer
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, Havre, France	30.82	782.9	35.6	2.0		se.	2		10		ese.	0	0				
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents. New York.*																	
S. S. Gellert, Capt. Kuhlewein, N. 40° 22′ W. 70° 00′*	30.52	775.2	30	—1.1	100	e.	2		10		e.	10 h'r	10 h'r	sm'h		cloudy	P. Frochlich, 3d Off.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch,																	Patterson & Thompson.
LAMPERT & HOLT S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius. Capt. J. Carroll, S. 9° —′, W. 32° —′*†	30.14	765.5	82	27.8		se.	4		8		ese.	0	0	long	e.		J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 51° 21′, W. 31° 19′						sw.	3		fg		sw.	0	0	mod.	sw; nw.		E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.00	762.0				se.	1		10		se.	0	0			cloudy	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker Havana, Cuba, W. I*†	30.26	768 6	70	21.1		calm	0		0			0	0			clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, Port St. Jago†	30.18	766.6	72	22.2		n.	2		0			0	0			clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Allsa, Capt. J. W. Sansom, N. 23° 06′, W. 74° 22′†	30.24	768.1	70	24.4		ene.	4								ene.	cloudy	
S. S. Bothnia, Capt. MacMackan, N. 50° 17′, W. 30° 45′*	30.11	764.8	52	11.1		sw.	6								wsw.	hazy	E.F.Stembridge,3d offi
S. S. City of Alexandria, Capt. L. F. Timmer- Vera Cruz, Mexico*†	30.14	765.5	68	20.0		nnw.	4								nnw.		
S. S. City of Washington, Capt. J. W. Rey- N. 23° 12′, W. 83° 27′*†	30.15	765.8	78	25.6		e.	1							sm'h		fine	
S. S. New York, Capt. R. B. Quick, N. 28° 17′, W. 88° 05′*†	30.20	767.1	76	24.4		sse.	1							sm'h		light rain	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schledam, Capt. E. M. Chevalier,																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Hohenzollern, Capt. R. Sander, N. 43° 09′, W. 45° 14′*	29.54?	750.3?	47.3	8.5		wsw; wnw.	7		10		w.	rain	rain	h'vy	w.	heavy rain	G. H. Lose, 3d officer. Cuppers & Walter.
S. S. Leipzig, Capt. F. Pfeiffer,																	
S. S. Main, Capt. Julius Barre, N. 44° 42′, W. 53° 02′*	30.10	764.5	17.5	— 8.1		n.	5		10		ne.	ioh'r	snow	mod.	ne.	snowing	
S. S. Mosel, Capt. J. Hesse, N. 50° 40′, W. 1° 34′	30.97	786.6	34.2	1.2		ne.	1		10		e.	0	0	sm'h		d. fog	J. Hesse.
S. S. Oder, Capt. C. Undeutsch, N. 53° 52′, E. 7° 00′*	30.82	782.8	42.8	6.0		wnw.	3		2		wnw.	0	0	sm'h	wnw.	hazy	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany			40.1	4.5		sw.	5		3		wsw.	0	0			foggy	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal†	30.14	765.5	44	6.7	92	w.	2		fog			0	0			foggy	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 30° 27′, E. 132° 02 *†	30.42	772.7	61	17.8	52	ne.	4		6		ne.			mod.	ne.	d. clouds	
S. S. Oceanic, Capt. J. Metcalf, N. 27° 09′, E. 123° 16 *	30.31	769.9	57	13.9	69	ene.	2		3		wnw.			1	ne.	fine	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City o Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.90	759.4				e.	1									foggy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Savannah, Georgia†	30.12	765.0	64	17.8	83	ne.	1		8		ne.	0	0			d. fog	H. K. Hallett.
OREGON IMROVEMENT CO. *John L Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.10	764.5	42	5.0	83	n.	1		8		sw.					fair	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer N. 39° 24′, W. 124° 14′*	30.12	765.0	49	9.4	93	nnw.	6		4		nnw.	0	0	mod.	nnw.	fine	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. Columbia, Capt. Fred Bolles,																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†	30.11	764.8	44	6.7	92	s.	1		10							foggy	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 32° 47′, W. 117° 24′†	30.08	764.0	50	10.0	71	ene.	3		0					sm'h		clear	
S. S. Geo. W. Elder, Capt. H. G. Morse																	
S. S. Idaho, Capt. E. Alexander, Tacoma, Washington Ter†	29.98	761.5	40	4.4	91	se.	1		10		nw.					cloudy	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 37° 12′, W. 122° 25′†	30.12	765.0	52	11.1	66	nnw.	1				nw.	0	0	sm'h	w.	fair	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace. San Francisco, Cal†	30.54	775.7	45	7.2	92	sw.	1		10			0	0			foggy	T. Wallace.
S. S. State of California, Capt. G. Debney, N. 42° 10′, W. 124° 10′†	30.27	768.8	48	8.9	85	wnw.	3		4		sw.	0	0	sm'h	w.	fair	
S. S. Victoria, H. M. Hayward, Esquimalt, B. C †	30.02	762.5	40	4.4	91	nw.	2		8					sm'h		cloudy	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulley, Supt. New York.*																	
S. S. Australia, Capt. ——, N. 23° 33′, W. 154° 32′	29.97	761.2	62	16.7	100	ene.	5		10					long	ne.	heavy rain	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	30.12	765.0	74	23.3	81	e.	3		8			0	0			cloudy	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, Yokohama, Japan†	30.46	773.7	53	11.7	66	nw.	3		5		nw.	0	0	long	nw.	fair	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn, N. 35° 01′, W. 130° 09′†	30.39	771.9	56	13.3	75	nnw.	6		5		nnw.	0	0	mod.	nw.	fair	E. Le Saik.
S. S. City of Tokio, Com. J. Maury N. 30° 09′, E. 176° 11′†	30.08	764.0	64	17.8	83	se.	4		8		se.	1 h'r	rh'r	light	se.	squally	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, Panama, Panama..†	29.87	758.7	74	23.3	81	nw.	2		5?		n.	0	0			cloudy?	
S. S. Grenada, Capt. M. Connolly, N. 11° 52′, W. 87° 40′†	29.91	759.7	77	25.0	81	ne.	6		0			0	0	r gh	ne	light haze	
S. S. South Carolina, Capt. W. J. Russell, N. 28° 14′, W. 115° 42′*†	29.98	761.5	59	15.0	87	n	3		0			0	0	mod.	n.	fair	
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	29.96	761.0	70	21.1	85	nw.	2		5?		nw.					clear?	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke, Trinidad, W. I*	.....	.....	.....	.....	.....	ene.	1	.....	0	.....	.....	0	0	sm'h	.....	clear	G. S. Locke
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 42° 21′, W. 23° 54′*†	30.71	780.0	58	14.4	93	s.	3	.....	5	.....	s.	0	0	mod.	wsw.	fair	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	30.96	786.4	33	0.6	89	s.	1	.....	.....	.....	.....	0	0	.....	.....	foggy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 49° 44′, W. 9° 04′*†	31.05	788.7	54	12.2	86	e.	1	.....	8	.....	ene.	0	0	long	wsw.	cloudy	M. Eymond.
S. S. Waesland, Capt. H. Nickels. N. 43° 35′, W. 53° 21′*	30.03	762.7	25	—3.9	.....	w.	6	.....	8	.....	w.	17 h'r	rain snow	r'gh	w.	clearing	.....
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub, Copenhagen, Denmark†	30.64	778.2	40.1	4.5	.....	wnw.	1	.....	10	.....	wnw.	2 h'r	2 h'r	.....	.....	covered	J. T. Ulberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 42° 44′, W. 50° 45′*†	30.16	766.1	24	—4.4	.....	nw.	7	.....	8	.....	nw.	6 h'r	hail sleet	mod.	nw.	cloudy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 45° 03′, W. 49° 53′	29.95	760.7	30	—1.1	.....	n.	6	.....	10	.....	nnw.	.....	.....	mod.	sw. to nnw.	snowing	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 43° 50′, W. 46° 02′*†	29.43	747.5	36	2.2	80	w.	7	.....	10	.....	w.	24 h'r	h'vy	con.	sw. nw.	snowing	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. Liverpool, Eng.*†	31.11	790.2	43	6.1	.....	se.	2	.....	5	.....	ne.	0	0	.....	.....	d. clouds	W. A. Ward.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th Officer.
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 42° 35′, W. 42° 05′*	30.13	765 3	56	13.3	.....	wsw.	6	.....	10	.....	.....	0	0	mod.	.....	.....	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, N. 26° 37′, W. 83° 37′†	30.36	771.1	76	24.4	81	ese.	3	0	2 k	.....	se.	0	0	mod.	se.	clear	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Alpha, Capt. Ole Grönn,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis. N. 31° 07′, W. 68° 45′*†	30.30	769.6	71	21.7	.....	wnw.	1	.....	5	.....	w.	0	0	mod.	wsw.	fair	L. L. Lewis.
Bk. Dom Pedro II, Capt. O. E. Coffin, S. 21° 08′, W. 34° 25′	.....	.....	.....	.....	.....	n.	.....	.....	.....	.....	n.	.....	.....	light	n.	clear	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.92	785.4	.....	.....	.....	ssw.	1	.....	1	.....	wnw.	0	0	.....	.....	clear	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. N. 0° 53′, W. 28° 35′†	29.90	759.4	.....	.....	.....	se.	1	.....	8	.....	se.	0	0	sm'h	ne.	.....	.....
S. Enoch Train, Capt. H. D. Chapman. N. 50° 00′ W. 2° 50′*	30.85	783.6	.....	.....	.....	e.	1	.....	8	.....	e.	0	0	light	wsw.	fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 43° 31′, W. 32° 05′*	30.42	772.7	.....	.....	.....	s.	4	.....	3	.....	s.	1 h'r	light	h'vy	cross	fair	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.42	772.7	35	1.7	52	n.	1	.....	7	.....	n.	.....	.....	sm'h	.....	cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 51° 20′, W. 65° 25′†	29.50	749.3	53	11.7	.....	w.	3	.....	10	.....	nw;	0	0	sm'h	.....	cloudy	G. D. Morrison.
Bk. Freya, Capt. Blaauw, N. 52° 14′, W. 19° 23′	.....	.....	53	11.7	.....	s.	6	.....	5	.....	s.	0	0	mod.	s.	fair	.....
Bk. Gamaliel, Capt. D. J. Anthony,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Geo. Booth, Capt. D. Williams,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. Williams.
S. Hedwig, Capt. T. Minssen. N. 53° 52′, E. 7° 50′*	30.56	776.2	44.2	6.8	95	w.	4	.....	10	.....	w.	0	0	short	w.	foggy	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 21° 24′, W. 29° 38′*	29.85	758.2	.....	.....	.....	nne.	5	.....	3	.....	ne.	0	0	mod	ne.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 39′, W. 11° 28′*†	30.60	777.2	.....	.....	.....	ese.	6	.....	.....	.....	ese.	6 h'r	6 h'r	very hv'y	ese.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.52	775 2	54	12.2	68	n.	2	.....	0	.....	.....	.....	.....	.....	.....	clear	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 29° 30′, W. 40° 42′*†	29.85	758.2	.....	.....	.....	se.	.....	.....	1	.....	se.	0	0	.....	.....	.....	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 17° 00′, W. 26° 00′*	29.92	760.0	67.8	19.9	94	ese.	3	.....	3	.....	e.	.....	.....	sm'h	ne.	.....	.....
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.53	775.4	59	15.0	81	ne.	6	.....	0	.....	.....	0	0	.....	.....	clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 26° 50′, W. 28° 07′*†	30.03	762.7	.....	.....	.....	nne.	6	.....	9	.....	nne.	.....	.....	mod	nne.	.....	I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton, N. 32° 27′, W. 56° 10′*†	30.30	769.6	.....	.....	.....	var.	.....	.....	.....	.....	.....	.....	.....	.....	.....	squally	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Heliotype Printing Co Boston

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 19, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.53	775.4	60.8	16.0	87	w.			2		0			0	0	clear	Moiroud.
Algiers			30.62	777.7	54.3	12.4	72	ne.			1		0			0	0	clear	Nicolas.
La Calle			30.62	777.7	66.2	19.0	63	w.			1		2			0.059	1.5	fair	Foufréde.
Tunis			30.58	776.7															Jacques.
Sfax																			Gau.
Saida			30.57	776.5	50.4	10.2	62	e.			1		2			0	0	fair	Perès.
Tebessa			30.04	778.3	44.2	6.8	60	se.			1		8			inap.	inap.	very cloudy	Derché.
Gerlville					37.8	3.2	76	sse.			3		10			0	0	covered	Louchamp.
Laghouat			30.71	779.9	44.6	7.0	66	n.			1		4			0	0	cloudy	Herbin.
Biskra			30.04	778.3	57.6	14.2	37	nw.			1		4			0	0	cloudy	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.64	752.8	29.73	755.1	67.2	19.6	87	sw.	6	2.7			8			0.03	0.8	dull	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.08	764.0	30.66	778.7	42.1	5.6	70	sw.			1		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Observatory	29.84	757.8	30.65	778.5	33.1	0.6	89	w.	15.0	6.7			10			0.039	1.0		Dr. Wierzbiski.
Eperies	29.58	751.2	30.50	774.8	35.6	2.0	79	n.			3		10 8			0	0		Julius Mikolik.
Gratz	29.36	745.7	30.67	778.9	42.3	5.7	58	e.			1		0			0	0		Andreas Rospini.
Hermannstadt	28.98	736.1	30.48	774.3	36.7	2.6	75	nnw.			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.37	745.9	30.80	782.3	32.5	0.3	87	wsw.			1	2 c	0			0	0		The Staff.
Lemberg	29.42	747.3	30.47	773.8	32.0	0.0	90	nw.			2		10			0	0		Dr. T. Stanecki.
Pola	30.45	773.5	30.57	776.5	50.9	10.5	64	nw.			1		5			0	0		I. R. Hydrographic Office.
Szathmar	30.03	762.8	30.50	774.7	28.9	—1.7	86	sw.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.28	769.0	30.57	776.5	37.8	3.2	89	w.			1		4			0	0		Karl Stancel.
Trieste	30.50	774.7	30.60	777.3	47.8	8.8	68	calm			0		4			0	0		Rieder.
Vienna	29.99	761.8	30.74	780.9	40.3	4.6	65	nw.			3		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Aberdeen	30.66	778.7	30.76	781.3	45.0	7.2	76	wsw.	6	2.7			6			0	0	d. clouds	W. Boswell.
Armagh, Observatory	30.61	777.5	30.85	783.6	42.6	5.9	83	sw.	5	2.2			10					overcast	S. Gall.
Bidston, Liverpool Obs'y			30.87	784.1	40.8	4.9	93	sse.	6	2.7			10					overcast	John Hartnup.
Bolton, Sharples	30.29	769.4	30.85	783.6	40.0	4.4	97	wsw.					10					foggy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.42	772.7	30.82	782.8	44.7	7.1	88	nw.			1		6			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.98	761.5	30.00	762.0	74.0	23.3	90	ne.			2		8					raining	Corpl. J. Surgenor.
Cardington			30.87	784.1	39.6	4.2	95	w.			0.2		10					overcast	John McLaren.
Chatham, School M. E.	30.75	781.0	30.89	784.6	39.3	4.1	95	calm			0		10			blank	blank	foggy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.63	778.0	30.87	784.1	41.9	5.5	83	e.			1		9					foggy	The Staff.
Fort Napier, Natal	27.48	698.0	29.70	751.4	69.4	20.8	83	ne			3		7						Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	88.0	31.1	66	nw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.78	781.8	46	7.8	85	s.			2		10			0	0	overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.42	772.7	30.48	774.2	61.6	16.4	85	e.			5		4					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	30.60	777.2	30.81	782.6	45.6	7.6	91	wsw.			5	6 c	0					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.71	780.0	30.89	784.6	39.8	4.3	90	ssw.			1		10					overcast	The Staff.
Guernsey	30.55	776.0	30.87	784.1	42.5	5.8	87	ene.			1		9					misty	A. Collenette, F. M. S.
Kew, Observatory	30.87	784.1	30.90	784.8	38.5	3.6	90	sw.	5	2.2			10					misty	The Staff.
Leicester, Museum	30.60	777.2	30.87	784.1	39.5	4.2	100	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.40	772.1	30.47	773.9	60.0	15.6	66	n.			3		0					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.23	767.8	30.28	769.1	74.0	23.3	76	e.			1		7					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.34	770.6	30.89	784.6	39.0	3.9	99	s.			1		10					misty	John Mac Emuil.
Oxford, Radcliffe Obs'y	30.65	778.5	30.88	784.3	36.4	2.4	96	wsw.			1		10					foggy	The Staff.
Plymouth	30.79	782.1	30.87	784.1	38.9	3.8	91	ese.			3		5					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.63	778.0	48	8.9	84	sw.	21	9.4			8					d. clouds	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.24	768.1	30.31	769.9	35.0	1.7	96	calm			0		10					drizzling	W. H. Lyne.
Sheffield	30.58	776.7	30.88	784.3	40.5	4.7	95	calm			0		7			0	0	misty	W. F. Cooper.
Silloth Rectory	30.82	782.8	30.85	783.6	44.6	7.0	91	sw.			2		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.87	784.1	42.4	5.8	94	w.	1	0.4			10					foggy	Rev. S. J. Perry.
Stratfield Turgiss					35.1	1.7	97	s.			1		10					overcast	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.74	780.8	30.80	782.3	45	7.2	76	e.			2		10					gloomy	W. Newcombe.
Valencia, Observatory	30.83	783.1	30.86	783.8	46.3	7.9	72	e.	11	4.9			10					misty	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.07	763.8	30.11	764.8	22	— 5.6	100	s.	16	7.2			10 n			0.065	1.6	light snow	H. J. Cundall, C. E.
Chatham, N. B.*	29.92	760.0	29.99	761.7	13	—10.6	87	calm	0	0			10 n		calm	0.16	4.1	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.89	759.2	29.91	759.7	19	— 7.2	96	sw.	25	11.2			10 k		w.	0	0	threatening	J. McWilliams.
Fort Garry, Manitoba*	29.17	740.9	30.11	764.8	— 8	—22.2	100	se.	3	1.3		4 k	3 n	se.	se.	0.010	0.3	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.01	762.2	30.15	765.8	30	— 1.1	100	se.	13	5.8			10 n			0.130	3.3	heavy snow	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.75	755.6	30.11	764.8	25	— 3.9	88	nw.	4	1.8			10 k		sw.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.83	757.7	30.04	763.0	24	— 4.4	73	w.	14	6.3			10 ks		w.	0	0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.48	748.8	30.25	768.3	5	—15.0	76	n.	7	3.1		0	0			0	0	clear	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.43	747.5	30.16	766.1	25	— 3.9	87	nw.	6	2.7		10 k	0	nw.		0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.50	749.3	30.18	766.6	24	— 4.4	84	w.	7	3.1			10 n		nw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.65	753.1	30.00	762.0	17	— 8.3	91	e.			1		10 ks		e.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.73	755.1	30.24	768.1	3	—16.1	91	w.	4	1.8		5 cs	0	w.		inap.	inap.	fair	W. H. McIntyre.
Sangeen, Ontario*	29.43	747.5	30.20	767.1	18	— 7.8	100	ne.	3	1.3			10 ks			0	0	cloudy	K. Stewart.
St. Andrews, N. B.	29.93	760.2	29.98	761.5	32	0.0	97	sw.	9	4.0			10 n			0.25	6.3	heavy snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.21	767.3	30.27	768.8	14	—10.0	100	calm	0	0			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.78	756.4	30.19	766.8	24	— 4.4	80	n.	15	6.7			10 n			0	0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.91	759.7	29.97	761.2	33	0.6	92	e.	2	0.9			fg.			0.36	9.1	light rain	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.30	769.6	30.58	776.7	11	—11.7		s.					10			0.10	2.5		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Cape St. Francis Lt. House	30.03	762.7	30.05	763.5	72.0	22.2	89	s.	15.1	6.8		4 k	0			0.020	0.5	clear	John Duthie.
Cape Town, C. G. H. Obs'y	30.03	762.7	30.07	763.8	81.4	27.4	53	sse	19	8.5		0	2			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Sub-Series.																			
Hankow																			N. Titoushkin.
Zi-Ka-Wei, near Shanghai.	30.23	767.9	30.26	768.5	44.8	7.1	82	nnw.	5.6	2.5			10			0	0	covered	M. Marc Dechevrens, S. J.

JANUARY 19, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours		Weather.	Observers
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.52	775.3	30.57	776.5	43.2	6.2	91	nw.	18	8			2						Oversergent Fischer.
Fanöe	30.71	780.1	30.73	780.6	42.8	6.0	96	w.			4		7						Overloerer Lauridsen.
Godthaab, Greenland	29.70	754.3	29.74	755.4	4.3	—15.4		e.			3		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.45	747.9	29.49	749.0	37.8	3.2		w.			6		10					raining.	A. O. Thorlacius.
Thorshavn	30.22	767.7	30.26	768.6	48.9	9.4	86	w.	27	12			10						Overloerer Bergh.
Vestervig	30.57	776.4	30.66	778.7	44.6	7.0	94	w.			4		0						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	30.05	763.3	30.74	780.8	40.6	4.8	90	sse.			1		fg			0	0	foggy	M. Labroue, Director.
Alençon, Normal School	30.32	770.0	30.87	784.0	28.4	—2	96	ne.			1		k		n.	0	0		M. Nicot, Director.
Arras, Engineer School	30.59	777.0	30.87	784.0	29.3	—1.5	97	ese.			2		10			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.52	775.1	30.60	777.1	43.2	6.2	67	nne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.26	768.6	30.87	784.0	28.0	—2.2		e.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.61	777.4	30.89	784.7	34.7	1.5	91	ne.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.84	783.3	36.3	2.4	96	ne.			1				ne.	0	0		M. Gobin, Director.
Bordeaux, Observatory	30.43	772.8	30.71	779.9	33.4	0.8	89	se.			1		8			0	0	very cloudy	M. Rayet, Director.
Bourges, Normal School	30.23	767.9	30.83	783.1	26.6	—3	88	n.			1		fg		ne.	0	0	light fog	M. Postel, Director.
Brest, Naval Observatory	30.55	775.9	30.79	782.1	43.5	6.4	85	ne.			1		0			0	0		M. de Kennarec, Dir.
Caen, Normal School	30.80	782.2	30.88	784.3	28.0	—2.2	92	nne.			1		10			0	0	covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.48	774.2	30.83	783.0	28.4	—2.0	92	ne.			1		0			0	0	clear	M. Jadot, Director.
Charleville, Normal School	30.33	770.3	30.87	784.0	37.4	3		e.			1		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.36	745.7	30.84	783.4	25.2	—3.8	95	n.			1		10			0	0	foggy	M. Allnard, Director.
Cluny, Normal School	29.92	760.0	30.83	783.0	28.0	—2.2	96	se.			3		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.95	760.6	30.88	784.3	29.5	—1.4	94	e.			1		2	e.	e.	0	0	light fog	Dr. Coulet, Dierctor.
Gap, Normal School	28.06	712.7	30.65	778.6	52.3	11.3	32									0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.47	748.6	30.61	777.6	58.5	14.7	33	ne.			1		0			0	0	clear	M. Klua, Director.
Grenoble, Normal School	29.98	761.6	30.81	782.5	33.4	0.8	92	ese.			1		0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	29.10	739.1	30.79	782.1	34.2	1.2	60	se.			1		mist			0	0	misty	M. Rivoire, Director.
Lamballe, Normal School	30.58	776.7	30.87	784.2	38.8	3.8	87	n.			2		5		n.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	30.14	765.5	30.72	780.2	51.8	11	63	sw.			1	2 cs	0			0	0	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	30.72	780.2	30.82	782.8	44.6	7.0	71	ne.			3		1		calm	0	0	clear	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.70	754.4	30.85	783.6	25.3	—3.7	97	nnw.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.54	775.6	30.87	784.2	29.3	—1.5	90	e.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.28	769.2	30.56	776.1	61.0	16.1	38	w.			0.1		1			0	0	hazy	M. Stephan, Director.
Montlouis Pinstituteur	25.31	642.9	30.15	765.9	42.8	6.0	37	sw.	5.6	2.5			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.61	777.4	30.72	780.3	52.0	11.2	59	wnw.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	30.03	762.8	30.88	784.4	28.8	—1.8	88	nne.			1	0	2 kn			0	0	slightly cl'dy	M. Hasse, Director
Nantes, Observatory	30.66	778.7	30.82	782.8	30.7	—0.7	89	ne.			2–3		10		ene.	0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.56	776.1	30.67	779.0	55.2	12.9	28	calm	0	0			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.62	549.2			30.6	—0.8		se.			1		1		se.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.64	752.8	30.79	782.0	26.2	—3.2							fg			0	0	dense fog	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.69	652.6			48.2	9.0	12	sw.			1					0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.75	781.0	30.78	781.8	32.9	0.5	91	ene.			3		10		e.	0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.56	776.2	30.79	782.1	33.4	0.8	74	nw.			1		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.47	723.1	30.70	779.8	45.1	7.3	40	e.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.85	783.7	30.90	784.9	35.2	1.8	93	nne.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.69	779.0	30.85	783.6	32.0	0	90	ene.			1		10			0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.70	779.8	30.87	784.0	29.3	—1.5	100	nne.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	30.00	761.9	30.73	780.6	45.1	7.3	73	se.			1		fg	w.		0	0	light fog	M Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.34	770.7	30.84	783.2	29.5	—1.4	100	ne.			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.95	760.8	30.83	783.0	26.6	—3.0	79	calm			0	0	6 k;8		w.	0	0	foggy	Prof. Dr. Hoh.
Berlin	30.52	775.2	30.71	779.9	37.4	3.0	100	nw.			2		10			0.299	7.6		Prof. Dr. Arndt.
Breslau	30.15	765.8	30.69	779.0	34.5	1.4	96	wnw.			3		10	wnw.				rain & fog	Royal University Obs'y.
Carlsruhe	30.43	772.8	30.91	785.2	23.5	—4.7	98	ne.			1		10			0	0	foggy	Albert Senz.
Cassel	30.10	764.6	30.82	782.8	32.9	0.5	90	s.			1		10			0	0	foggy	Dr. H. Mohl.
Frankfort on the Main	30.50	774.8	30.90	784.8	30.4	—0.9	90	n.			1		10			0	0		Physical Society.
Friedrichshafen	29.35	745.4	30.89	784.7	29.3	—1.5	96	e.			2		10			0	0	light fog	Wilhelm, Chief Tel.
Hamburg	30.71	780.1	30.81	782.5	37.6	3.1	100	wnw.			3		10			0.039	1.0	dense fog	E. Preller.
Kiel	30.72	780.4	30.74	780.8	42.4	5.8	97	w.			2		10			0.031	0.8		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.39	772.0	30.84	783.4	33.4	0.8	95	sw.			2		10					light rain	H. Leppig, Asst.
Magdeburg	30.60	777.3	30.81	782.5	37.4	3.0	91	w.			2	0	7 ks			0.024	0.6	foggy	Dr. Assmann.
Memel	30.35	770.8	30.39	772.0	36.3	2.4	93	nw.			4		10 s						Issermann.
Munich	28.90	734.1	30.82	782.7	31.5	—0.3	82	calm			0		1			0	0		Central Station.
Neufahrwasser	30.47	773.8	30.48	774.2	37.6	3.1	81	wnw.			4		10			0	0		A. Lothes.
Neustadt, Palatinate	30.34	770.7	30.89	784.5	26.1	—3.3		wnw.			3		10	nw.		0	0		Dicknether.
Stuttgart	29.87	758.6	30.86	783.5	23.0	—5.0	100	n.			1		10			0	0		Prof. Dr. Schoder.
Wustrow	30.67	778.9	30.69	779.5	39.4	4.1	100	wnw.			4		10			0.047	1.2	dense fog	Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.98	761.6	30.39	771.8	48.9	9.4		w.			1.5		4 k			0	0		Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.12	764.9	30.17	766.2	80.6	27.0	44	ene.					2			0	0	d clouds	
Deesa	29.65	753.1	30.13	765.3	81.0	27.2	29	nnw.	7.8	3.5			0			0	0	blue sky	
Bombay	30.01	762.2	30.05	763.2	81.7	27.6	65	nnw.	21	9.4			0			0	0	blue sky	
Poona, Yarrowda	28.15	714.9	29.99	761.8	83.8	28.8	27	e.	11	4.9			1	wnw.		0	0	d. clouds	
Belgaum	27.48	698.0	30.02	762.4	79.7	26.5	25	ne.	8	3.6			0			0	0	blue sky	
Lahore	29.43	747.4	30.21	767.2	63.4	17.4	72	calm	1.4	0.6			4			0	0	d. clouds	
Roorkee	29.25	743.0	30.21	767.3	54.8	12.7	94	nw.	3.7	1.6			10			0	0		
Agra	29.63	752.6	30.22	767.0	67.3	19.6	51	w.	2.4	1.1						0	0		
Nagpur	29.07	738.4	30.12	765.1	81.0	27.2	26	e.	3.0	1.3			0			0	0	blue sky	
Jubbulpore	28.81	731.7	30.22	767.5	64.9	18.3	37	calm	1.2	0.5			0			0	0	blue sky	
Lucknow	29.82	757.5	30.21	767.4	70.2	21.2	39	wsw.	3.5	1.6			0			0	0	blue sky	
Allahabad	29.87	758.7	30.20	767.0	63.8	17.7	65	calm	1.0	0.4			0			0	0	blue sky	
Patna	29.99	761.7	30.18	766.6	68.4	20.2	50	w.	2.9	1.3			0			0	0	blue sky	
Hazaribagh	28.11	714.2	30.18	766.6	68.3	20.2	31	n.	6.2	2.8			0			0	0	blue sky	
Cuttack	30.05	763.2	30.13	765.3	75.3	24.1	57	ne.	0.3	0.1			1			0	0	blue sky	
Calcutta, Alipore	30.11	764.7	30.13	765.3	71.8	22.1	54	n.	3.0	1.3			0			0	0	blue sky	
Dhubri	29.91	759.6	30.03	762.8	68.4	20.2	65	calm	2.3	1.0			0			0	0	blue sky	
Chittagong	30.01	762.3	30.11	764.7	72.4	22.4	51	nw.	1.9	0.8			0			0	0	blue sky	
Sibsagar	29.83	757.6	30.18	766.6	62.6	17.0	83	ne.	1.5	0.7			0			0	0	blue sky	
Jeypore	28.73	729.7	30.22	767.6	69.7	20.9	38	nw.	3.2	1.4			1			0	0	blue sky	
Zanzibar, Africa	29.86	758.4			86.6	30.3	69	nne.	11.6	5.2			8 k;fk		nne.	0	0	threatening.	
Trichinopoly	29.81	757.2			79.7	26.5	53	ene.	2	0.9			4			0	0	d. clouds	
Bellary	28.57	725.7			83.0	28.3	36	e.	4.3	1.9			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.17	766.4	30.60	777.2	55.0	12.8	38	calm	0	0			2			0	0		Prof. Giovanni Clodig.
Milan	30.06	763.6	30.61	777.6	45.1	7.3	57	w.	4.2	1.9			0			0	0		Prof. Schiaparelli.
Padua	30.48	774.3	30.60	777.3	44.6	7.0	71	nnw.	1.3	0.6			2			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.67	753.5	30.63	777.9	43.3	6.3	63	e.	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	30.39	772.0	30.60	777.1	57.7	14.3	64	calm	0	0			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.64	727.5	30.65	778.5	52.5	11.4	31	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.55	775.9	30.60	777.3	52.3	11.3	32	n.	7.4	3.3			1			0	0		Prof. Luigi Guidi.
Florence	30.32	770.0	30.58	776.8	50.0	10.0	31	se.			2		1			0	0		Prof. Costantino Pitter.
Leghorn	30.49	774.4	30.58	776.7	45.7	7.6	39	nne.	2.5	1.1			0			0	0		Prof. P. Monte.
Rome	30.34	770.6	30.52	775.2	56.1	13.4	36	n.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	30.18	766.5	30.44	773.2	56.8	13.8	54	wnw.	18.1	8.1			5	nw.		0	0		Prof. C. de Giorgi.
Cosenza	29.56	750.8	30.49	774.4	56.5	13.6	77	sse.	3.1	1.4			0			0	0		Prof. D. Conti.
Cagliari	30.37	771.3	30.57	776.4	55.0	12.8	58	nw.			2		0			0	0		Prof. A. Pacinotti.
Palermo	30.28	769.0	30.54	775.6	57.4	14.1	56	n.	4.2	1.9			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.40	772.2	30.45	773.4	59.0	15.0	54	nne.	11.9	5.3			2	nne.		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R.	29.95	760.6	30.48	774.1	58.8	14.9	35	n.	2.5	1.1			1	nnw.		0	0		Prof. T. Brioschi.
Stelvio	22.63	574.9			29.3	— 1.5	58	ne.			1		1			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.69	576.2			33.1	0.6	27	w.			2		1			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.12	765.0	30.15	765.8	30.7	— 0.7	92	wsw.	7.1	3.2			10ks;s			0	0	overcast	
Hakodate	30.12	765.0	30.13	765.3	30.3	— 0.9	77	calm	0	0			9			0	0	covered	
Hiroshima, I. M. Obs'y †	30.08	764.0	30.09	764.3	43.5	6.4	77	nne.	4.0	1.8		10 ck;cs	0			0.004	0.1	very cloudy	K. Sasaki.
Kanazawa	30.16	766.0	30.26	768.6	35.1	1.7	74					1 cs	0			0	0	fair	S. Endo.
Kioto	29.98	761.5	30.16	766.0	37.0	2.8	88	nnw.	2.2	1.0			10 s			0.006	0.2	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.94	760.5	30.15	765.8	46.4	8.0	90	sw.	0.7	0.3		0	4 s			0.030	0.8	clear	S. Takehayashi.
Niigata	30.10	764.5	30.14	765.5	34.8	1.6	91	se.	3.0	1.3		2ck;cs	0			0	0	clear	
Nobiru	30.16	766.0	30.18	766.6	35.1	1.7	80	n.	2.8	1.3			10 s			0	0	cloudy	H. Midzushina.
Sapporo					17.3	— 8.2	89	calm	0	0			1			0.005	0.1	clear	
Tokei Obs'y, Yeddo	30.11	764.8	30.18	766.6	43.5	6.4	74	se.	4.4	2.0		0	0			0	0	clear	The Staff.
Wakayama	30.09	764.8	30.15	765.8	42.2	5.7	80	e.	5.5	2.5		10 ck	0			0	0	cloudy	Y. Kuwamuea
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.81	757.2	30.00	762.0	84.3	29.1	73.6	wnw.	8.0	3.6		1 c	4 k;n		nw.	0.08	2.0	fair	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.70	601.9	29.92	759.9	50.9	10.5	89	calm	0	0		0	5 k		sw.	0	0	½ cloudy	Vicente Fernandez.
Leon	24.45	621.0	30.24	768.3	50.6	10.3	78	n.			2	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.70	754.5	29.97	761.2	64.0	17.7	91	nnw.			1		10 n		sw.	0	0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.8	30.29	769.4	43.9	6.6	73	calm	0	0		0	0			0	0		The Staff.
Morelia	24.33	618.0	30.58	776.8	48.7	9.3	83	se.			5	0	0			0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.91	607.3	30.00	762.0	50.7	10.4	71	calm			0	1 cs	0			0	0	fine	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.5	30.33	770.4	41.0	5.0	77	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.24	614.8	30.27	768.9	48.4	9.1	56	s.			1		10		e.	0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.91	785.0	30.91	785.0	39.2	4.0		wsw.			2					0	0		
Groningen	30.80	782.2	30.85	783.6	41.2	5.1		w.			1					0	0		
Helder	30.87	784.0	30.87	784.0	43.2	6.2		w.			1					0.012	0.3		
Hellevoetsluis	30.88	784.3	30.88	784.3	39.7	4.3	95	sw.			1					0	0		
Utrecht	30.84	783.4	30.89	784.6	39.0	3.9	97	ssw.			1		hz			0.012	0.3	hazy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.50	774.7	30.56	776.3	46.8	8.2	98	sw.	11	5			10			0.602	15.3	raining	
Brono	29.92	760.0	29.96	761.0	44.2	6.8	93	sw.	18	8			10			0.244	6.2	raining	
Christiania	30.22	767.6	30.37	771.4	44.8	7.1	74	ssw.	4	2			10			0.004	0.1	foggy	
Gjesvær	29.04	737.6	29.06	738.2	27.7	— 2.4		s.			6		10						
Lodingen	29.43	747.6	29.48	748.8	39.4	4.1	97	wsw.			6		10			0.772	19.6	raining	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.4	15.2	76	se.	9.4	4.2			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.50	749.3	30.53	775.4	53.6	12.0	43	ese.	9.8	4.4			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.25	768.3	30.34	770.5	61.9	16.6	62	calm	0	0			7			0	0		Capt. D. A. de Ounha.
Lisbon, Observatory	30.19	766.8	30.56	776.3	50.0	10.0	55	nne.	16.1	7.2			1			0	0		The Staff.
Ponta Delgada, Azores	30.34	770.7	30.41	772.5	61.2	16.2	67	ese.	5.6	2.5			4			0	0		
Saint Paul de Loando	29.65	753.1	29.85	758.2	79.2	26.2	97	wsw.	2.5	1.1			1	sse.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.55	725.2	29.73	755.2	1.6	—16.9		sw.	56	25			10 n			0	0		Major K. Lasarew.
Archangel	29.62	752.4	29.64	752.9	6.4	—14.2	87	wnw.	43	2			8 ks			0	0		Capt. Ssellwerstow.
Astrakhan	29.95	760.6	29.86	758.5	27.5	— 2.5	81	w.	18	8		10 cp	0			blank	blank	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.35	745.4	29.89	759.2	7.2	—13.6	80	sw.	9	4			3			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.83	757.6	30.08	764.0	36.1	2.3	84	w.	9	4			10 n			0	0		Observatory.
Ekaterinburg	28.03	711.9	29.00	736.5	24.4	— 4.2	81	nnw.	9	4			10			0.016	0.4		Meteorological Obs'y.
Kasan	29.00	736.5	29.27	743.5	28.0	— 1.9	74	nnw.	9	4			10			0.004	0.1		Observatory.
Kertch	30.08	764.0	30.10	764.5	31.6	— 0.2	90	w.	4	2			10 n			0	0		Lagorio & Sastyres.
Kieff	29.48	748.8	30.14	765.6	36.5	2.5	65	wnw.	18	8		cjcsjck	9 ks			0	0		Observatory.
Lugan	29.70	754.3	29.91	759.7	34.3	1.3	70	sw.	13	6			8			0	0		Meteorological Obs'y.
Moscow	29.17	740.8	29.67	753.5	27.0	— 2.8	83	n.	13	6		0	7 ks			0.028	0.7		Meteorological Obs'y
Nikolaiev	30.16	766.0	30.23	767.8	34.5	1.4	82	n.	13	6		0	7 n			0.020	0.5	light clouds	Capt. Kurdakow.
Nikolaievsk, on the Amoor.	29.86	758.4	29.95	760.6	— 6.9	—21.6	84	calm	0	0			3			0	0		Lieut. Iwanow.
Pekin, China	30.09	764.3	30.23	767.9	34.5	1.4	35	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	29.93	760.1	29.94	760.5	30.0	— 1.1	90	nw.	9	4		0s	9 n			0.020	0.5		Central Physical Obs'y.
Tashkend, Laboratory	28.64	727.4	30.30	769.6	32.0	0.0	92	calm	0	0			10			0.433	11.0	snowing	Teich, A. M.
Tiflis	28.68	728.4	30.15	765.8	38.3	3.5	48	nw.	18	8			0			0	0		Physical Observatory.
Warsaw	30.16	766.1	30.61	777.5	34.2	1.2	98	wnw.	18	8			10 ks						Astronomical Obs'y.
Wilna	29.88	759.0	30.33	770.3	33.4	0.8	92	wsw.	2	1			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.21	741.8	29.51	749.5	12.7	—10.7	72	wsw.	27	12			10			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.67	779.0	50	10.0	93	ssw.			4		10			0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.55	775.9	30.65	778.4	55.0	12.8	64	sw.	1.8	0.8			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.02	777.8	30.68	779.3	53.4	11.9	57	se.	2.2	1.0		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.01	701.3	30.69	779.4	48.2	9.0	51	ne.	3.4	1.5		0	1			0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.36	720.4	30.67	779.1	50.5	10.3	43	e.	8.3	3.7		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.52	775.3	30.69	779.4	54.9	12.7	78	ne.	1.6	0.7		5	5	nw.		0.083	2.1	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.60	751.8	30.52	775.2	54.0	12.2	53	calm	0	0		0	1			0	0	almost clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.08	764.0	30.15	765.7	70.2	21.2	85	e.	9.8	4.4		0	0			0	0	clear	Benito Vines, S. J.
Manila, Philippine Islands	30.01	762.2	30.07	763.7	76.6	24.8	68	ene.	0.7	0.3		1 c	1 ks		ene.	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.38	771.5	30.48	774.0	58.8	14.9	41	e.	24.9	11.1		0	4		e.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.05	763.2	30.14	765.5	75.2	24.0	81	e.	15.0	6.7		7 ks	5 kn	e.	e.	0	0	cloudy	E. Gadea, Chief Eng'r.
Tuguegarao, Philippine Id's	29.97	761.2	30.10	764.5	72.8	22.7	78	nw.	3.3	1.5		0	3 ks		nw.	0	0	fair	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.62	752.3	29.66	753.3	32.0	0.0	85	sw.			2		10			0	0		
Umea	29.76	756.0	29.82	757.3	40.6	4.8	81	ssw.			2		9			0	0		
Hernosand	29.97	761.3	30.02	762.6	46.9	8.3	63	sw.			2		5			0	0		
Stockholm	30.04	763.1	30.22	767.6	38.3	3.5	69	w.			2		10			0	0		
Wisby	30.27	768.9	30.33	770.4	38.8	3.8	83	w.			2		5			0	0		
SUB SERIES.																			
Upsala	30.09	764.2	30.17	766.4	40.1	4.5	70	wsw.	7.4	3.3			9	nnw.		0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.34	745.2	30.84	783.2	31.8	— 0.1	90	ene.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.35	770.9	36.0	2.2	95	nnw.	3	1.5			10		n.	0.185	4.7		The Observatory.
Valona			30.38	771.6	55.0	12.8		nw.			1		5			0	0	cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.00	761.9	52.7	11.5	64	ssw.			3		10 n		sw.	0.10	2.5		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.00	762.0	30.09	764.3	33	0.6	68	calm	0	0		3 ck	5 s;sk	nw.		0.03	0.8	cloudy	
Alpena, Michigan	29.55	750.6	30.26	768.6	7.3	—13.7	76	nw.	6	2.7		0	4 s			0.03	0.8	fair	
Atlanta, Georgia	28.90	734.0	30.13	765.3	50.0	10.0	100	nw.	11	4.9			10 n		calm	0.66	16.8	light rain	
Atlantic City, New Jersey	30.05	763.3	30.06	763.5	34.8	1.6	89	n.	6	2.7			10 s			1.05	26.7	cloudy	
Augusta, Georgia	29.90	759.4	30.10	764.5	53.0	11.7	86	nw.	4	1.8			10 s			0.10	2.5	cloudy	
Baltimore, Maryland	30.06	763.5	30.10	764.5	37	2.8	82	e.	3	1.3			10 s			0.59	15.0	cloudy	
Barnegat, New Jersey	30.02	762.5	30.04	763.0	34.0	1.1	96	nw.	10	4.5			10 s		n.	0.97	24.6	cloudy	
Bismarck, Dakota	27.96	710.2	29.96	761.0	7	—13.9	80	calm	0	0		0	0			0	0	clear	
Block Island, Rhode Island																0.03	0.8		
Boise City, Idaho	27.36	694.9	30.29	769.4	6	—14.4	91	calm	0	0		0	0			0.03	0.8	clear	
Boston, Massachusetts	29.83	757.7	30.00	762.0	28.0	— 2.2	88	nw.	6	2.7			10 s			0.05	1.3	cloudy	
Brownsville, Texas	30.10	764.5	30.15	765.8	50	10.0	93	n.	4	1.8		9 cs	0			0	0	cloudy	
Buffalo, New York	29.38	746.2	30.18	766.6	26.6	— 3.0	88	w.	5	2.2			10 s			0	0	cloudy	
Burlington, Vermont	29.73	755.1	30.04	763.0	30.5	— 0.8	76	nw.	5	2.2			10 n		w.	inap.	inap.	light snow	
Cairo, Illinois	29.90	759.4	30.32	770.1	29.5	— 1.4	88	nw.	6	2.7		0	sk.			0.42	10.7	clear.	
Campo, California	27.23	691.6	29.86	758.4	35	1.7	89	sw.	3	1.3			10 n			0.06	1.5	light rain	
Camp Thomas, Arizona																			
Cape Henry, Virginia	30.08	764.0	30.10	764.5	39	3.9	100	nw.	9	4.0			10 n			0.87	22.1	light rain	
Cape May, New Jersey	30.04	763.0	30.07	763.8	36	2.2	89	nw.	20	8.9			10 ks		nw.	1.40	35.6	cloudy	
Castroville, Texas	29.41	747.0	30.26	768.6	39	3.9	65	e.	5	2.2		10 c	0			0	0	cloudy	
Cedar Keys Florida	30.14	765.5	30.16	766.1	67	19.4	90	s.	11	4.9		0	0			0	0	clear	
Champaign, Illinois	29.44	747.8	30.31	769.9	25.1	— 3.8	80	ne.	5	2.2			10 s		n.	0	0	cloudy	
Charleston, S. Carolina	30.06	763.5	30.12	765.0	61	16.1	93	sw.	11	4.9		0	5 s		w.	0	0	fair	
Charlotte, N. Carolina	29.16	740.7	30.05	763.3	41.2	5.1	92	se.	1	0.4			10s;fg			0.46	11.7	cloudy	
Chattanooga, Tennessee	29.33	745.0	30.19	766.8	44.0	6.7	93	w.	9	4.0		0	9 ks		w.	0.80	20.3	cloudy	
Cheyenne, Wyoming	23.78	604.0	30.03	762.7	17.8	— 7.9	61	nw.	16	7.2		0	0			0	0	clear	
Chicago, Illinois	29.50	749.3	30.26	768.6	21.5	— 5.8	86	nw.	4	1.8		10 k	0	w.		0	0	cloudy	
Chincoteague, Virginia	30.06	763.5	30.08	764.0	37	2.8	100	n.	8	3.6			10 n		n.	0.89	22.6	heavy rain	
Cincinnati, Ohio	29.57	751.1	30.26	768.6	32	0.0	68	nw.	8	3.6			10 n			inap.	inap.	light snow.	
Cleveland, Ohio	29.44	747.8	30.22	767.6	27	— 2.8	88	nw.	9	4.0			10 s			0	0	cloudy	
Coleman City, Texas	28.36	720.3			28	— 2.2	100	ne.	8	3.6		0	6 s			0	0	fair	
Columbus, Ohio	29.30	744.2	30.20	767.1	27	— 2.8	64	n.	7	3.1			10 s		w.	0	0	cloudy	
Concho, Texas	28.23	717.0	30.25	768.3	28	— 2.2	88	calm	0	0			10 s			0	0	cloudy	
Davenport, Iowa	29.60	751.8	30.32	770.1	13	—10.6	61	n.	2	0.9		hz.	0			0	0	clear	
Dayton, Washington T'y	28.40	721.3	30.20	767.1	31.3	— 0.4	87	sw.	4	1.8			10 s		sw.	inap.	inap.	cloudy	
Deadwood, Dakota	25.16	639.1	30.11	764.8	22	— 5.6	76	sw.	8	3.6		0	0			0	0	clear	
Decatur, Texas					32	0.0	88	se.	6	2.7			fg.			0.04	1.0	dense fog	
Delaware Breakwater, Del.	30.04	763.0	30.06	763.5	37	2.8	89	n.	16	7.2			10 s		n.	0.68	17.3	cloudy	
Denison, Texas	29.44	747.8	30.28	769.1	26.0	— 3.3	76	calm	0	0		0	0			0.28	7.1	clear	
Denver, Colorado	24.54	623.3	30.06	763.5	11.4	—11.4	75	s.	7	3.1		0	0			0	0	clear	
Des Moines, Iowa	29.33	745.0	30.30	769.6	9	—12.8	70	n.	1	0.4		0	0			inap.	inap.	clear	
Detroit, Michigan	29.48	748.8	30.24	768.1	29.2	— 1.6	88	nw.	7	3.1			10 s		w.	0	0	cloudy	
Dodge City, Kansas	27.42	696.5	30.17	766.3	15.5	— 9.2	82	s.	6	2.7		0	0			0	0	clear	
Dubuque, Iowa	29.54	750.3	30.31	769.9	5.5	—14.7	76	nw.	1	0.4		0	fg.		calm	inap.	inap.	clear	
Duluth, Minnesota	29.47	748.5	30.23	767.8	5	—15.0	76	sw.	1	0.4			10 s		calm	0	0	cloudy	
Eagle Pass, Texas	29.42	747.3	30.26	768.6	43.0	6.1	68	se.	8	3.6			10 s			0	0	cloudy	
Eagle Rock, Idaho	25.28	642.1	30.24	768.1	— 8	—22.2	82	nw.	2	0.9		0	0			0.11	2.8	clear	
Eastport, Maine	29.95	760.7	30.02	762.5	33.5	0.8	83	s.	12	5.4			10 n			0.19	4.8	heavy snow.	
El Paso, Texas	26.20	665.5	30.08	764.0	27.2	— 2.7	56	se.	2	0.9		0	8 s			0	0	cloudy	
Erie, Pennsylvania	29.40	746.7	30.17	766.3	30	— 1.1	78	nw.	3	1.3			10 s		nw.	0	0	cloudy	
Escanaba, Michigan	29.57	751.1	30.29	769.4	— 1	—18.3	83	w.	5	2.2		0	0			0	0	clear	
Florence, Arizona																			
Fort Apache, Arizona	24.82	630.4	29.94	760.5	30	— 1.1	70	se.	7	3.1		0	0			0	0	clear	
Fort Assinnaboine, Montana	26.97	685.0	30.01	762.2	22	— 5.6	61	sw.	9	4.0		0	8 s		sw.	0.01	0.3	cloudy	
Fort Bennett, Dakota	28.28	718.3	30.02	762.5	18	— 7.8	70	s.	2	0.9			10 s			0	0	cloudy	
Fort Benton, Montana	27.01	686.0	29.99	761.7	16	— 8.9	54	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	27.89	708.4	30.09	764.3	— 8	—22.2	61	w.	10	4.5		0	0			0	0	clear	
Fort Custer, Montana	26.72	678.7	30.10	764.5	17	— 8.3	70	se.	7	3.1		0	0			0	0	clear	
Fort Davis, Texas	25.06	636.5	30.04	763.0	37	2.8	82	s.	4	1.8			10 ks		s.	0	0	threatening	
Fort Elliott, Texas	27.30	693.4	30.23	767.8	17	— 8.3	56	s.	12	5.4		0	0			inap.	inap.	clear	
Fort Gibson, Indian T'y	29.04	752.8	30.24	768.1	22.3	— 5.4	88	ne.	8	3.6		0	0			0	0	clear	
Fort Grant, Arizona	25.07	636.8	29.97	761.2	36	2.2	53	se.	8	3.6		5 cs	0			0	0	fair	
Fort Griffin, Texas	28.92	734.6	30.30	769.6	26	— 3.3	88	calm	0	0		0	0			0	0	clear	
Fort Keogh, Montana	27.35	694.7	30.04	763.0	25	— 3.9	64	w.	7	3.1			10 s		w.	0	0	cloudy	
Fort Macon, North Carolina	30.05	763.3	30.06	763.5	57	13.9	100	sw.	15	6.7			10 ks		sw.	0.18	4.6	cloudy	
Fort McKavett, Texas	27.92	709.2	30.32	770.1	30	— 1.1	80	calm	0	0		hz.	0			0	0	light haze	
Fort Missoula, Montana	26.69	677.9	30.15	765.8	24	— 4.4	88	sw.	3	1.3			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	29.28	743.7	29.31	744.5	17	— 8.3	100	sw.	90	40.2			10 n			0.03	0.8	light snow	
Fort Shaw, Montana	26.18	665.0	30.04	763.0	25	— 3.9	64	sw.	8	3.6		1 cs	0			0.02	0.5	clear	
Fort Sill, Indian Territory	28.95	735.3	30.28	769.1	24	— 4.4	84	ne.	2	0.9		0	0			0	0	clear	
Fort Stevenson, Dakota	27.94	709.7	30.00	762.0	6	—14.4	100	sw.	3	1.3			10 s		calm	0.05	1.3	cloudy	
Fort Verde, Arizona					16.7	— 8.5	56	nw.			2	0	0			0	0	clear	
Fredericksburg, Texas																0.36	9.1		
Galveston, Texas	30.18	766.6	30.22	767.6	40	4.4	91	ne.	16	7.2			10 s			0.12	3.0	cloudy	
Grand Haven, Michigan	29.56	750.8	30.27	768.8	18.5	— 7.5	84	ne.	5	2.2		0	0			inap.	inap.	clear	
Hatteras, North Carolina	30.04	763.0	30.06	763.5	59	15.0	100	sw.	20	8.9			9 k		s.	0.32	8.1	cloudy	
Helena, Montana	25.67	652.0	30.10	764.5	26	— 3.3	67	nw.	10	4.5			10 s			0.08	2.0	cloudy	
Henrietta, Texas	29.23	742.4	30.30	769.6	27	— 2.8	88	nw.	5	2.2		0	0			0	0	clear	
Huron, Dakota	28.52	724.4	30.06	763.5	18	— 7.8	58	s.	16	7.2			10 s			0	0	cloudy	
Indianapolis, Indiana	29.41	747.0	30.25	768.3	26	— 3.3	88	n.	4	1.8			10 s		n.	0	0	cloudy	
Indianola, Texas	30.20	767.1	30.23	767.8	40.4	4.7	100	n.	14	6.3			10 s			0	0	cloudy	
Jacksboro, Texas	29.03	737.3	30.27	768.8	26	— 3.3	88	ne.	4	1.8		0	0			0	0	clear	
Jacksonville, Florida	30.13	765.3	30.18	766.6	65	18.3	90	se.	8	3.6		2 cs	0			0	0	clear	
Keokuk, Iowa	29.59	751.6	30.29	769.4	11.0	—11.7	80	nw.	3	1.3		0	0			0	0	clear	
Key West, Florida	30.14	765.5	30.16	766.1	73.0	22.8	82	se.	6	2.7		0	1 s			0	0	clear	
Kittyhawk, North Carolina	30.05	763.3	30.07	763.8	45	7.2	100	n.	4	1.8			fg.			0.33	8.4	dense fog	
Knoxville, Tennessee	29.09	738.9	30.17	766.3	40	4.4	89	nw.	6	2.7			10 s			1.08	27.4	cloudy	
La Crosse, Wisconsin	29.43	747.5	30.27	768.8	5	—15.0	76	s.	4	1.8		0	0			0	0	clear	
La Mesilla, New Mexico	26.09	662.7	30.12	765.0	25.0	— 3.9	76	calm	0	0			10 s			0	0	cloudy	
Leavenworth, Kansas	29.36	745.7	30.32	770.1	15	— 9.4	67	calm	0	0			10 s			0	0	cloudy	
Lewiston, Idaho	29.36	745.7	30.23	767.8	23.2	— 4.9	58	e.	1	0.4		0	5 s		calm	0.04	1.0	fair	
Little Rock, Arkansas	29.93	760.2	30.26	768.6	33	0.6	88	nw.	2	0.9			10 s			0.68	17.3	cloudy	
Los Angeles, California	29.48	748.8	29.88	758.9	42.3	5.7	82	s.	8	3.6		0	7 s		calm	0	0	fair	
Louisville, Kentucky	29.64	752.8	30.22	767.6	31.0	— 0.6	78	nw.	6	2.7			10 n		calm	0.37	9.4	light snow	
Lynchburg, Virginia	29.36	745.7	30.08	764.0	37.5	3.1	82	w.	1	0.4			10s;fg			0.29	7.4	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.21	741.9	30.30	769.6	8	—13.3	76	nw.	2	0.9		0	0			0	0	clear	
Marquette, Michigan	29.48	748.8	30.2[illegible]	768.6	9	—12.8	55	sw.	8	3.6		0	2 s		sw.	0.01	0.3	clear	
Mason, Texas	28.54	724.9	30.28	769.1	31	— 0.6	78	calm	0	0		0	3 s		calm	0	0	clear	
Memphis, Tennessee	29.94	760.5	30.30	769.6	31	— 0.6	100	nw.	3	1.3			10 s		nw.	0.98	24.9	cloudy	
Milwaukee, Wisconsin	29.47	748.5	30.27	768.8	9	—12.8	76	nw.	9	4.0		0	3 s			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.14	765.5	30.18	766.6	52.0	11.1	93	n.	7	3.1	.....	.....	10 n	.....	n.	0.05	1.3	light rain	
Montgomery, Alabama	29.93	760.2	30.17	766.3	50.6	10.3	87	nw.	8	3.6	.....	.....	10 s	.....	.....	0.30	7.6	cloudy	
Moorhead, Minnesota	28.91	734.3	30.02	762.5	7.1	—13.8	76	s.	24	10.7	.....	.....	10 n	.....	s.	0	0	cloudy	
Morgantown, W. Virginia	29.11	739.4	30.17	766.3	34.0	1.1	82	ne.	7	3.1	.....	.....	10 s	.....	.....	0.12	3.0	cloudy	
Mt. Washington, N. H.	23.44	595.4	30.08	764.0	5.0	—15.0	91	nw.	50	22.4	.....	.....	fg	.....	nw.	0.04	1.0	light fog	
Nashville, Tennessee	29.67	753.6	30.23	767.8	34.9	1.6	92	nw.	4	1.8	.....	.....	10 ks	.....	nw.	1.26	32.0	cloudy	
New Haven, Connecticut	29.92	760.0	30.04	763.0	27	— 2.8	96	n.	.....	.....	1	.....	10 s	.....	sw.	0.41	10.4	cloudy	
New London, Connecticut	29.98	761.5	30.03	762.7	36	2.2	79	w.	3	1.3	.....	.....	10 s	.....	calm	0.62	15.7	cloudy	
New Orleans, Louisiana	30.12	765.0	30.18	766.6	52.3	11.3	79	n.	10	4.5	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	
Newport, Rhode Island	29.94	760.5	29.99	761.7	36.0	2.2	89	nw.	6	2.7	.....	.....	10 s	.....	nw.	0.62	15.7	cloudy	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.02	0.5	.....	
New Shoreham, Rhode Isl'd.	29.99	761.7	30.02	762.5	37.2	2.9	82	n.	6	2.7	.....	.....	10 s	.....	n.	0.75	19.0	cloudy	
New York, New York	29.87	758.7	30.06	763.5	35	1.7	89	nw.	3	1.3	.....	.....	10 s	.....	w.	0.50	12.7	cloudy	
Norfolk, Virginia	30.08	764.0	30.11	764.8	42	5.6	82	n.	4	1.8	.....	.....	10 n	.....	n.	0.78	19.8	light rain	
North Platte, Nebraska	27.02	686.3	30.14	765.5	13.6	—10.2	75	e.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Olympia, Washington T'y	30.17	766.3	30.21	767.3	35.0	1.7	89	s.	1	0.4	.....	.....	10 s	.....	calm	inap.	inap.	cloudy	
Omaha, Nebraska	29.02	737.1	30.28	769.1	15.0	— 9.4	76	s.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Ogalaamie, Pt. Barrow, Alas.	29.52	749.8	29.54	750.3	— 6.6	—21.4	100	e.	16	7.2	.....	.....	10 s	.....	.....	0	0	cloudy	
Oswego, New York	29.75	755.6	30.10	764.5	31.0	— 0.0	78	n.	11	4.9	.....	.....	10 s	.....	n.	0	0	cloudy	
Palestine, Texas	29.70	754.4	30.26	768.6	35	1.7	69	nw.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	
Pensacola, Florida	30.10	764.5	30.14	765.5	59.8	15.4	87	n.	5	2.2	.....	.....	10 s	.....	w.	0.18	4.6	cloudy	
Philadelphia, Pa.	30.03	762.7	30.09	764.3	34	1.1	88	calm	0	0	.....	.....	10s; fg	.....	.....	0.50	12.7	cloudy	
Pike's Peak, Colorado	17.35	440.7	30.05	763.3	0	—17.8	54	sw.	20	8.9	.....	0	0	.....	.....	0	0	clear	
Pioche, Nevada	23.91	607.3	30.11	764.8	19	— 7.2	73	nw.	9	4.0	.....	.....	10 n	.....	calm	0.02	0.5	light snow	
Pittsburg, Pennsylvania	29.31	744.5	30.16	766.1	32.0	0.0	68	n.	4	1.8	.....	.....	10 s	.....	nw.	0.11	2.8	cloudy	
Port Eads, Louisiana	30.16	766.1	30.17	766.3	55.6	13.1	93	n.	14	6.3	.....	hz	2 s	calm	.....	0.95	24.1	clear	
Port Huron, Michigan	29.52	749 8	30.25	768.3	20.1	— 6.6	76	nw.	7	3.1	.....	.....	10 s	.....	nw.	0	0	cloudy	
Portland, Maine	29.92	760.0	29.97	761.2	31	— 0.6	88	nw.	1	0.4	.....	.....	10 s	.....	nw.	0.18	4.6	cloudy	
Portland, Oregon	30.25	768.3	30.32	770.1	39.0	3.9	82	se.	8	3.6	.....	.....	10 s	.....	se.	0.02	0.5	cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	58	14.4	86	sw.	2	0.9	.....	.....	10 ks	.....	sw.	0.17	4.3	cloudy	
Prescott, Arizona	24.52	622.8	29.90	759.4	24	— 4.4	56	sw.	2	0.9	.....	0	5 s	.....	s.	0	0	fair	
Punta Rassa, Florida	30.16	766.1	30.17	766.3	69.5	20.8	90	se.	9	4.0	.....	hz	1 s	.....	calm	0	0	clear	
Red Bluff, California	29.82	757.4	30.20	767.1	41.5	5.3	45	n.	15	6.7	.....	0	0	.....	.....	0	0	clear	
Rio Grande City, Texas	29.95	760.7	30.20	767.1	44	6.7	86	n.	3	1.3	.....	5 c	0	calm	.....	0	0	fair	
Rochester, New York	29.44	747.8	30.15	765.8	26	— 3.3	100	w.	9	4.0	.....	.....	10 ks	.....	nw.	0	0	threatening	
Roseburg, Oregon	29.78	756.4	30.35	770.9	35.1	1.7	89	calm	0	0	.....	.....	10 s	.....	.....	0.03	0.8	cloudy	
Sacramento, California	29.99	761.7	30.07	763.8	40.0	4.4	40	n.	13	5.8	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.65	753.1	30.29	769.4	26.3	— 3.2	83	n.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
St. Paul, Minnesota	29.20	743.2	30.21	767.3	6.8	—14.0	63	se.	9	4.0	.....	0	0	.....	.....	0	0	clear	
St. Vincent, Minnesota	29.09	738.9	30.07	763.8	— 5	—20.6	100	se.	7	3.1	.....	.....	10 n	.....	calm	0.01	0.3	light snow	
Salt Lake City, Utah	25.60	650.2	30.17	766.3	19	— 7.2	44	calm	0	0	.....	0	0	.....	.....	inap.	inap.	clear	
San Antonio, Texas	29.51	749.5	30.24	768.1	37.7	3.2	72	n.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
San Diego, California	29.74	755.4	29.81	757.2	52.2	11.2	72	sw.	12	5.4	.....	.....	10 n	.....	.....	inap.	inap	light rain	
Sandusky, Ohio	29.51	749.5	30.23	767.8	28	— 2.2	88	nw.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	
Sandy Hook, New Jersey	30.02	762.5	30.00	763.5	36.0	2.2	89	nw.	0	2.7	.....	8 k	0	nw.	.....	0.74	18.8	cloudy	
San Francisco, California	29.97	761.2	30.04	763.0	48	8.9	35	ne.	29	13.0	.....	0	0	.....	.....	0	0	clear	
Santa Fé, New Mexico	23.10	586.7	30.12	765.0	18	— 7.8	73	ne.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Savannah, Georgia	30.02	762.5	30.12	765.0	61	16.1	93	s.	10	4.5	.....	4 cs	fg	sw.	.....	0	0	fair	
Shreveport, Louisiana	30.03	762.7	30.28	769.1	38	3.3	89	n.	3	1.3	.....	.....	10 s	.....	calm	0.23	5.8	cloudy	
Silver City, New Mexico	24.11	612.4	29.97	761.2	23	— 5.0	70	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Sitka, Alaska	29.80	756.9	29.87	758.7	39.7	4.3	72	w.	8	3.6	.....	.....	10 s	.....	w.	0.62	15.7	cloudy	
Smithville, North Carolina	30.05	763.3	30.09	764.3	58	14.4	100	sw.	11	4.9	.....	.....	10 s	.....	sw.	0	0	cloudy	
Spokane Falls, Wash. Ter.	28.08	713.2	30.22	767.6	12	—11.1	83	w.	1	0.4	.....	0	0	.....	.....	inap.	inap.	clear	
Springfield, Illinois	29.58	751.3	30.31	769.9	23	— 5.0	73	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Springfield, Massachusetts	29.89	759.2	30.03	762.7	27.0	— 2.8	88	n.	1	0.4	.....	.....	10s; fg	.....	.....	0.11	2.8	cloudy	
Springfield, Mo.	28.77	730.7	30.35	770.9	22	— 5.6	87	calm	0	0	.....	0	fg	.....	.....	0	0	clear	
Stockton, Texas	27.03	686.5	30.17	766.3	33.2	0.7	81	se.	10	4.5	.....	.....	10 s	.....	se.	0	0	cloudy	
Thatcher's Island, Mass.	29.93	760.2	29.99	761.7	32.0	0.0	100	nw.	14	6.3	.....	.....	10 s	.....	nw.	0.24	6.1	cloudy	
Toledo, Ohio	29.50	749.3	30.24	768.1	29	— 1.7	67	sw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
Tucson, Arizona	27.41	696.2	29.91	759.7	35	1.7	82	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Umatilla, Oregon	29.88	758.9	30.27	768.8	20.3	— 3.2	87	e.	2	0.9	.....	1 cs	0	.....	.....	0	0	clear	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	30.00	762.0	30.27	768.8	39	3.9	89	nw.	2	0.9	.....	.....	10 s	.....	calm	0.81	20.6	cloudy	
Visalia, California	29.51	749.5	29.90	759.4	34	1.1	78	se.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Washington, D. C.	30.00	762.0	30.12	765.0	34	1.1	100	nw.	3	1.3	.....	.....	10 s	.....	.....	1.03	26.2	cloudy	
West Los Animas, Colorado	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wickenburg, Arizona	.....	.....	.....	.....	32	0.0	74	calm	.....	.....	0	10 ck	0	.....	.....	0	0	cloudy	
Williamsport, Pa.	29.48	748.8	30.11	764.8	30	— 1.1	88	nw.	4	1.8	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	
Wilmington, N. Carolina	30.02	762.5	30.08	764.0	62	16.7	93	sw.	10	4.5	.....	.....	10 k	.....	sw.	0.01	0.3	cloudy	
Winnemucca, Nevada	25.68	652.3	30.22	767.6	7	—13.9	58	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass.	29.93	760.2	29.97	761.2	36	2.2	100	nw.	12	5.4	.....	.....	10 s	.....	.....	0.68	17.3	cloudy	
Yankton, Dakota	28.74	730.0	30.16	766.1	19	— 7.2	53	s.	8	3.6	.....	0	5 s	.....	s.	0	0	fair	
Yuma, Arizona	29.71	754.6	29.86	758.4	36.5	2.5	80	ne.	7	3.1	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559.3	.....	.....	50.0	10.0	70	sw.	1	0.4	.....	0	2 s	.....	.....	0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.04	763.0	30.05	763.3	77	25.0	86	e.	.....	.....	.....	5 k	2 ks	e.	e	0.50	12.7	fair	J. A. Racker.
Buenaventura, U. S. C.	29.90	759.4	29.92	760.4	78	25.6	90	calm	0	0	.....	.....	10 ks	.....	calm	0.30	7.6	threatening	J. I. Plume.
Guadeloupe, W. I.	30.02	762.5	30.04	763.0	75	23.9	87	se.	.....	.....	.....	0	0	.....	.....	0	0	clear	B. Bigar.
Havana, Cuba, W. I.	30.14	765.5	30.19	766.8	72	22.2	90	se.	1.2	0.5	.....	0	1 ks	.....	calm	0	0	clear	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	72.0	22.2	72	n.	1	0.4	.....	0	0	.....	.....	0	0	.....	Robert Johnstone.
Navassa, W. I.	29.96	761.0	30.04	763.0	76.5	24.7	77	ne.	9	4.0	.....	8 k	5 s	e	ne.	0	0	cloudy	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	75	23.9	86	e.	.....	.....	2	5 k	7 ps	e.	e.	0.050	1.3	.....	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mba	29.38	746.2	29.93	760.2	80	26.7	89	calm	.....	.....	0	1 c	0	calm	.....	0	0	clear	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	73.4	23.0	90	ne.	.....	.....	4	0	1 k	.....	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.09	764.3	30.11	764.8	75	23.9	76	n.	3.6	1.6	.....	0	2 s	.....	.....	0	0	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.54	750.3	29.60	751.8	—41.6	—40.6	.....	s.	32	14.3	.....	.....	10 n	.....	s.	0.05	1.3	.....	J. Fortescue & W. Wood

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.	Character.	Dir'n from.		
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 20° 50′, E. 111° 50′	30.20	767.1	65	18.3		ne.			2–3		0					2	e.	misty	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads. India.	29.97	761.2	80.5	26.9	82	nne.			2		7							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.35	770.9	56.5	13.6	80	ene.			1		4							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 6° 15′ E. 92° 56′	29.96	761.0	81	27.2	87	nne.			4–5		5	e.				4	nne.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.04	763.0	69	20.6	70	sw.			2–3		4	s.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.85	758.2	68	20.0	94	sse.			1–2		9							d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.41	772.4	36	2.2	90	calm			0		9							rain & snow.	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.46	773.7	60	15.6		ene.			3		3	ene.				2	wsw.	squally	Lieut. J. L. Burr
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, N. 32° 03′, E. 120° 40′	30.08	764.0	44.5	6.9	100	nnw.			2–3		10							misty	Capt. S. Long.
H. M. S. Diamond, S. 36° 20′, W. 13° 15′	29.75	755.6	70	21.1	90	nw.			6		10					6	nw.	raining	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	30.30	769.6	63.5	17.5	81	nne.			1–2		2	nne.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 02′, W. 81° 37′	30.18	766.6	72	22.2	97	calm			0		1							misty	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 19′, W. 59° 58′	29.51	749.5	53	11.7	89	nne.			1–2		10					1	nne.	misty	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.88	758.9	83	28.3		nne.			2		4							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald, S. 36° 35′, E. 150° 45′	29.78	756.4	72	22.2	90	n.			2–3		5	w.				4	nne.	misty	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.19	766.8	41	5.0		w.			1		3	s.						d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, S. 13° 52′, W. 28° 50′	30.01	762.2	77	25.0	90	e.			3–4		3					3	ene.	d. clouds	Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 41′ E. 43° 13′	29.94	760.5	78.5	25.8	69	ssw.			5		0					3	ssw.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.14	765.5	45	7.2	80	calm			0		8							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.93	760.2	65	18.3	78	calm			0		2							misty	Comm. E. G. Bourke.
H. M. S. Garnet, Port Howard, Falkland Ids	29.46	748.3	53	11.7	86	nne.			6		5							squally	Capt. L. Jones.
H. M. S. Iris, Ayas Bay, Asiatic Turkey	30.08	764.0	51	10.6	59	ne.			1		2					1	ne.	d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.18	766.6	61	16.1	88	calm			0		4	e.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 21° 32′, E. 112° 46′	30.16	766.1	64.5	18.1	78	ene.			1–2		0					3	e.	misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 17° 14′, E. 64° 06′	30.09	764.3	76	24.4	90	ne.			2–3		1	ne.				2	ne.	blue sky	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, Barbadoes, West Indies	29.95	760.7	77	25.0	82	ne.			2		3	ne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 5° 06′, E. 65° 31′	29.96	761.0	81	27.2	87	w.			2		3							d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 14° 26′, W. 9° 18′	30.03	762.7	75	23.9	97	e.			3		8					2	se.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, Bushire, Persia	30.05	763.3	71.1	21.7		sse.			3–6									squally	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.18	766.6	36	2.2	90	calm			0		7							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, Ind	30.14	765.5	77.5	25.3	82	nne.			3		8	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 15° 00′, E. 41° 50′	29.99	761.7	81	27.2	78	s.			3		5	s.				sm'h		d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 07′, W. 87° 56′	30.03	762.7	78	25.6	86	ene.			3		8					1	e.	d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, Off Panama, Panama	29.88	758.9	75	23.9	90	nnw.			2		4	calm						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 12° 29′, E. 48° 46′	30.07	763.8	76	24.4	100	ene.			3		0					3	ene.	blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.04	763.0	74	23.3		n.			2		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark																			Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, St. Vincent, C. Verd Ids.	30.00	761.9	73.4	23.0	83	ne.			2		5		sw.			2	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 16° 46′, W. 67° 02′	30.04	762.9	77.4	25.2	80	ne.			5		7							misty	Capt. A. L. Broberg.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
N. Yard, Pensacola, Fla	30.08	764.0	62	16.7	83	nw.	4	1.8	.....	.....	5	.....	nw.	0.07	1.8	.....	.....	fair	
N. Yard, Portsmouth, N. H.	29.97	761.2	28	— 2.2	.....	wnw.	8	3.6	.....	.....	8	.....	w.	0	0	.....	.....	cloudy	
Naval Hospital Yokohama, Japan	30.06	763.5	42	5.6	74	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	hazy	
Adams, Callao, Peru	29.67	753.6	69	20.6	100	se.	.....	.....	1–2	.....	8	.....	.....	.....	.....	gr'd	.....	fair	
Alaska, Valparaiso, Chili	29.89	759.2	60	15.6	94	e.	.....	.....	2	.....	10	.....	.....	0	0	sm'h	.....	cloudy	
Alert, N. 16° 05′, E. 110° 21′*	29.99	761.7	75	23.9	90	ne.	.....	.....	3	.....	10	.....	ne.	.....	.....	long	ne.	cloudy	
Alliance, Boston, Mass.*†	30.06	763.5	35	1.7	80	n.	.....	.....	1	.....	10	.....	.....	light	light	.....	.....	cloudy	
Ashuelot Tientsin, China	30.25	768.3	27	— 2.8	100	ssw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, S. 23° 57′, W. 41° 55′	29.99	761.7	75	23.9	81	sse.	9	4.0	.....	.....	2	.....	s;e	0	0	light	s.	fair	
Colorado, New York, N. Y	30.01	762.2	35	1.7	100	nw.	1	0.4	.....	.....	10	.....	calm	0.05	1.3	.....	.....	misty	
Essex, N. 36° 06′, W. 49° 37′	30.34	770.6	53	11.7	73	ene.	.....	.....	0	.....	8	.....	ne.	.....	.....	mod.	ne.	cloudy	
Franklin, Norfolk, Va	30.09	764.3	43	6.1	75	nnw.	8.4	3.8	.....	.....	10	.....	.....	0.10	2.5	.....	.....	rainy	
Galena, Porto Grande, Cape Verd Id	30.03	762.7	72	22.2	90	ne.	.....	.....	1	.....	2	.....	.....	.....	.....	mod.	ne.	fair	
Independence, N. Yard, Mare I'd, Cal	29.94	760.5	40	4.4	64	calm	0	0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La	30.19	766.8	53	11.7	86	wnw.	.....	.....	3	.....	10	.....	calm	.....	.....	.....	.....	cloudy	
Lackawanna, Valparaiso, Chili†	30.06	763.5	63	17.2	94	ne.	.....	.....	1	.....	1	.....	ne.	.....	.....	.....	.....	clear	
Lancaster, Genoa, Italy	30.52	775.2	59	15.0	76	s.	.....	.....	0–1	.....	0	.....	.....	0	0	.....	.....	clear	
Michigan, Erie, Pa	29.98	761.5	30	— 1.1	.....	n.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I	29.95	760.7	37	2.8	100	nnw.	6	2.7	.....	.....	10	.....	.....	.....	.....	sm'h	.....	overcast	
Monocacy, Yokohama, Japan	30.23	767.8	46	7.8	47	nnw.	.....	.....	1	.....	2	.....	calm	.....	.....	.....	.....	fair	
Nipsic, Naples, Italy	30.51	774.9	59	15.0	54	n.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.03	762.7	67	19.4	100	sse.	.....	.....	2	.....	10	.....	nw.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.21	767.3	64	17.8	73	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C	30.13	765.3	34	1.1	90	nw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Pensacola, S. 30° 49′, W. 72° 10′	29.98	761.5	64	17.8	83	sse.	.....	.....	1	.....	10	.....	s.	0	0	long	s.	cloudy	
Powhatan, Boston, Mass	29.97	761.2	31	— 0.6	100	wnw.	.....	.....	2	.....	10	.....	nw.	.....	.....	.....	.....	hazy	
Quinnebaug, Villafranca, France	30.55	776.0	64	17.8	62	calm	.....	.....	0	.....	2	.....	calm	.....	.....	sm'h	.....	clear	
Ranger, N. 18° 16′, W. 103° 21′*	29.85	758.2	77	25.0	60	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, S. 13° 54′, W. 170° 26′*	29.66	753.4	84	28.9	83	ese.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	clear	
Shenandoah, Montevideo, Uruguay*	30.09	764.3	72	22.2	67	nne.	.....	.....	3	.....	1	.....	.....	.....	.....	sm'h	.....	hazy	
St. Louis, League Island, Pa	30.29	769.4	34	1.1	90	calm	0	0	.....	.....	10	.....	.....	0.82	20.8	.....	.....	misty	
Swatara, Kobe, Japan*	30.00	762.0	47	8.3	70	calm	.....	.....	0	.....	10	.....	.....	.....	.....	sm'h	.....	hazy	
Tennessee, New York, N. Y	30.03	762.7	36	2.2	100	nw.	3.6	1.6	.....	.....	10	.....	.....	0.64	16.3	.....	.....	misty	
Vandalia, Port Spain, Trinidad, W. I.	29.98	761.5	77	25.0	82	ese.	.....	.....	1	.....	5	.....	e.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass	29.99	761.7	29	— 1.7	.....	nnw.	3	1.3	.....	.....	10	.....	.....	0.13	3 3	.....	.....	d. mist	
Wachusetts, N. 48° 26′, W. 123° 26′	30.10	766.1	34	1.1	100	wsw.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Wyoming, Port Royal, S. C	30.09	764.3	61	16 1	94	s.	12	5.4	.....	.....	8	.....	sw.	0	0	.....	.....	misty	
Yantic, Kingston, Jamaica, W. I.*	29.99	761.7	73	22.8	81	n.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith, N. 52° 12′, W. 34° 55′	30.02	762.5	37	2.8	100	wnw.	7		10		nw.	22 h'r	22 h'r	5-6	nw; ssw.	showery	C. Gapon.
S. S. Polynesian, Capt. Robt. Brown, Boston, Mass*	29.88	758.9	26	—3.3		nnw.	2		10		ene.	1 h'r	snow			hazy	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. N. 43° 17′, W. 66° 50′*	29.96	761.0	37	2.8		nne.	3		10					light	se.	rainy	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore. N. 54° 42′, W. 23° 19*	30.38	771.6	49	9.4		ssw.	6				w.	3 h'r	3 h'r	r'gh	s.	cloudy	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	29.91	759.7	32	0.0	100	e.	2		2?		nw.					overcast?	Chauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent,																	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†	30.91	785.1	47	8.3	92	calm	0		10							cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†	30.92	785.4	54	12.2	93												W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Assyria, Capt. J. Brown, N. 42° 32′, W. 56° 28′*†	30.60	777.2	32	0.0		e.	3		10		s.			sm'll	n.	cloudy	J. Brown.
Utopia, Capt. A. McRitchie,																	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 18° 14′, W. 72° 34*†	30.14	765.5	72	22.2	80	n.	4		1		calm	0	0	long	ese.	fine	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Savanilla, U. S. C*	29.91	759.7	76	24.4		ne.	5		0			0	0			very fine	J. Sandberg.
S. S. Arden, Capt. R. de Echevarrieta,																	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse, N. 40° —′, W. 74° —′	30.31	769.9				n.	3		7		nw.	sh'rs	sh'rs	mod.	n.	cloudy	Fisher & Welden.
BOSTON & HALIFAX. *E. W Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S.																	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
Baroda, Capt. C. J. Russel, N. 42° 07′, W. 14° 59′	30.58	776.7	57.2	14.0	81	ene.	3		5							d clouds	
British Merchant, Capt. E. J. Molony. N. 13° 11′, E. 84° 45′	30.06	763.5	77.8	25.4	86	ne.	4		3							d. clouds	
Caldew, Capt. W. Peterson, S. 29° 46′, W. 83° 53′	30.12	765.0	69	20.6		wsw.	2		1							blue sky	
S. S. Cipero, Capt. W. N. Lailey, N. 37° 47′, W. 25° 04′	30.44	773.2	61.6	16.4	77	sse.	3		4					1	se.	d. clouds	
S. City of Agra, Capt. Thos. Young, N. 2° 53′, W. 26° 40′	29.91	759.7	82.5	28.1		se.	3		9							overcast	
Bk. Glaramara, Capt. R. Morton, N. 24° 45′, W. 39° 38′	29.97	761.2	69	20.6	84	sse.	3		6							showery	
Glencairn, Capt. R. S. Tannock, S. 42° 50′, W. 29° 42′	29.77	756.1	53.5	11.9	68	wsw.	4		2							d. clouds	
S. S. Gordon Castle, Capt. W. Waring,																	
Bg. Hermine, Capt. G. G. Jones,																	
S. S. Humboldt, Capt. A. W. Jeffery																	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 18° 50′, W. 75° 53′	30.00	762.0	79.5	26.4	82	ese.	5		3							d. clouds	
May Hulse, Capt. H. Youlden, S. 21° 18′, W. 36° 17′	29.93	760.2	79	26.1	86	w.	1		10							overcast	
Minho, Capt. J. Lawson, Pernambuca, Brazil, S. A.	29.97	761.2	84.3	29.1	75	ene.	2		4							d. clouds	
Naiad, Capt. John Smith, S. 2° 56′, W. 27° 04′	29.97	761.2	81.5	27.5	83	ene.	4		2							d. clouds	
Pole Star, Capt. F. Norman, S. 54° 17′, W. 65° 07′	29.47	748.5	51.9	11.1	80	n.	3		9							misty	
Queen of Cambria, Capt. M. Parry. S. 43° 07′, E. 18° 26′	29.74	755.4	54.1	12.3	73	w.	6		7							showery	
S. S. Strathleven, Capt. C. W. Pearson																	
S. Superb, Capt. Berridge N. 17° 41′, W. 40° 39′	30.00	762.0	73.1	22.8	76	n.	3		8							d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham,																	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent, San Francisco*																	
S. S. Newbern, Capt. E. Y. Rogers, N. 23° 27′, W. 107° 25′†	29.88	758.9	66	18.9	78	nne.	5		10		ne.	light	light	light	n.	cloudy	
CROMWELL LINE. *Clark & Seaman, Agents, New York*																	
S. S. Hudson, Capt. H. R. Freeman, N. 27° 00′, W. 86° 25′†*	30.33	770.4	74	23.3		se.	1		0			6 h'r	6 h'r	mod.	se.	clear	D. R. Freeman.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, Havre, France	30.71	779.9	33.8	1.0		se.	2		10		se.	0	0				
S. S. St. Laurent, Capt. A. Servan,																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. Kuhlewein,																	P. Frochlich, 3d Off.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch																	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, N. 13° —′, W. 34° —′*†	30.16	766.1	83	28.3		ese.	4		8		e.	0	0	long	ene.		J. Carroll

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.* S. S. Iberian, Capt. E. Parry, N. 50° 02′, W. 36° 19′	.....	.....	.....	.....	.....	wnw.	6	.....	.....	.....	wnw.	9 h'r	9h'r	con.	wnw.	.....	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.* S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.99	787.1	.....	.....	.....	calm	0	.....	fg	.....	calm	0	0	.....	.....	foggy	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.* S. S. Niagara, Capt. J. B. Baker, Havana, Cuba, W. I*†	30.27	768.8	70	21.1	.....	calm.	0	.....	0	.....	.....	0	0	.....	.....	clear	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips, N. 20° 37′, W. 74′ 05′†	30.18	766.6	77	25.0	.....	ene.	4	.....	8	.....	ene.	0	0	h'vy	ene.	cloudy	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE. S. S. Ailsa, Capt. J. W. Sansom N. 19° 44′, W. 74° 06′†	30.12	765.0	77	25.0	.....	e.	4	.....	.....	.....	.....	.....	.....	.....	e.	showery	.....
S. S. Bothnia, Capt. W. McMickan, N. 49° 01′, W. 36° 00′*	29.96	761.0	40	4.4	.....	nw.	6	.....	.....	.....	.....	.....	.....	high	wnw.	hailing	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. J. F. Timmerman, Vera Cruz, Mexico*†	30.22	767.6	69	20.6	.....	n.	3	.....	.....	.....	.....	.....	.....	.....	n.	.....	.....
S. S. City of Washington, Capt. J. W. Reynolds,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Maas, Capt. T. H. Bonjer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.* S. S. Hohenzollern, Capt. R. Sander, N. 45° 00′, W. 38° 41′*	30.33	770.4	37.4	3.0	.....	wnw.	6	.....	8	.....	nw.	snow	snow	long	wnw.	fair	G. H. Lose, 3d Off.
S. S. Leipzig, Capt. F. Pfeiffer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, N. 43° 03′, W. 58° 59′*	30.42	772.7	35.5	1.9	.....	se.	2-3	.....	7	.....	s.	3 h'r	light	sm'h	se.	raining	.....
S. S. Mosel, Capt. J. Hesse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Hesse.
S. S. Oder, Capt. Undeutsch, N. 50° 52′, E. 1° 00′*	30.89	784.6	74.6	7.0	.....	e.	1	.....	2	.....	e.	0	0	sm'h	e.	hazy	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany	.....	.....	41.0	5.0	.....	w.	4	.....	0	.....	.....	0	0	.....	.....	foggy	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.* S. S. Belgic, Capt. H. Davison, San Francisco, Cal†	30.00	762.0	48	8.9	42	n.	7	.....	0	.....	.....	0	0	.....	.....	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 32° 39′, E. 136° 19′*†	30.37	771.4	63	17.2	61	e.	2	.....	8	.....	ese.	.....	.....	sm'h	.....	cloudy	.....
S. S. Oceanic, Capt. J. Metcalf, N. 25° 02′, E. 119° 30′*	30.19	766.8	57	13.9	81	se.	2	.....	0	.....	.....	.....	.....	sm'h	.....	fine	.....
OCEAN S. S. CO. *George Young, Agent, New York.* S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.92	760.0	.....	.....	.....	sw	1	.....	2	.....	w.	.....	.....	.....	.....	smoky	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Savannah, Ga.†	30.27	768.8	62	16.7	94	sw.	1	.....	5	.....	w.	0	0	.....	.....	fair	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.* S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter.†	30.34	770.6	41	5.0	83	sw.	1	.....	8	.....	sw.	.....	.....	.....	.....	fair	E. W. Holmes.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.* S. S. Willamette, Capt. L. Meyer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
S. S. Columbia, Capt. F. Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal	29.99	761.7	50	10.0	50	n.	5	.....	0	.....	.....	.....	.....	.....	.....	clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco* S. S. Ancon, Capt. J. W. Ingalls, N. 33° 41′, W. 118° 14′†	29.74	755.4	49	9.4	85	e.	4	.....	10	.....	ese.	.....	.....	sm'h	.....	cloudy	.....
S. S. Idaho, Capt. E. Alexander, Seattle, Wash. Ter*	30.17	766.3	38	3.3	90	ne.	1	.....	10	.....	.....	.....	.....	.....	.....	cloudy	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, N. 35° 40′, W. 121° 20′†	29.97	761.2	49	9.4	71	nne.	1	.....	0	.....	.....	0	0	mod.	w.	clear	T. Wallace.
S. S. State of California, Capt. G. Dobney, San Francisco, Cal†	29.99	761.7	49	9.4	37	n.	5	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. Victoria, Capt. H. M. Hayward, New Westminster, B. C†	30.20	767.0	35	1.7	90	var.	2	.....	8	.....	.....	.....	.....	.....	.....	cloudy	.....
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulkley, Supt., New York.* S. S. Australia, Capt. —— N. 25° 39′, W. 151° 54′	30.05	763.3	65	18.3	100	ene.	6	.....	8	.....	ene.	.....	.....	cross	ne.	showery	A. Bannerman, 2d Offi.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.91	759.7	72	22.2	85	n.	1	.....	0	.....	.....	0	0	.....	.....	clear	W. H. Hawes, 2d Offi.
S. S. City of Rio de Janeiro, Capt. Cavarly, Yokohama, Japan†	30.29	769.4	53	11.7	53	n.	4	.....	2	.....	n.	0	0	.....	.....	fine	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn, N. 32° 41′, W. 135° 34′†	30.42	772.7	61	16.1	77	nnw.	4	.....	2	.....	nnw.	0	0	mod.	nw.	clear	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 29° 58′, E. 171° 40′†	29.96	761.0	61	16.1	70	nw.	5	.....	5	.....	wnw.	1 h'r	1 h'r	mod.	wnw.	threatening	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, Panama, Panama†	29.86	758.4	74	23.3	100	nnw.	2	.....	4	.....	nw.	0	0	.....	.....	fair	.....
S. S. Grenada, Capt. M. Connolly, N. 9° 05′, W. 84° 55′†	29.86	758.4	82	27.8	70	nne.	4	.....	0	.....	.....	0	0	light	ssw.	clear	.....
S. S. South Carolina, Capt. W. J. Russell, N. 31° 25′, W. 117° 49′*†	29.76	755.9	56	13.3	100	w.	5	.....	10	.....	w.	rain	rain	light	nw.	rainy	.....
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	30.01	762.2	71	21.7	100	nw.	2	.....	5?	.....	nw.	.....	.....	.....	.....	clear?	.....

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.				Character.	Direction.		
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke Trinidad, W. I.	.....	.....	.....	.....	.....	e.	1	.....	0	.....	.....	0	0	sm'h	.....	clear	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 45° 44′, W. 31° 10′*†	30.30	769.6	57	13.9	93	w.	5	.....	8	.....	wnw.	2 h'r	2 h'r	cross	nw	cloudy	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	30.93	785.6	38	3.3	80	calm	0	.....	.....	.....	.....	0	0	.....	.....	light fog	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 50° 23′, W. 2° 39′*†	31.05	788.7	42	5.6	91	ene.	2	.....	fg.	.....	.....	0	0	sm'h	.....	overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 42° 35′, W. 58° 58′*	30.17	766.3	39	3.9	.....	sse.	5	.....	10	.....	s.	.....	.....	sm'h	sse.	cloudy	.....
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
THINGVALLA LINE *Funch, Edye & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub Copenhagen, Denmark†	30.54	775.7	44.6	7.0	.....	nw.	2	.....	4	.....	nw.	0	0	.....	.....	clear	J. T. Uberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 42° 36′. W. 56° 41′*†	30.48	774.2	28	—2.2	.....	s.	4	.....	8	.....	sw.	2 h'r	snow sleet	sm'h	.....	cloudy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 43° 24′, W. 66° 27′*†.	30.40	772.1	34	1.1	.....	ssw.	4	.....	10	.....	sw.	h'vy	h'vy	sm'h	sw.	showery	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 46° 09′, W. 39° 16′*†	30.15	765.8	40	4.4	73	nw.	5	.....	8	.....	nw.	12 h'r	sh'rs	mod.	nw.	cloudy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. Liverpool, Eng.*†	31.06	788.9	43	6.1	.....	se.	2	.....	2	.....	s.	0	0	.....	.....	foggy	H. D. Jay, 4th Officer.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th Officer.
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 44° 00′ W. 36° 34′*	30.33	770.4	47	8.3	.....	n.	4	.....	6	.....	.....	0	0	high	ne.	.....	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 28° 17′, W. 85° 30′†	30.36	771.1	75	23.9	85	ssw.	3	.....	10 8	.....	w.	0	0	mod.	ssw.	cloudy	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Alpha, Capt. Ole Grönn,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis N. 30° 09′, W. 68° 29′*†	30.34	770.6	71	21.7	.....	s.	1	.....	8	.....	sw.	0	0	hv'y	nne.	cloudy	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin S. 20° 28′ W. 33° 13′*†	29.60	751.8	.....	.....	.....	n.	.....	.....	.....	.....	.....	.....	.....	light	n.	squally	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.92	785.4	.....	.....	.....	s.	1	.....	fg.	.....	.....	0	0	.....	.....	foggy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 0° 43′. W. 30° 22′†	29.90	759.4	.....	.....	.....	sse.	3	.....	2	.....	sse.	0	0	sm'h	ne; e.	.....	.....
S. Enoch Train, Capt. H. D. Chapman. N. 50° 06′, W. 2° 55′*	30.77	781.5	.....	.....	.....	e.	1	.....	10	.....	e.	0	0	light	wsw.	overcast	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 45° 49′. W. 28° 15′*	30.37	771.4	.....	.....	.....	s.	6	.....	3	.....	s.	0	0	mod.	w.	fair	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.17	766.3	43	6.1	75	calm	0	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 52° 54′. W. 65° 29′†	29.71	754.6	.....	.....	.....	ese.	1	.....	1	.....	w.	0	0	sm'h	.....	clear	G. D. Morrison.
Bk. Freya, Capt. Blauow, N. 52° 03′, W. 22° 01′	.....	.....	52	11.1	.....	s.	6	.....	5	.....	s.	0	0	high	s.	squally	.....
Bk. Gamaliel, Capt. D. J. Anthony,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Geo. Booth, Capt. D. Williams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. Williams.
S. Hedwig, Capt. T. Minssen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 23° 17′, W. 27° 37′*	29.89	759.2	.....	.....	.....	nnw.	4	.....	2	.....	nnw.	0	0	mod.	nnw.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 37° 27′, W. 11° 47′*†	30.62	777.7	.....	.....	.....	e.	4	.....	.....	.....	e.	4 h'r	4 h'r	h'vy	e.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.44	773.2	56	13.3	62	sw.	1	.....	0	.....	.....	....	.....	.....	.....	clear	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly N. 25° 50′, W. 40° 40′*†	29.86	758.4	.....	.....	.....	se.	.....	.....	.....	.....	se.	0	0	.....	.....	.....	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 16° 12′, W. 25° 43′*	29.92	760.0	70.2	21.2	96	ne.	1	.....	3	.....	e.	.....	.....	sm'h	.....	.....	.....
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.46	773.7	59	15.0	87	ne.	5	.....	5	.....	se.	0	0	.....	.....	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 28° 45′, W. 26° 22′ *†	30.03	762.7	.....	.....	.....	nne.	5	.....	7	.....	nne.	.....	.....	mod.	nne.	.....	I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton. N. 31° 55′, W. 52° 15′*†	30.30	769.6	.....	.....	.....	nne. ne.	.....	.....	.....	.....	.....	.....	.....	.....	.....	squally	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer U. S. A.

Heliotype Printing Co Boston

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 20, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.48	774.3	62.6	17.0	80	w.			5		0			0	0	clear	Moiroud.
Algiers			30.56	776.1	54.7	12.6	75	se.			1		0			0	0	clear	Nicolas.
La Calle			30.54	775.6	57.6	14.2	76	wnw.			2		4			0	0	cloudy	Fonfréde.
Tunis			30.50	774.8															Jacques.
Sfax																			Gau.
Saïda																			
Tebessa			30.54	775.8	46.8	8.2	70	se.			1		3			0	0	pretty fair	Perès.
Geriville			30.58	776.8	47.1	8.4	67	nw.			2		3			0	0	pretty fair	Derché.
Laghouat					39.6	4.2	84	sse.			2		10			0	0	covered	Lonchamp.
Biskra			30.67	778.9	47.1	8.4	57	n.			1		0			0	0	clear	Herbin.
			30.58	776.7	61.2	16.2	36	nw.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.53	750.0	29.62	752.3	68.0	20.0	79	se.	4	1.8			10			0	0	dull	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.09	764.2	30.67	778.9	40.6	4.8	69	sw.			1		5			0	0		Prof. Ivan Stozir.
Cracow, I. R. Observatory	29.82	757.3	30.63	777.9	36.3	2.4	93	w.	13.0	5.8			10			0.012	0.3		Dr. Wierzbiski.
Eperies	29.60	751.7	30.51	774.9	42.8	6.0	67	nw.			4	4 cs	0			0	0		Julius Mikolik.
Gratz	29.34	745.3	30.66	778.7	39.6	4.2	63	calm			0		2			0	0		Andreas Rospini.
Hermannstadt	29.00	736.7	30.51	775.0	36.9	2.7	75	nnw.			2		5			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.30	744.1	30.72	780.4	34.2	1.2	80	e.			1	2 c	0			0	0		The Staff.
Lemberg	29.41	747.1	30.45	773.5	34.9	1.6	93	nw.			2		10			0	0		Dr. T. Stanecki.
Pola	30.42	772.7	30.54	775.6	52.9	11.6	80	wnw.			1		7			0	0		I. R. Hydrographic Office.
Szathmar	30.04	763.0	30.51	775.0	38.5	3.6	77	ne.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.28	769.1	30.58	776.6	39.9	4.4	77	calm			0		0			0	0		Karl Stancel.
Trieste	30.47	773.8	30.57	776.4	55.8	13.2	35	calm			0		10			0	0		Rieder.
Vienna	29.95	760.6	30.09	779.6	42.8	6.0	70	nw.			2		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Mateseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.38	771.6	30.49	774.4	42.5	5.8	75	ssw.	15	6.7			3			0	0	blue sky	W. Boswell.
Armagh, Observatory	30.39	771.9	30.64	778.2	41.0	5.0	77	ssw.	13	5.8			10					overcast	S. Call.
Bidston, Liverpool Obs'y			30.73	780.5	36.2	2.3	90	sse.	8	3.6			10					overcast	John Hartnup.
Bolton, Sharples	30.16	766.1	30.72	780.3	33.0	0.6	91	ssw.	6	2.7			10					gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.26	768.6	30.65	778.5	37.5	3.1	83	se.			2		10			0	0	overcast	J. McLandsborough, F.R.
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	78.0	25.6	69	ne.			2		3					d. clouds	Corpl. J. Surgenor.
Cardington			30.70	779.8	40.0	4.4	88	sw.			0.2		10					foggy	John McLaren.
Chatham, School M. E.	30.61	777.5	30.74	780.8	40.3	4.6	90	calm			0		10					gloomy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.49	774.4	30.72	780.3	45.0	7.2	76	ese.			1		9					overcast	The Staff.
Fort Napier, Natal	27.69	703.3	29.90	759.4	73.2	22.9	67	ne.			1		7						Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.68	753.9	29.92	760.0	87.0	30.6	65	nw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.62	777.7	45	7.2	85	s.			2		10			0.03	0.8	overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.43	772.9	30.48	774.2	61.9	16.6	79	e.			3		5					d clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.37	771.4	30.57	776.5	41.2	5.1	71	wsw.			4		5 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.56	776.2	30.74	780.8	40.6	4.8	77	ssw.			1		10					overcast	The Staff.
Guernsey	30.40	772.1	30.72	780.3	36.0	2.2	90	ese.			1		10					overcast	A. Collenette, F. M. S.
Kew, Observatory	30.71	780.0	30.75	781.0	40.8	4.9	81	s.	3	1.3			10					misty	The Staff.
Leicester, Museum	30.47	773.9	30.74	780.8	35.1	1.7	90	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.33	770.4	30.41	772.4	60.4	15.8	75	nw.			1		6					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.22	767.6	30.27	768.8	73.5	23.1	83	e.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.20	767.1	30.76	781.3	33.0	0.6	91	ssw.			0–1		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.50	774.7	30.73	780.5	37.5	3.1	82	ssw.			1		10					overcast	The Staff.
Plymouth	30.64	778.2	30.71	780.0	44.3	6.8	82	e.			2		5					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.34	770.6	44.5	6.9	80	ssw.	13	5.8			9					d. clouds	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.32	770.1	30.39	771.9	41.0	5.0	73	n.			1		10					overcast	W. H. Lyne
Sheffield	30.42	772.7	30.72	780.3	35.6	2.0	95	ssw.			1		10			0	0	overcast	W. F. Cooper.
Silloth Rectory	30.60	777.2	30.62	777.7	42.2	5.7	84	w.			3		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.70	779.8	37.3	2.9	85	w.	5	2.2			10					misty	Rev. S. J. Perry.
Stratfield Turgiss					38.8	3.8	87	sw.			1		10					overcast	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.63	778.0	30.69	779.5	48	8.9	77	e.			2		8					gloomy	W. Newcombe.
Valencia, Observatory	30.61	777.5	30.64	778.2	49.6	9.8	70	s.	19	8.5			10					d. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.38	771.6	30.43	772.9	7	—13.9	95	nw.	5	2.2		0	5 s			0.635	16.1	fair	H. J. Cundall, C. E.
Chatham, N. B*	30.40	772.1	30.48	774.2	— 7	—21.7	100	calm	0	0		2 c	2 s	calm	calm	0.01	0.3	fair	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.35	770.9	30.37	771.4	— 7	—21.7	82	s.	10	4.5		2 cs	0	calm		0	0	clear	J. McWilliams.
Fort Garry, Manitoba*	28.74	730.0	29.64	752.8	5	—15.0	83	ne.	4	1.8			10 n			0.100	2.5	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.29	769.4	30.44	773.2	7	—13.9	91	nw.	5	2.2		0	0			0.730	18.5	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.90	759.4	30.26	768.6	20	— 6.7	91	s.	10	4.5			10 ks		s.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.11	764.8	30.33	770.4	5	—15.0	91	se.	6	2.7			fg.			0	0	foggy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.38	746.2	30.12	765.0	20	— 6.7	84	s.	12	5.4		5 k	5 ks			0	0	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.44	747.8	30.17	766.3	28	— 2.2	88	s.	13	5.8			10 n			0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.47	748.5	30.15	765.8	29	— 1.7	77	sw.	12	5.4			10 n		sw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	30.02	762.5	30.38	771.6	— 4	—20.0	100	calm			0		fg.			0	0	foggy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.69	754.1	30.20	767.1	5	—15.0	91	se.	5	2.2			10 s		sw.	0	0	threatening	W. H. McIntyre.
Saugeen, Ontario*	29.33	745.0	30.09	764.3	22	— 5.6	96	s.	16	7.2			10 ks			inap.	inap.	cloudy	K. Stewart.
St. Andrews, N. B.	29.40	746.7	30.45	773.4	3	—16.1	76	n.	3	1.3		0	0			0.20	5.1	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.26	768.6	30.33	770.4	9	—12.8	87	nw.	15	6.7		8 c	0			0.40	10.2	fair	T. C. Hill, C. E.
Toronto, Ontario*	29.77	756.1	30.17	766.3	29	— 1.7	92	sw.	14	6.3			10 s		w.	0	0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.34	770.6	30.41	772.4	13	—10.6	66	ne.	2	0.9		8 c	0	w.		0.18	4.6	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.69	754.1	29.95	760.7	29	— 1.7		nw.					10			0.10	2.5		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.68	761.5	30.01	762.2	76.8	24.9	72	se.	6.5	2.9		0	2 s			0.030	0.8	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.96	761.0	30.00	762.0	86.0	30.0	55	sse.	19	8.5		0	1			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.17	766.3	30.45	773.4	49.5	9.7	91	se.			1		0			0.06	1.5	clear	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.34	770.5	30.36	771.2	35.6	2.0	82	e.	3.1	1.4		0	0			0	0	clear	M. Marc Dechevrens, S J

Stations.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.49	774.5	30.54	775.7	40.5	4.7	92	nw.	16	7			4						Oversergent Fischer.
Fanöe	30.60	777.3	30.62	777.8	40.8	4.9	98	w.			4		9						Overloerer Lauridsen.
Godthaab, Greenland	29.23	742.5	29.28	743.6	11.8	—11.2		w.			7		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.50	749.2	29.54	750.3	29.8	— 1.2		w.			7		10					snowing	A. O. Thorlacius.
Thorshavn	29.78	756.3	29.81	757.2	47.5	8.6	77	sw.	38	17			10					raining	Overloerer Bergh.
Vestervig	30.44	773.2	30.53	775.5	42.6	5.9	91	w.			4		10						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.96	761.0	30.64	778.3	40.6	4.8	90	se.			1	0	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	30.19	766.8	30.74	780.8	27.3	—2.6	96	n.			3		k			0	0		M. Nicot, Director.
Arras, Engineer School	30.47	774.0	30.75	781.0	29.5	—1.4	97	ese.			2		10			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.44	773.2	30.52	775.2	40.3	4.6	67	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.14	765.6	30.75	781.0	26.6	—3.0		se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.49	774.4	30.78	781.7	29.7	—1.3	96	e.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.69	779.4	36.0	2.2	96	ne.			1		fg		ne.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.36	771.1	30.63	778.1	43.5	6.4	80	n.			1		0			0.004	0.1	clear	M. Rayet, Director.
Bourges, Normal School	30.13	765.2	30.72	780.4	27.5	— 2.5	100	n.			1		fg			0	0	light fog	M. Postel, Director.
Brest, Naval Observatory	30.47	773.9	30.71	780.1	36.0	2.2	96	calm			0		10			0	0	misty	M. de Kennarec, Dir.
Caen, Normal School	30.65	778.5	30.73	780.5	29.5	—1.4	92	se.			1		10			0	0	covered	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.35	770.8	30.69	779.6	27.5	—2.5	100	se.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.24	768.0	30.79	782.0	27.3	—2.6		ssw.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.24	742.8	30.71	780.1	27.9	—2.3	98	n.			1		10			0	0	foggy	M. Alluard, Director.
Cluny, Normal School	29.83	757.7	30.74	780.7	27.3	—2.6	96	n.			2		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.84	758.0	30.77	781.5	30.2	—1	90	e.			1		10	e.	e.	0	0	covered	Dr. Coulet, Director.
Gap, Normal School	27.95	709.8	30.53	775.5	50.9	10.5	95	s.			2					0	0		M. Jeangirard, Director.
Greasque, du. Rhone	29.37	745.9	30.50	774.7	61.3	16.3	26	n.			1		1		sw.	0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.89	759.3	30.72	780.2	32.9	0.5	100	ese.			2		sn		ne.	0	0		M. Ablard, Director.
Guéret, Normal School	29.00	736.5	30.62	777.7	46.8	8.2	61	se.			1	2	0			0	0	slightly cl'dy	M. Rivoire, Director.
Lamballe, Normal School	30.47	773.8	30.76	781.3	29.3	—1.5	98	n.			1		10		n.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	30.10	764.4	30.67	779.1	55.8	13.2	47	sse.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.67	778.9	30.77	781.5	30.2	—1.0	100						fg			0	0	foggy	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.62	752.3	30.76	781.4	25.5	— 3.6	95	ne			1		mist			0	0	misty	M. André, Director.
Mans, Normal School	30.43	772.9	30.77	781.5	28.4	—2	95	se.			3		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.26	768.7	30.54	775.7	58.1	14.5	59	w.			0.1		0			0	0		M. Stephan, Director.
Montlouis Pinstituteur	25.27	641.8	30.11	764.8	47.8	8.8	33	e.	9.4	4.2			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.44	773.1	30.55	775.0	52.9	11.6	64	s.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.93	760.3	30.78	781.7	29.5	—1.4	92	nw.			1		10 kn			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.58	776.6	30.74	780.8	28.8	—1.8	92	ene.			0-1		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Roissière, Director.
Perpignan, Observatory	30.47	773.8	30.58	776.7	55.8	13.2	44	calm	0	0			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.62	549.1			28.4	—2.0		se.			2		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.53	750.1	30.69	779.4	27.7	—2.4							fg			0	0	foggy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.63	651.0			43.9	6.6	22	nw.			2		0			0	0	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.68	779.3	30.71	780.1	31.8	—0.1	96	e.			1		mist			0	0	misty	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.54	775.6	30.77	781.6	29.8	—1.2	95	ene.			1		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	28.40	721.3	30.61	777.6	47.1	8.4	34	e.			1		0			0	0	clear	M. Coltrat, Director.
Rouen, Normal School	30.72	780.3	30.77	781.5	30.6	—0.8	89	e.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.59	776.2	30.72	780.2	29.1	—1.6	95	e.			1		10			0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.58	776.8	30.75	781.0	27.1	—2.7	100	ne.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.94	760.5	30.68	779.2	45.1	7.3	73	se.			1		fg	w.		0	0	light fog	M Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.22	767.6	30.71	780.1	27.3	—2.6	100	ne.			1					0	0		Dr. A. Bériguy, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.85	758.1	30.72	780.3	33.8	1.0	90	s.			1	0	8 ks			0	0	foggy	Prof. Dr. Hob.
Berlin	30.48	774.2	30.67	778.9	39.4	4.1	97	sw.			2		10			0.016	0.4		Prof. Dr. Arndt.
Breslau	30.12	765.1	30.67	778.9	38.8	3.8	88	wnw.			3		10			0.008	0.2		Royal University Obs'y.
Carlsruhe	30.28	769.2	30.76	781.3	30.9	—0.6	90	e.			1		10			0	0	hazy	Albert Senz.
Cassel	29.99	761.8	30.71	780.0	33.4	0.8	89	s.			1		10			0	0	foggy	Dr. H. Möhl.
Frankfort on the Main	30.37	771.3	30.76	781.2	36.5	2.5	91	nne.			1		10			0	0		Physical Society.
Friedrichshafen	29.23	742.5	30.78	781.7	29.1	—1.6	92	sse.			1		10			0	0	light fog	Wilhelm, Chief Tel.
Hamburg	30.63	778.1	30.73	780.5	36.7	2.6	100	w.			3		10			0.012	0.3	dense fog	E. Preller.
Kiel	30.65	778.4	30.66	778.8	38.8	3.8	95	w.			2		10			0.008	0.2		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.32	770.1	30.76	781.4	36.7	2.6	90	sw.			1		10			0.047	1.7	foggy	H. Leppig, Asst.
Magdeburg	30.53	775.5	30.74	780.7	41.4	5.2	89	wsw.			2		9 ks			0.004	0.1	hazy	Dr. Assmann.
Memel	30.21	769.9	30.36	771.1	37.4	3.0	96	nw.			4	0	18						Issermann.
Munich	28.80	731.6	30.71	780.0	25.7	—3.5	98	calm			0		10			0	0	dense fog	Central Station.
Neufahrwasser	30.45	773.5	30.47	773.9	42.1	5.6	82	nw.			3		5			0	0		A. Lothes.
Neustadt, Palatinate	30.22	767.6	30.76	781.3	33.4	0.8	85	w.			2		10			0	0		Dickmether.
Stuttgart	29.74	755.5	30.71	779.9	30.6	—0.8	96	s.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.63	777.9	30.65	778.5	36.3	2.4	100	w.			4		10			0.020	0.5	dense fog	Profs. Brandes & Reimer.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.98	761.6	30.39	771.8	50.7	10.4		n.			1.0		10			0	0	misty	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.10	764.5	30.15	765.8	82.9	28.3	33	ese.					2			0	0	d. clouds	
Deesa	29.63	752.5	30.10	764.6	83.1	28.4	30	nw.	7.6	3.4			0			0	0	blue sky	
Bombay	30.00	762.0	30.04	763.0	81.3	27.4	67	nnw.	18	8.0			0			0	0	blue sky	
Poona, Yarrowda	28.19	716.0	30.04	762.9	85.8	29.9	18	ene.	8	3.6			0			0	0	blue sky	
Belgaum	27.49	698.2	30.02	762.6	79.5	26.4	25	e.	10	4.5			0			0	0	blue sky	
Lahore	29.38	746.3	30.16	766.1	65.6	18.7	59	calm	0.9	0.4			0			0	0	blue sky	
Roorkee	29.20	741.5	30.14	765.5	60.8	16.0	85	s.	1.3	0.6			0			0	0		
Agra	29.58	751.4	30.17	766.2	70.2	21.2	53	w.	3.5	1.6						0	0		
Nagpur	29.04	737.6	30.09	764.2	83.0	28.3	22	calm	3.1	1.4			0			0	0	blue sky	
Jubbulpore	28.79	731.2	30.20	767.0	64.4	18.0	39	ne.	1.0	0.4			0			0	0	blue sky	
Lucknow	29.75	755.7	30.14	765.6	67.3	19.6	48	wsw.	3.5	1.6			0			0	0	blue sky	
Allahabad	29.81	757.2	30.14	765.5	65.8	18.8	61	calm	1.4	0.6			0			0	0	blue sky	
Patna	29.94	760.5	30.14	765.4	67.6	19.8	48	wnw.	3.1	1.4			0			0	0	blue sky	
Hazaribagh	28.08	713.2	30.15	765.7	68.8	20.4	28	n.	6.2	2.8			0			0	0	blue sky	
Cuttack	30.02	762.5	30.11	764.7	73.2	22.9	52	calm					0			0	0	blue sky	
Calcutta, Alipore	30.07	763.7	30.09	764.3	69.5	20.8	57	nnw.	2.0	0.9			0			0	0	blue sky	
Dhubri	29.97	761.2	30.09	764.4	69.0	20.6	64	calm	4.1	1.8			0			0	0	blue sky	
Chittagong	29.98	761.5	30.07	763.8	71.6	22.0	68	w.	2.0	0.9			0			0	0	blue sky	
Sibsagar	29.79	756.6	30.14	765.6	63.0	17.2	82	ne.	2.5	1.1			0			0	0	blue sky	
Jeypore	28.69	728.7	30.17	766.2	72.9	22.7	29	nnw.	2.7	1.2			0			0	0	blue sky	
Zanzibar, Africa	29.92	760.0			87.5	30.8	63	ne.	8.1	3.6		c	6 pk	fk	n.	0	0	d. clouds	
Trichinopoly	29.80	756.9			78.8	26.0	52	ese.	2	0.9			4			0	0	d. clouds	
Bellary	28.56	725.4			82.4	28.0	33	e.	4.3	1.9			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.16	766.0	30.58	776.8	50.9	10.5	46	calm	0	0			9			0	0		Prof. Giovanni Clodig.
Milan	30.04	763.1	30.60	777.1	42.1	5.6	78	sw.	4.9	2.2			7	e.		0	0		Prof. Schiaparelli.
Padua	30.48	774.2	30.50	777.2	43.5	6.4	67	n.	5.6	2.5			8			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.63	752.7	30.59	777.0	43.7	6.5	69	e.	6.9	3.1			2			0	0		Prof. P. F. Denza.
Genoa	30.33	770.3	30.53	775.4	57.9	14.4	68	w.	0.7	0.3			8	e.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.61	726.8	30.62	777.8	52.5	11.4	37	w.			2		1	s.		0	0		Prof. D. C. Bruno.
Pesaro	30.47	773.9	30.52	775.3	46.4	8.0	58	n.	6.9	3.1			10			0	0		Prof. Luigi Guidi.
Florence	30.28	769.0	30.54	775.8	45.0	7.2	63	se.			2		10			0	0		Prof. Costantino Pitter.
Leghorn	30.44	773.1	30.53	775.4	45.1	7.3	65	ne.	4.2	1.9			10			0	0		Prof. P. Monte.
Rome	30.27	768.9	30.45	773.5	53.2	11.8	45	nne.	0	0			10			0	0		Prof. P. S. Ferrari.
Lecce	30.14	765.5	30.40	772.2	56.8	13.8	59	nne.	11.9	5.3			5	ne.		0	0		Prof. C. de Giorgi.
Cosenza	29.52	749.8	30.45	773.4	55.4	13.0	75	sse.	2.5	1.1			3	se.		0	0		Prof. D. Conti.
Cagliari	30.26	768.5	30.46	773.6	58.6	14.8	52	wnw.			4		0			0	0		Prof. A. Pacinotti.
Palermo	30.18	766.0	30.44	773.2	59.9	15.5	57	calm	0	0			10			0	0		Prof. G. Cincciatore.
Syracuse	30.35	770.9	30.40	772.1	57.4	14.1	65	e.	3.8	1.7			8	sw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.89	759.2	30.42	772.7	59.0	15.0	34	ene.	3.8	1.7			6	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.58	573.5			31.3	— 0.4	36	s.			1		4			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.52	574.6			32.2	0.1	29	s.			2		6			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.71	754.6	29.74	755.4	35.6	2.0	91	se.	3.1	1.4			10 n			0.538	13.7	light rain	
Hakodate	29.78	756.4	29.79	756.6	36.5	2.5	92	e.	24.0	10.7			10		e.	0.124	3.2	raining	
Hiroshima, I. M. Obs'y	30.00	762.0	30.02	762.5	40.8	4.9	61	n.	10.0	4.5		ck	7 n			0	0	light rain	K. Sasaki.
Kanazawa	30.15	765.8	30.26	768.6	39.7	4.3	66					ck	8 n		wnw.			light rain	S. Endo.
Kioto	29.70	754.4	29.88	758.9	41.3	5.2	53	nw.	10.6	4.7		ck	3 s			0.240	6.1	fair	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.94	760.5	30.15	765.8	42.6	5.9	64	nw.	6.4	2.9		o	o			0	0	clear	S. Takehayashi.
Niigata	29.73	755.1	29.76	755.9	37.2	2.9	97	se.	5.4	2.4			10 n			0.360	9.1	raining	
Nobiru	29.67	753.6	29.69	754.1	39.0	3.9	98	nnw.	10.3	4.6		o	9 s			0.045	1.1	cloudy	H. Midzushina.
Supporo					29.0	— 1.7	82	ese.	5.4	2.4			10			0	0	covered	
Tokei Obs'y, Yeddo	29.58	751.3	29.65	753.1	36.4	2.4	88	nw.	4.9	2.2		o	o			0.030	0.8	clear	The Staff.
Wakayama	29.88	758.9	29.93	760.2	43.5	6.4	52	wnw.	10.9	4.9		ck	3 ks		w.	0.023	0.6	fair	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.80	756.9	29.99	761.7	83.0	28.3	79	nne.	5.0	2.2		o	8 kks		sse.	0	0	cloudy	Oliver & Figot.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.67	601.3	29.89	759.3	48.2	9.0	67	calm	0	0		o	o			0	0		Vicente Fernandez.
Leon	24.46	621.3	30.25	768.4	51.6	10.9	78	n.			1	o	o			0	0	foggy	Prof. M. Leal.
Mazatlan	29.79	756.6	30.05	763.3	65.5	18.6	94	nw.			2		10 n		wsw.	0.197	5.0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.11	587.2	30.30	769.7	45.1	7.3	71	calm	0	0		o	o			0	0		The Staff.
Morelia	24.34	618.2	30.59	777.0	48.9	9.4	75	sse.			3	o	o			0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	23.94	608.1	30.04	763.2	50.5	10.3	71	calm			0	1 cs	o	sw.		0	0	fine	M. V de Leon, M. E.
Puebla, Catholic Institute	23.44	595.3	30.42	772.7	40.1	4.5	76	calm	0	0		o	o			0	0		Prof. P. Spina.
San Luis Potosi	24.20	614.9	30.22	767.8	56.8	13.8	50	se.			1	o	o			0	0	fine	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.76	781.3	30.76	781.3	36.3	2.4		se.					2			0	0		
Groningen	30.67	779.1	30.73	780.5	38.5	3.6		sw.			1					0	0		
Helder	30.72	780.4	30.72	780.4	39.7	4.3		sw.			1					0	0		
Hellevoetsluis	30.75	781.0	30.75	781.0	36.0	2.2	93	sse.			1					0	0		
Utrecht	30.71	780.1	30.76	781.3	34.3	1.3	96	ssw.			1		hz.			0.016	0.4	hazy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.34	770.7	30.41	772.3	44.2	6.8	98	s.	13	6			10			0.315	8.0	raining	
Brono	29.86	758.5	29.90	759.5	42.8	6.0	88	sw.	27	12			10			0.280	7.1	raining	
Christiania	30.11	764.7	30.26	768.6	39.9	4.4	82	w.	7	3			6			0	0		
Gissvær	29.10	739.1	29.12	739.7	30.7	— 0.7		w.			7		10						
Lodingen	29.50	749.2	29.54	750.4	35.6	2.0	91	wsw.			6		10			0.602	15.3	raining	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					60.1	15.5	81	se.	4.9	2.2			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.49	749.1	30.52	775.3	52.2	11.2	50	ene.	6.9	3.1			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.32	770.1	30.41	772.3	64.0	17.8	65	ese.	3.1	1.4			4			0.118	3.0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.21	767.3	30.58	776.8	48.6	9.2	70	nne.	17.4	7.8			1			0	0		The Staff.
Ponta Delgada, Azores	30.43	772.8	30.50	774.6	62.4	16.8	64	calm	0	0			4			0	0		
Saint Paul de Loando	29.69	754.0	29.89	759.1	79.7	26.5	92	wsw.	2.5	1.1			7	n.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.43	722.2	29.56	750.9	21.0	— 6.1		sw.	56	25			10 n			0	0		Major K. Lasarew.
Archangel	28.99	736.3	29.01	736.8	30.9	— 0.6	100	nnw.	9	4			10			0.283	7.2	snowing	Capt. Sseliwerstow.
Astrakhan	30.14	765.6	30.06	763.5	31.6	— 0.2	81	w.	4	2		0	8 ks			0	0		Capt. Wisganow.
Barnaul	29.32	744.7	29.85	758.3	13.5	—10.3	79	sw	18	8			10			0	0		Meteorological Obs'y.
Dorpat	29.72	754.9	29.97	761.2	43.5	6.4	71	wnw.	11	5		2 c	0			0	0		Observatory.
Ekaterinburg	28.52	724.5	29.58	751.4	— 9.0	—22.8	72	wsw.	9	4		1 cs	0			0.039	1.0	light clouds	Meteorological Obs'y.
Kasan	29.43	747.5	29.72	755.0	2.1	—16.6	68	sse.	4	2			10			0.012	0.3		Observatory.
Kertch	30.22	767.6	30.24	768.1	33.3	0.7	83	nnw.	2	1		0	0			0	0		Lagorio & Sastyres.
Kieff	29.53	750.0	30.20	767.0	33.1	0.6	96	wnw.	7	3			10 ks			0	0		Observatory.
Lugan	29.98	761.5	30.20	767.0	28.8	— 1.8	68	w.	9	4			2			0.008	0.2		Meteorological Obs'y.
Moscow	29.24	742.6	29.73	755.2	31.6	— 0.2	92	s.	7.8	3.5			10 s			0	0		Meteorological Obs'y
Nikolaiev	30.29	769.3	30.36	771.1	35.6	2.0	82	nw.	9	4			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China												0	0			0	0		Physical Observatory.
St. Petersburg	30.19	766.7	30.33	770.3	30.6	— 0.8	51	calm	0	0		2 c;cs	0			0	0	light clouds	Central Physical Obs'y.
Tashkend, Laboritory	29.70	754.3	29.71	754.7	38.1	3.4	87	wnw.	22	10			10			0.630	16.0	snowing	Teich, A. M.
Tiflis	28.50	724.0	30.15	765.9	33.4	0.8	90	calm	0	0			10 s			0	0		Physical Observatory.
Warsaw	28.63	727.2	30.11	764.7	37.2	2.9	59	nw.	4	2			10 ks						Astronomical Obs'y.
Wilna	30.05	763.2	30.49	774.5	36.7	2.6	94	wnw.	16	7			10			0	0	h'vy clouds.	Berg, Assistant.
Yeniseisk	29.81	757.2	30.25	768.4	36.9	2.7	94	w.	7	3			10			0	0		M. O. Marks.
	29.28	743.8	29.59	751.5	14.4	— 9.8	78	w.	29	13			10			0	0		
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.39	771.9	49	9.4	93	ssw.			4		10			0	0	cloudy	J. Youngclause.
North Unst, Shetland Pds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.46	773.7	30.56	776.2	55.4	13	60	sw.	2.5	1.1			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.23?	767.9?	30.29?	769.4?	55.6	13.1	45	se.	2.2	1.0		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.58	700.4	30.66	778.7	48.0	8.9	45	ne.	2.2	1.0		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.34	719.7	30.65	778.5	49.5	9.7	59	e.	7.4	3.3		1	0			0	0	light clouds.	The Staff.
Murcia, Met. Obs'y	30.50	774.6	30.65	778.6	58.3	14.6	72	sw.	3.4	1.5		3	4	wnw.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.65	753.2	30.58	776.7	50.5	10.3	55	n.	4.3	1.9		0	1			0	0	almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.08	764.0	30.15	765.7	69.4	20.8	89	e.	2.2	1.0		0	1 s		e.	0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	30.01	762.2	30.06	763.6	75.0	23.9	75	se.	4.4	2.0		1 cs	1 s		ene.	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.40	772.2	30.50	774.7	59.5	15.3	46	e.	14.8	6.6		2	2	se.	ese.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.01	762.2	30.10	764.5	74.5	23.6	87	e.	19.2	8.6			9 kn		ne.	0	0	overcast	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.98	761.5	30.11	764.8	73.4	23.0	82	nw.	0	0		0	3 ks		nne.	0	0	fair	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.47	748.6	29.51	749.6	37.0	2.8	89	sw.			2		8			0	0		
Umea	29.72	755.0	29.78	756.3	42.4	5.8	67	nw.			4		8			0	0		
Hernosand	29.91	759.8	29.97	761.1	46.9	8.3	54	wnw.			4		5			0	0		
Stockholm	30.04	762.9	30.21	767.4	42.1	5.6	69	w.			2		0			0	0		
Wisby	30.23	767.8	30.29	769.3	40.6	4.8	84	wsw.			2		0			0	0		
Sub Series.																			
Upsala	30.07	763.8	30.16	766.0	42.1	5.6	71	wsw.	7.2	3.2			1	nw.		0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.24	742.6	30.74	780.7	30.2	— 1.0	92	ne.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.43	773.0	40.1	4.5	80	nw.	4	2.0			10		n.	0	0		The Observatory.
Valona			30.35	770.8	54.1	12.3		w.			1		2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.13	765.2	48.9	9.4	88	se.			1		10 n		sw.	0.09	2.3		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.34	770.6	30.43	772.9	17	— 8.3	67	ne.	3	1.3		4 cs	sk.			0	0	fair	
Alpena, Michigan	29.31	744.5	30.02	762.5	22.5	— 5.3	87	sw.	14	6.3			10 s			0	0	cloudy	
Atlanta, Georgia	29.04	737.6	30.27	768.8	44.0	6.7	100	e.	8	3.6			fg.			0.02	0.5	dense fog	
Atlantic City, New Jersey	30.38	771.6	30.38	771.6	30	— 1.1	67	n.	6	2.7		7ck;cs	0			0.02	0.5	fair	
Augusta, Georgia	30.09	764.3	30.29	769.4	50.0	10.0	86	ne.	4	1.8			10 s			0.04	1.0	cloudy	
Baltimore, Maryland	30.36	771.1	30.41	772.4	34	1.1	71	ne.	4	1.8			10s;hz			0	0	cloudy	
Barnegat, New Jersey	30.35	770.9	30.37	771.4	34.0	1.1	71	e.	6	2.7		4 k	6 s	w.	w.	0	0	cloudy	
Bismarck, Dakota	27.77	705.3	29.77	756.1	19	— 7.2	70	sw.	2	0.9		hz.	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.18	690.4	30.10	764.5	18	— 7.8	87	nw.	4	1.8			10 s		calm	0	0	cloudy	
Boston, Massachusetts	30.24	768.1	30.41	772.4	16.0	— 8.9	67	nw.	6	2.7		0	3 s;hz			0	0	clear	
Brownsville, Texas	29.97	761.2	30.02	762.5	54	12.2	100	n.	4	1.8			10 n			0.08	2.0	light rain	
Buffalo, New York	29.41	747.0	30.21	767.3	27	— 2.8	88	s.	13	5.8			10 s		s.	0.02	0.5	cloudy	
Burlington, Vermont	30.03	762.7	30.34	770.6	10.7	—11.8	71	se.	1	0.4		7 cs	0	w.		inap.	inap.	fair	
Cairo, Illinois	29.83	757.7	30.25	768.3	35.8	2.1	91	se.	4	1.8			10 s		calm	inap.	inap.	threatening	
Campo, California	27.49	698.2	30.12	765.0	18.8	— 7.3	87	e.	2	0.9		0	0			0.09	2.3	clear	
Camp Thomas, Arizona																			
Cape Henry, Virginia	30.33	770.4	30.35	770.9	41	5.0	82	n.	9	4.0			10 s		n.	0.55	14.0	cloudy	
Cape May, New Jersey	30.36	771.1	30.39	771.9	28	— 2.2	88	ne.	5	2.2		6 cs	2 ks	sw.	sw.	0	0	cloudy	
Castroville, Texas	29.25	742.9	30.10	764.5	45	7.2	93	e.	2	0.9			10 n			0.04	1.0	light rain	
Cedar Keys Florida	30.20	767.1	30.22	767.6	66	18.9	93	se.	4	1.8			10 s			0	0	cloudy	
Champaign, Illinois	29.26	743.2	30.13	765.3	25.8	— 3.4	70	s.	12	5.4			10 s	w.	sw.	0	0	cloudy	
Charleston, S. Carolina	30.22	767.6	30.28	769.1	52	11.1	93	ne.	10	4.5			10 s		ne.	0	0	threatening.	
Charlotte, N. Carolina	29.42	747.3	30.31	769.9	39.0	3.9	100	e.	4	1.8			fg.			0	0	dense fog	
Chattanooga, Tennessee	29.41	747.0	30.27	768.8	43.0	6.1	93	ne.	4	1.8		8 ck	fg.	sw.	calm	0	0	cloudy	
Cheyenne, Wyoming	23.73	602.7	29.98	761.5	7.2	—13.8	80	w.	2	0.9		0	0			0	0	clear.	
Chicago, Illinois	29.30	744.2	30.05	763.3	29.4	— 1.4	76	sw.	8	3.6			10 s			0	0	cloudy	
Chincoteague, Virginia	30.36	771.1	30.38	771.6	36	2.2	89	n.	11	4.9		4 ck	4 s		n.	0.03	0.8	cloudy	
Cincinnati, Ohio	29.51	749.5	30.20	767.1	37.2	2.9	82	se.	7	3.1			10 n			inap.	inap.	light snow	
Cleveland, Ohio	29.42	747.3	30.20	767.1	27	— 2.8	77	se.	3	1.3			10 s		se.	0	0	cloudy	
Coleman City, Texas	28.23	717.0			37	2.8	100	se.	4	1.8			10 s			0.37	9.4	cloudy	
Columbus, Ohio	29.29	744.0	30.19	766.8	34	1.1	71	s.	5	2.2			10 s			0	0	cloudy	
Concho, Texas	28.05	712.5	30.07	763.8	37	2.8	92	calm	0	0			10 s			0.34	8.6	cloudy	
Davenport, Iowa	29.32	744.7	30.03	762.7	31	— 0.6	68	sw.	7	3.1			10 s		calm	0	0	cloudy	
Dayton, Washington T'y	28.18	715.8	29.98	761.5	37	2.8	82	sw.	8	3.6		0	8 s		sw.	0.19	4.8	cloudy	
Deadwood, Dakota	25.01	635.2	29.96	761.0	20.5	— 6.4	76	s.	8	3.6		0	0			0	0	clear	
Decatur, Texas					35	1.7	100	s.	10	4.5			10 n			0.28	7.1	light rain	
Delaware Breakwater, Del.	30.36	771.1	30.38	771.6	34	1.1	88	ne.	6	2.7		3 c;cs	6 s	w.	sw.	0.02	0.5	cloudy	
Denison, Texas	29.30	744.2	30.14	765.5	36.3	2.4	100	se.	2	0.9			10 n			0.19	4.8	light rain	
Denver, Colorado	24.48	621.8	30.00	762.0	13.0	—10.6	76	n.	2	0.9		0	0			0	0	clear	
Des Moines, Iowa	29.02	737.1	29.99	761.7	33	0.6	78	sw.	6	2.7		0	7 s		sw.	0	0	fair	
Detroit, Michigan	29.39	746.5	30.15	765.8	34.2	1.2	79	s.	10	4.5			10 s		calm	inap.	inap.	cloudy	
Dodge City, Kansas	27.26	692.4	30.01	762.2	18.8	— 7.3	87	n.	5	2.2		0	0			0	0	clear	
Dubuque, Iowa	29.24	742.7	30.01	762.2	23.2	— 4.9	73	s.	2	0.9			10 s		calm	0	0	cloudy	
Duluth, Minnesota	29.06	738.1	29.82	757.4	16	— 8.9	83	sw.	1	0.4			10 s		calm	0.03	0.8	cloudy	
Eagle Pass, Texas	29.28	743.7	30.12	765.0	46.8	8.2	93	se.	5	2.2			10 s			inap.	inap.	cloudy	
Eagle Rock, Idaho	25.21	640.3	30.17	766.3	4	—15.6	79	n.	4	1.8			10 s			0.29	7.4	cloudy	
Eastport, Maine	30.37	771.4	30.44	773.2	9.5	—12.5	78	ne.	10	4.5		2 c	0			0.10	2.5	clear	
El Paso, Texas	26.23	666.2	30.11	764.8	40.2	4.6	100	nw.	2	0.9			10 n			0.13	3.3	light rain	
Erie, Pennsylvania	29.42	747.3	30.19	766.8	30	— 1.1	88	s.	12	5.4			10 s			0	0	cloudy	
Escanaba, Michigan	29.23	742.4	29.95	760.7	19	— 7.2	91	sw.	9	4.0			10 n			0.01	0.3	light snow	
Florence, Arizona																			
Fort Apache, Arizona	24.91	632.7	30.03	762.7	31	— 0.6	81	calm	0	0			10 s		calm	0.46	11.7	cloudy	
Fort Assinnaboine, Montana	26.76	679.7	29.80	756.9	29	— 1.7	59	sw.	16	7.2		0	8 s		w	0	0	cloudy	
Fort Bennett, Dakota	28.13	714.5	29.87	758.7	7	—13.9	80	n.	2	0.9		0	4 s			0	0	fair	
Fort Benton, Montana	26.85	682.0	29.83	757.7	29	— 1.7	80	sw.	22	9.8			10 s		calm	0	0	cloudy	
Fort Buford, Dakota	27.56	700.0	29.76	755.9	20	— 6.7	73	s.	2	0.9		0	0			0	0	clear	
Fort Custer, Montana	26.46	672.1	29.84	757.9	27	— 2.8	77	sw.	9	4.0		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.04	636.0	30.02	762.5	34	1.1	92	s.	2	0.9			fg			0.80	20.3	dense fog	
Fort Elliott, Texas	27.16	689.9	30.10	764.5	16	— 8.9	61	se.	8	3.6		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.52	749.8	30.12	765.0	36.0	2.2	89	se.	4	1.8			10 s			inap.	inap.	cloudy	
Fort Grant, Arizona	25.17	639.3	30.07	763.8	33	0.6	57	sw.	5	2.2			10 s			0.10	2.5	cloudy	
Fort Griffin, Texas	28.75	730.2	30.13	765.3	35	1.7	89	calm	0	0		0	0			0.34	8.6	clear	
Fort Keogh, Montana	27.13	689.1	29.82	757.4	25	— 3.9	64	sw.	3	1.3			10 s			0	0	cloudy	
Fort Macon, North Carolina	30.26	768.6	30.27	768.8	45	7.2	93	n.	12	5.4			10 s		calm	0.31	7.9	cloudy	
Fort McKavett, Texas	27.76	705.1	30.15	765.8	40.3	4.6	100	calm	0	0			fg.			0.20	5.1	light fog	
Fort Missoula, Montana	26.50	673.1	29.96	761.0	28	— 2.2	77	sw.	4	1.8			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	30.15	765.8	30.18	766.6	12	—11.1	100	sw.	16	7.2		0	5 s		sw.	0.10	2.5	fair	
Fort Shaw, Montana	25.97	659.6	29.83	757.7	31	— 0.6	62	sw.	24	10.7		1 cs	0			0	0	clear	
Fort Sill, Indian Territory	28.79	731.3	30.12	765.0	34	1.1	96	s.	8	3.6			fg.			0.06	1.5	dense fog	
Fort Stevenson, Dakota	27.69	703.3	29.75	755.6	16	— 8.9	83	sw.	6	2.7		0	3 s		w.	0	0	clear	
Fort Verde, Arizona					28	— 2.2	88	se.			1		fg.			0.12	3.0	dense fog	
Fredericksburg, Texas	28.27	718.0	30.09	764.3	41	5.0	92	calm	0	0			10 s			0.16	4.1	cloudy	
Galveston, Texas	30.05	763.3	30.09	764.3	46	7.8	100	ne.	14	6.3			10 n		ne.	0.22	5.6	light rain	
Grand Haven, Michigan	29.34	745.2	30.05	763.3	31.0	— 0.6	83	sw.	12	5.4			10 s		sw.	0	0	cloudy	
Hatteras, North Carolina	30.26	768.6	30.28	769.1	48	8.9	86	ne.	22	9.8			9 s			0.56	14.2	cloudy	
Helena, Montana	25.46	646.7	29.90	759.4	28	— 2.2	88	nw.	4	1.8			10 n			0.05	1.3	light snow	
Henrietta, Texas	29.10	739.1	30.17	766.3	35	1.7	100	s.	8	3.6			10 s			0.29	7.4	cloudy	
Huron, Dakota	28.37	720.6	29.91	759.7	11.3	—11.5	64	se.	4	1.8		0	0			0	0	clear	
Indianapolis, Indiana	29.30	744.2	30.14	765.5	31.5	— 0.3	87	s.	6	2.7			10 s		s.	0	0	threatening.	
Indianola, Texas	30.02	762.5	30.05	763.3	48.3	9.1	100	ne.	22	9.8			10 s			0.03	0.8	cloudy	
Jacksboro, Texas	28.89	733.8	30.13	765.3	35	1.7	89	s.	4	1.8			10 s			0.25	6.3	cloudy	
Jacksonville, Florida	30.19	766.8	30.24	768.1	61	16.1	93	sw.	1	0.4			fg.			0	0	dense fog	
Keokuk, Iowa	29.33	745.0	30.03	762.7	32.0	0.0	85	sw.	6	2.7			10 s		sw.	0	0	cloudy	
Key West, Florida	30.15	765.8	30.18	766.6	73.4	23.0	82	e.	5	2.2			9 s		e.	0	0	cloudy	
Kittyhawk, North Carolina	30.32	770.1	30.34	770.6	46	7.8	83	ne.	14	6.3			10 s			0.91	23.1	cloudy	
Knoxville, Tennessee	29.18	741.2	30.26	768.6	43	6.1	85	calm	0	0			10 s			0	0	cloudy	
La Crosse, Wisconsin	29.12	739.6	29.96	761.0	25	— 3.9	80	s.	8	3.6		0	4 s			0	0	fair	
La Mesilla, New Mexico	26.08	662.4	30.10	764.5	36.5	2.5	90	calm	0	0			10 s			0	0	threatening.	
Leavenworth, Kansas	29.09	738.9	30.05	763.3	35	1.7	69	s.	6	2.7			10 s		sw.	0	0	cloudy	
Lewiston, Idaho	29.05	737.9	29.92	760.0	33	0.6	96	e.	1	0.4			10 n		calm	0.05	1.3	sleeting	
Little Rock, Arkansas	29.83	757.7	30.16	766.1	37	2.8	100	se.	1	0.4			10 s			0.25	6.3	cloudy	
Los Angeles, California	29.72	754.9	30.12	765.0	39.2	4.0	73	se.	1	0.4		0	0			0.03	0.8	clear	
Louisville, Kentucky	29.57	751.1	30.16	766.1	39.0	3.9	82	s.	3	1.3			10 s		calm	inap.	inap.	cloudy	
Lynchburg, Virginia	29.64	752.8	30.36	771.1	40.7	4.8	79	e.	2	0.9			10 s			0	0	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	28.92	734.6	30.01	762.2	23	— 5.0	73	s.	4	1.8			10 s		calm	0	0	cloudy	
Marquette, Michigan	29.11	739.4	29.89	759.2	21	— 6.1	70	s.	6	2.7			10 s		calm	0	0	cloudy	
Mason, Texas	28.38	720.8	30.12	765.0	40	4.4	82	calm	0	0			10 s		calm	0.05	1.3	cloudy	
Memphis, Tennessee	29.86	758.4	30.22	767.6	38	3.3	92	se.	3	1.3			10 s			0.11	2.8	cloudy	
Milwaukee, Wisconsin	29.23	742.4	30.03	762.7	26	— 3.3	88	sw.	6	2.7			10 s			0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—CONTINUED.																			
Mobile, Alabama	30.18	766.6	30.22	767.6	49.0	9.4	93	ne.	5	2.2			10 s			inap.	inap.	cloudy	
Montgomery, Alabama	29.99	761.7	30.23	767.8	41.7	5.4	99	w.	1	0.4			fg			0	0	dense fog	
Moorhead, Minnesota	28.67	728.2	29.78	756.4	12	—11.1	80	s.	10	4.5		0	0			0	0	clear	
Morgantown, W. Virginia	29.18	741.2	30.24	768.1	32.5	0.3	86	calm	0	0			10 s			0	0	cloudy	
Mt. Washington, N. H.	23.72	602.5	30.35	770.9	10.0	—12.2	70	w.	15	6.7		6 cs	0	w.		0	0	fair	
Nashville, Tennessee	29.66	753.4	30.22	767.6	38.9	3.8	87	se.	4	1.8			10 ks			0.01	0.3	cloudy	
New Haven, Connecticut	30.27	768.8	30.39	771.9	18	— 7.8	83	n.	8	3.6		10 c	0	nw.		0	0	cloudy	
New London, Connecticut	30.37	771.4	30.42	772.7	22	— 5.6	73	n.	6	2.7		8 c	2 ks	calm	n.	0	0	cloudy	
New Orleans, Louisiana	30.10	764.5	30.16	766.1	55.0	12.8	86	e.	8	3.6			10 s			0	0	cloudy	
Newport, Rhode Island	30.35	770.9	30.40	772.1	22.5	— 5.3	72	n.	7	3.1		4 c	3 s	w.	calm	0	0	fair	
New River, N. Carolina																			
New Shoreham, Rhode I'd.	30.37	771.4	30.40	772.1	27.5	— 2.5	64	ne.	10	4.5		2 cs	0			0	0	clear	
New York, New York	30.23	767.8	30.42	772.7	26	— 3.3	76	ne.	5	2.2			10 s; fg			0	0	cloudy	
Norfolk, Virginia	30.32	770.1	30.36	771.1	41	5.0	73	ne.	4	1.8			10 ks		sw.	0.63	16.0	cloudy	
North Platte, Nebraska	26.92	683.8	30.04	763.0	11.6	—11.3	78	w.	10	4.5		0	0			0	0	clear	
Olympia, Washington T'y	30.02	762.5	30.06	763.5	42.0	5.6	74	w.	14	6.3		0	0			0.05	1.3	clear	
Omaha, Nebraska	28.71	729.2	29.98	761.5	28.8	— 1.8	81	sw.	2	0.9		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.89	759.2	29.91	759.7	— 3.6	—19.8	93	wnw.	12	5.4			10 s			0	0	cloudy	
Oswego, New York	29.92	760.0	30.26	768.6	19.0	— 7.2	70	se.	8	3.6			10 s		sw.	0	0	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.19	766.8	30.22	767.6	50.0	10.0	100	n.	5	2.2			fg			c	0	dense fog	
Philadelphia, Pa.	30.36	771.1	30.42	772.7	26	— 3.3	76	ne.	5	2.2		3 ck	6 s	s.	w.	0	0	cloudy	
Pike's Peak, Colorado	17.31	439.7	30.01	762.2	— 3	—19.4	79	sw.	10	4.5		0	0			0	0	clear	
Pioche, Nevada	24.03	610.4	30.23	767.8	13	—10.6	53	nw.	5	2.2		0	0			inap.	inap.	clear	
Pittsburg, Pennsylvania	29.36	745.7	30.21	767.3	28.5	— 1.9	84	ne.	2	0.9			10 s; fg		calm	0	0	cloudy	
Port Eads, Louisiana	30.15	765.8	30.16	766.1	58.2	14.6	85	e.	16	7.2		0	9 k		e.	0	0	cloudy	
Port Huron, Michigan	29.39	746.5	30.12	765.0	24.2	— 4.3	78	s.	8	3.6		10 cs	0	calm		0	0	cloudy	
Portland, Maine	30.37	771.4	30.42	772.7	16	— 8.9	67	n.	7	3.1		3 cs	0	calm		0	0	clear	
Portland, Oregon	30.14	765.5	30.21	767.3	42.3	5.7	92	se.	4	1.8			10 s		s.	0.03	0.8	cloudy	
Portsmouth, N. Carolina					46	7.8	68	ne.	13	5.8			10 ks		ne.	0.26	6.6	cloudy	
Prescott, Arizona	24.66	626.4	30.04	763.0	24	— 4.4	67	se.	2	0.9		1 cs	0	calm		0.04	1.0	clear	
Punta Rassa, Florida	30.18	766.6	30.19	766.8	66	18.9	84	e.	8	3.6		10 c; ck	0	c.; e.		0	0	cloudy	
Red Bluff, California	29.77	756.1	30.15	765.8	39.0	3.9	54	ne.	3	1.3		0	0			0	0	clear	
Rio Grande City, Texas	29.82	757.4	30.07	763.8	52	11.1	93	ne.	5	2.2			10 n		ne.	0.05	1.3	light rain	
Rochester, New York	29.51	749.5	30.22	767.6	22	— 5.6	73	s.	9	4.0		10 cs	0	calm		0.02	0.5	cloudy	
Roseburg, Oregon	29.69	754.1	30.20	768.6	33.9	1.1	88	calm	0	0			10 s			0	0	cloudy	
Sacramento, California	30.06	763.5	30.14	765.5	33.7	0.9	75	s.	6	2.7		0	0			0	0	clear	
St. Louis, Missouri	29.49	749.0	30.13	765.3	33.4	0.8	84	s.	9	4.0			10 s			0	0	cloudy	
St. Paul, Minnesota	28.93	734.8	29.88	758.9	15.0	— 9.4	83	se.	5	2.2		0	0			0	0	clear	
St. Vincent, Minnesota	28.68	728.5	29.66	753.4	4	—15.6	100	s.	6	2.7		0	6 s		calm	0.02	0.5	fair	
Salt Lake City, Utah	25.70	652.8	30.27	768.8	10	—12.2	60	se.	3	1.3		0	0			0	0	clear	
San Antonio, Texas	29.35	745.5	30.08	764.0	43.2	6.2	93	ne.	4	1.8			10 n		n.	0.02	0.5	light rain	
San Diego, California	30.00	762.0	30.07	763.8	42.2	5.7	68	e.	4	1.8		0	0			0.47	11.9	clear	
Sandusky, Ohio	29.44	747.8	30.16	766.1	30	— 1.1	81	s.	4	1.8			10 s			0	0	cloudy	
Sandy Hook, New Jersey	30.36	771.1	30.40	772.1	30.0	— 1.1	78	ne.	7	3.1		3 k	3 s	ne.	calm	0	0	fair	
San Francisco, California	30.06	763.5	30.14	765.5	43	6.1	68	w.	3	1.3		0	0			0	0	clear	
Santa Fé, New Mexico	23.06	585.7	30.06	763.5	22	— 5.6	76	n.	2	0.9		4 c	0			0	0	fair	
Savannah, Georgia	30.17	766.3	30.27	768.8	58	14.4	86	e.	8	3.6			10 s			0	0	threatening	
Shreveport, Louisiana	29.91	759.7	30.16	766.1	40	4.4	100	calm	0	0			10 n		calm	0.92	23.4	heavy rain	
Silver City, New Mexico	24.14	613.1	30.00	762.0	30	— 1.1	80	nw.	3	1.3		0	5 s		calm	0.18	4.6	fair	
Sitka, Alaska	30.02	762.5	30.10	764.5	37.2	2.9	82	sw.	4	1.8		4 k	2 s	sw.	calm	0.32	8.1	fair	
Smithville, North Carolina	30.26	768.6	30.30	769.6	43	6.1	93	n.	7	3.1			10 s			0.02	0.5	cloudy	
Spokane Falls, Wash. Ter.	27.80	706.1	29.94	760.5	31	— 0.6	88	nw.	13	5.8			10 s			0.06	1.5	cloudy	
Springfield, Illinois	29.38	746.2	30.11	764.8	33.5	0.8	76	s.	7	3.1		hz.	8 s		s.	0	0	cloudy	
Springfield, Massachusetts	30.31	769.9	30.45	773.4	13.9	—10.1	80	n.	2	0.9		10 cs	fg	w.		0	0	cloudy	
Springfield, Mo.	28.61	726.7	30.19	766.8	36	2.2	89	s.	8	3.6			10 n			0.02	0.5	light rain	
Stockton, Texas	26.95	684.5	30.09	764.3	32.2	0.1	100	w.	8	3.6			10 s		w.	0.48	12.2	cloudy	
Thatcher's Island, Mass.	30.34	770.6	30.40	772.1	31.5	— 0.3	83	se.	12	5.4			10 s		s.	0	0	cloudy	
Toledo, Ohio	29.40	746.7	30.14	765.5	30	— 1.1	78	s.	7	3.1			10 s			0	0	cloudy	
Tucson, Arizona	27.55	699.8	30.05	763.3	42	5.6	93	sw.	7	3.1			10 n			0.17	4.3	light rain	
Umatilla, Oregon	29.63	752.6	30.02	762.5	42.8	6.0	63	w.	3	1.3		0	3 s		w.	inap.	inap.	clear	
Uvalde, Texas																			
Vicksburg, Mississippi	29.94	760.5	30.21	767.3	43	6.1	93	e.	2	0.9			10 n		calm	0.09	2.3	light rain	
Visalia, California	29.70	754.4	30.10	764.5	33	0.6	78	nw.	3	1.3		0	0			0	0	clear	
Washington, D. C.	30.29	769.4	30.41	772.4	32.5	0.3	78	e.	3	1.3			10 s		sw.	inap.	inap.	cloudy	
West Los Animas, Colorado																			
Wickenburg, Arizona					35	1.7	67	calm			0	0	1 k			0.08	2.0	clear	
Williamsport, Pa.	29.71	754.6	30.34	770.6	25	— 3.9	73	ne.	4	1.8			10 s			0	0	cloudy	
Wilmington, N. Carolina	30.24	768.1	30.30	769.6	44	6.7	93	ne.	5	2.2			fg		calm	0.02	0.5	dense fog	
Winnemucca, Nevada	25.68	652.3	30.22	767.6	11	—11.7	64	s.	4	1.8		0	0			0	0	clear	
Wood's Holl, Mass.	30.39	771.9	30.43	772.9	25	— 3.9	73	n.	9	4.0			10 s			0	0	cloudy	
Yankton, Dakota	28.51	724.1	29.93	760.2	14	—10.0	64	calm	0	0		0	0			0	0	clear	
Yuma, Arizona	29.94	760.5	30.09	764.3	36.0	2.2	82	calm	0	0		0	0			0	0	clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.01	559.0			53.0	11.7	76	calm	0	0		0	1 s			0	0	clear	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.05	763.3	30.06	763.5	76	24.4	85	e.				5 k	2 ks	e.	e.	0.40	10.2	fair	J. A. Racker.
Buenaventura, U. S. C.	29.87	758.7	29.89	759.2	77	25.0	90	calm	0	0			10 ks		calm	0.30	7.6	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.96	761.0	29.98	761.5	76	24.4	87	ne.				0	6 ks					light rain	B. Bigar.
Havana, Cuba, W. I.	30.16	766.1	30.21	767.3	72	22.2	84	calm	0	0			10 ks		calm	0	0	cloudy	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.05	763.3	30.06	763.5	69.0	20.6	85	calm	0	0		0	1 s		e.	0	0	fine	Robert Johnstone.
Navassa, W. I.	29.96	761.0	30.04	763.0	77	25.0	75	ne.	40	17.9		5 ck	2 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.03	762.7	75	23.9	95	e.			1		10 n	e.	e.	0.050	1.3	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.93	760.2	79	26.1	85	calm			0		10 ks		s.	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua					73.4	23.0	88	ne.			4	0	0			0	0		Earl Flint.
Santiago de Cuba, W. I.	30.07	763.8	30.10	764.5	74	23.3	81	n.	2.4	1.1		3 c	0			0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.82	757.4	29.87	758.7	—35.0	—37.2		nw.	21	9.4			10 s		nw.	0.17	4.3		J. Fortescue & W. Wood

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 20° 09′, E. 110° 38′	30.15	765.8	67	19.4		ne.			1		8	calm						d. clouds	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India.	29.93	760.2	82.2	27.9	72	n.			1		5							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.39	771.9	57	13.9	75	calm			0		4							d. clouds	Capt. G. F. Hotham.
H. M. S. Bacchante, N. 6° 06′, E. 90° 12′	29.93	760.2	82	27.8	78	nne.			4		3	nne.				4	nne.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.97	761.2	76	24.4	64	e.			1		2	sw.				...		d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.88	758.9	69	20.6	95	sse.			1		8							d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey.	30.41	772.4	41	5.0		n.			1		9							showery	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean.	30.53	775.4	60	15.6		ene.			2		2	ene.				1	wsw.	d. clouds	Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, N. 32° 13′, E. 119° 27′	30.22	767.6	45.5	7.5	92	ese.			1-2		0							misty	Capt. S. Long.
H. M. S. Diamond, S. 36° 50′, W. 12° 00′	29.90	759.4	60	15.6	82	sw.			3		7					3	s.	d. clouds	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.19	766.8	67.5	19.7	87	ssw.			1-2		5	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 20′, W. 80° 53′	30.16	766.1	76	24.4	98	ese.			4-5		7	e.				2	ne.	squally	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 19′, W. 59° 58′	29.75	755.6	50	10.0	93	nne.			1-2		10					1	nne.	overcast	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.96	761.0	83	28.3		nne.			1-2		4	nnw.						d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald, N. 36° 35′, E. 149° 35′	29.80	756.9	58	14.4	87	sse.			5-6		9	sse.				6	sse.	d. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	29.68	753.9	39	3.9		nw.			1		2							d. clouds	Capt. G. Robinson.
H. M. S. Espiegle.																			Capt. C. A. P Bridge.
H. M. S. Euryalus.																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.92	760.0	78	25.6	72	s.			5		0					3	s.	blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	29.86	758.4	46	7.8	60	w.			4-5		6	w.				1	w.	misty	Capt. R. F. Hoskyn.
H. M. S. Garnet, Coquimbo, Chili	29.93	760.2	63	17.2	83	s.			1		10							overcast	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. Jones.
H. M. S. Iris, Ayas Bay, Asiatic Turkey	30.17	765.0	52	11.1	28	n.			2		1					1	ne.	blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.18	766.6	62	16.7	88	calm			0		3	nw.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark, S. 34° 38′, E. 154° 22′	29.68	753.9	72.3	22.4	89	n.			3		10					3	ne.	misty	Lieut. C. F. Oldham
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.17	766.3	67.3	19.6	79	calm			0		0							misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 16° 18′, E. 59° 49′	30.09	764.3	76	24.4	90	ne.			1-2		1	nne.				2	nne.	blue sky	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, Grenada, West Indies	29.98	761.5	79.5	26.4	78	nne.			3		3	ne.				3	ne.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 1° 20′, E. 66° 55′	29.95	760.7	82	27.8	83	nne.			3		6					2	ne.	d. clouds	Capt. R. Kinahan.
H. M. S. Pelican, S. 12° 22′, W. 10° 27	30.00	762.0	73.5	23.1	97	ese.			3		7					2	ese.	d. clouds	Capt. F. R. Dickens.
H. M. S. Phœnix.																			Capt. H. H. Grenfel.
H. M. S. Ready, Bushire, Persia	30.20	767.1	59.1	15.1		nw.			3									squally	Capt. W. H Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.01	762.2	38	3.3	90	nnw.			2		3							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.12	765.0	78.5	25.8	78	nne.			2		6	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 12° 26′, E 44° 40′	29.98	761.5	80	26.7	78	e.			3		4	e.				sm'h		d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 27′, W. 88° 12′	30.03	762.7	75	23.9	88	ne.			1		8							showery	Capt. C. G. Fane.
H. M. S. Triumph, Off Panama, Panama	29.90	759.4	75	23.9	85	nnw.			2		0							blue sky	Capt. A. H. Markham.
H. M. S. Tyne, N. 12° 26′, E. 52° 23′	30.09	764.3	76	24.4	100	ene.			2		0					2	ene.	blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W I.	30.05	763.3	75	23.9		calm			0		0							blue sky	Com. W. S. Brown.
H. M. S. Woodlark																			Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Brava, Cape Verd Ids.	30.01	762.2	76.6	24.8	77	ne.			2		2					3	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 14° 16′, W. 65° 57′	30.02	762.4	77.2	25.1	88	ene.			6		7							misty	Capt. A. L. Broberg.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r.	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch	Mill				
N. Yard, Pensacola, Fla	30.20	767.1	53	11.7	93	nne.	6	2.7			10			0	0			cloudy	
N. Yard, Portsmouth, N. H.	30.38	771.6	10	—12.2		calm	0	0			2			0	0			fair	
Naval Hospital Yokohama, Japan	29.59	751.6	39	3.9	82	n.			1		0			sli't	sli't			clear	
Adams, Callao, Peru	29.68	753.9	69	20.6	95	sse.			2		10					gr'd		cloudy	
Alaska, Valparaiso, Chili	29.92	760.0	64	17.8	89	calm			0		0			c	0	sm'h		clear	
Alert, N. 13° 57′, E. 109° 58′*	29.95	760.7	77	25.0	86	wnw.			4		10		nw.	0	0	mod.	nw.	cloudy	
Alliance, Boston, Mass.*†	30.37	771.4	24	— 4.4	60	nnw.			1		2			0	0			fair	
Ashuelot Tientsin, China	30.31	769.9	26	— 3.3	100	ene.			1		0							clear	
Brooklyn, S. 25° 00′, W. 43° 16′	30.06	763.5	75	23.9	81	ene.	5	2.2			2		se.	0	0	light	se.	fair	
Colorado, New York, N. Y	30.36	771.1	24	— 4.4	100	calm	0	0			8		calm	0	0			cloudy	
Essex, N. 34° 30′, W. 47° 50′	30.24	768.1	62	16.7	77	e.			2		2		e.			sm'h		clear	
Franklin, Norfolk, Va	30.36	771.1	42	5.6	83	nne.	4	1.8			10		calm	0	0			cloudy	
Galena, Porto Grande, Cape Verd Ids	30.08	764.0	71	21.7	85	e.			3		5		e.			mod.	ne.	fair	
Independence, N. Yard, Mare I'd, Cal	30.12	765.0	35	1.7	100	calm	0	0			0			0	0			clear	
Kearsarge, New Orleans, La	30.16	766.1	53	11.7	93	ene.			3		10							cloudy	
Lackawanna, Valparaiso, Chili†	30.09	764.3	65	18.3	94	nne.			1		8		ne.					cloudy	
Lancaster, Leghorn, Italy	30.46	773.7	50	10.0	86	ne.			2		10			0	0			cloudy	
Michigan, Erie, Pa	30.08	764.0	28	— 2.2		sse.			4		10							cloudy	
Minnesota, Newport, R. I	30.37	771.4	23	— 5.0	100	e.	7	3.1			8					sm'h		cloudy	
Monocacy, Yokohama, Japan	29.72	754.9	44	6.7	84	nw.			1		0							clear	
Nipsic, Naples, Italy	30.45	773.4	62	16.7	36	e.			2		10					sm'h		cloudy	
Onward, Callao, Peru†	30.03	762.7	67	19.4	100	se.			2		10		nnw.			long	w.	cloudy	
Palos, Hong Kong, China	30.18	766.6	66	18.9	84	calm			0		5		calm					fair	
Passaic, Washington, D. C	30.42	772.7	31	— 0.6	?	ne.			1		10		calm					cloudy	
Pensacola, S. 32° 55′, W. 71° 43′	30.03	762.7	58	14.4	94	sse.			4		10		s.	0	0	long	s.	cloudy	
Powhatan, Boston, Mass	30.39	771.9	20	— 6.7	100	nw.			1		5		s.					hazy	
Quinnebaug, Villafranca, France	30.53	775.4	60	15.6	76	calm			0		8		calm			sm'h		fair	
Ranger, N. 18° 16′, W. 103° 21′*	29.85	758.2	70	21.1	66	nw.			2		0			0	0	long	w.	clear	
Richmond, S. 11° 04′, W. 169° 52′*	29.61	752.1	84	28.9	83	sse.			3		2			0	0	long	se.	clear	
Shenandoah, Montevideo, Uruguay*	30.09	764.3	74	23.3	68	n.			4		2					sm'h		clear	
St Louis, League Island, Pa	30.62	777.7	27	— 2.8	88	ne.	2	0.9			5		n.	0	0			fair	
Swatara, Kobe, Japan*	29.72	754.9	46	7.8	40	wnw.			4		2		wnw.			mod.	wnw.	fair	
Tennessee, New York, N. Y	30.41	772.4	25	— 3.9		ne.	3	1.3			5		e.	0	0			hazy	
Vandalia, Port Spain, Trinidad, W. I.	30.00	762.0	76	24.4	91	calm			0		8		calm					fair	
Wabash, Boston, Mass	30.40	772.1	16	— 8.9		calm	0	0			2			0	0			fair	
Wachusetts, N. 47° 15′, W. 125° 11′	30.01	762.2	35	1.7	100	var.			1		0							clear	
Wyoming, Port Royal, S. C	30.23	767.8	54	12.2	93	ne.	8	3.6			10		ne.	0	0			misty	
Yantic, Kingston, Jamaica, W. I.*	30.01	762.2	75	23.9	81	n.			1		2							clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 53° 17′, W. 26° 18′	30.86	783.8	40	4.4	82	sw.	5	.....	9	.....	sw.	3 h'r	sleet	4–5	wsw; nw.	snowing	C. Gapon, 2d Officer.
S. S. Polynesian, Capt. R. Brown, Off Cape Sable, N. S*	30.19	766.8	20	—6.7	.....	ne.	4	.....	4	.....	ene.	1 h'r	snow	mod.	nw.	clear	Roberts & Spark
S. S. Prussian, Capt. J. G. Stephens, Portland, Maine*	30.30	769.6	10	—12.2	.....	nne.	2	.....	3	.....	nne.	.....	.....	.....	.....	fair	J. G. Stephens.
S. S. Waldensian N. 55° 14′, W. 16° 09′*	30.41	772.4	46	7.8	.....	w.	6	.....	.....	.....	wnw.	2 h'r	2 h'r	mod.	wsw.	clear	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	30.20	767.1	36	2.2	10	wnw.	3	.....	2	.....	nw.	.....	.....	.....	.....	clear	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, Eng*†	30.72	780.3	43	6.1	100	s.	1	.....	10	.....	.....	.....	.....	.....	.....	foggy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†	30.72	780.3	53	11.7	93	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown.. N. 43° 04′, W. 52° 13′†*	30.14	765.5	40	4.4	.....	nw.	6	.....	5?	.....	n.w.	.....	.....	mod.	nw.	cloudy?	J. Brown.
Utopia, Capt. A. McRitchie,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 18° 14′, W. 72° 34′*†	30.19	766.8	73	22.8	81	n.	4	.....	6	.....	calm	0	0	sm'h	.....	cloudy	C. P. Krause.
S. S. Alvo, Capt. D. W. Williams, Savanilla, U. S. C.*	29.92	760 0	76	24.4	.....	ne.	5	.....	0	.....	.....	0	0	.....	.....	very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse N. 41° —′, W. 74° —′	30.50	774.7	.....	.....	.....	n.	2	.....	0	.....	.....	0	0	sm'h	.....	clear	Fisher & Weldon.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell N. 40° 59′, W. 15° 49′	30.60	777.2	58.3	14.6	76	ene.	3	.....	2	.....	.....	.....	.....	.....	.....	d. clouds.	.....
British Merchant, Capt. E. J. Molony, N. 13° 19′, E. 86° 42′.	30.03	762.7	77.5	25.3	82	ne.	4	.....	4	.....	.....	.....	.....	.....	.....	misty	.....
Bk. Caldew, Capt. W. Peterson S. 31° 43′, W. 83° 56′	30.11	764.8	70	21.1	.....	w.	5	.....	8	.....	.....	.....	.....	.....	.....	misty..	.....
S. S. Cipero, Capt. W. N. Lally N. 35° 24′, W. 27° 32′...	30.45	773.4	63.5	17.5	83	sse.	3	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. City of Agra, Capt. Thos. Young, N. 4° 15′, W. 27° 14′	29.92	760.0	81.5	27.5	.....	ne.	4	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Glaramara, Capt. R. Morton, N. 27° 29′, W. 38° 41′	29.99	761.7	69	20.6	84	ese.	5	.....	9	.....	.....	.....	.....	.....	.....	misty	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bq. Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, S. 20° 25′ W. 72° 06′	30.01	762.2	77.5	25.3	82	se.	5	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, S. 23° 20,′ W. 36° 58′	30.03	762.7	77.2	25.1	86	ese.	5	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Pernambuca, Brazil, S. A	30.00	762.0	84.2	29.0	75	e.	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. John Smith S 0° 50′, W. 27° 10′	29.97	761.2	80.7	27.1	87	e.	3	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 55° 39′, W. 65° 07′	29.56	750.8	49	9.4	92	ne.	4	.....	6	.....	.....	.....	.....	.....	.....	misty	.....
Queen of Cambria, Capt. M. Parry, S. 43° 33′, E. 23° 03′	29.37	746.0	57	13.9	96	w.	7	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
S. S. Strathleven, Capt. C. W. Pearson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge, N. 17° 50′ W. 40° 16′	.....	.....	.....	.....	.....	ssw.	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt S. Windham,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. Fitt.
CALIFORNIA, AND MEXICAN S. S. CO.																	
J. Birmingham, Agent San Francisco.																	
S. S. Newbern, Capt. E. Rogers, N. 23° 05′, W. 107° 50′†	29.94	760.5	70	21.1	90	wnw.	3	.....	1	.....	nw.	light	light	small	nw.	clear	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman N. 24′ 44′, W. 83° 21′ †*	30.38	771.6	76	24.4	.....	ese.	3	.....	10	.....	se.	0	0	mod.	se.	fair	R. B. Crowell, 2d Off.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer
GENERAL TRANS-ATLANTIC CO.																	
Louis de Beblan, Agent, New York.																	
S. S. Canada, Capt. Frangeul, Havre, France	30.71	780.0	35.6	2.0	.....	se.	2	.....	10	.....	se.	0	0	.....	.....	.....	.....
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York.																	
S. S. Gellert, Capt. Kuhlewein,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. Froehlich, 3d Off.
S. S. Silesia, Capt. A. Albers N. 40° 35′, W. 70° 13′*†	30.42	772.7	34.2	1.2	.....	e.	2	.....	5	.....	e.	0	0	1	nw.	fair	.....
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius. Capt. J. Carroll, S 17° —′, W. 37° —′*†	30.19	766.8	84	28.9	.....	ese.	2	.....	10	.....	ene.	0	0	long	ene.	.....	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind. Up'er	Amount and kind. Lo'er	Direction. Upper.	Direction. Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 48° 17′, W. 42° 05′	.....	.....	.....	.....	.....	s.	3	.....	.....	.....	w.	1 h'r	snow	mod.	sw.	.....	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.76	781.3	.....	.....	.....	s.	1	.....	fg	.....	.....	0	0	.....	.....	foggy	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker N. 25° 13′, W. 80° 12′†*	30.32	770.1	76	24.4	.....	ne.	2	.....	0	.....	.....	0	0	.....	.....	clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, N. 25° 08′, W. 74° 12′†	30.32	770.1	73	22.8	.....	ene.	4	.....	10	.....	ene.	0	0	mod.	ese.	cloudy	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, Kingston, Jamaica†	30.11	764.8	76	24.4	.....	var.	0–1	.....	.....	.....	.....	.....	.....	.....	.....	fine	.....
S. S. Bothnia, Capt. MacMackan, N. 46° 56′, W. 42° 00′*	30.05	763 3	44	6.7	.....	s.	5	.....	.....	.....	.....	.....	.....	con.	.....	cloudy	F.F.Stembridge,3d off
S. S. City of Alexandria, Capt. L. F. Timmer- Frontera Rouds, C. A.*† [mann	30.18	766.6	71	21.7	.....	ene.	3	.....	.....	.....	.....	.....	.....	.....	ne.	showery	.....
S. S. City of Washington, Capt. J. W. Rev-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick, [nolds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Schiedam, Capt E. M. Chevalier,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Hohenzollern, Capt. R. Sander, N. 45° 51′, W. 34° 08′*	30.50	774.7	44.6	7.0	.....	sw.	2	.....	5	.....	se.	0	0	sm'h	s.	fair	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cuppers & Walter.
S. S. Main, Capt. Julius Barre, N. 41° 28′, W. 65° 00′*	30.37	771.4	34.0	1.1	.....	n.	2–3	.....	8	.....	n.	0	0	light	ne	fine	.....
S. S. Mosel, Capt. J. Hesse	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Hesse.
S. S. Oder, Capt. C. Undeutsch, Southampton, England*	30.74	780.8	43.7	6.5	.....	e.	1	.....	5	.....	e.	0	0	mod.	e.	hazy	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany	.....	.....	40.1	4.5	.....	w.	3	.....	8	.....	.....	0	0	.....	.....	foggy	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal	.....	.....	43	6.1	67	w.	1	.....	0	.....	.....	0	0	.....	.....	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Yokohama, Japan*†	29.89	759.2	51	10.6	78	ne.	2	.....	0	.....	.....	.....	.....	.....	ne.	hazy	.....
S. S. Oceanic, Capt. J. Metcalf, N. 22° 40′, E. 115° 56′*	30.18	766.6	62	16.7	83	ne.	2	.....	0	.....	.....	.....	.....	sm'h	.....	fine	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.97	761.2	.....	.....	.....	ne.	1	.....	10	.....	e.	.....	.....	.....	.....	smoky	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 33° 37′, W. 77° 45′†	30.37	771.4	58	14.4	76	nne.	3	.....	10	.....	ene.	0	0	mod.	ene.	drizzling	H. K. Hallett.
OREGON IMROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.17	766.3	43	6.1	83	nne.	1	.....	5	.....	nne.	.....	.....	.....	.....	fair	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *R. Van Otterendorp, Agent, San Francisco.*																	
S. S. Columbia, Capt. Fred Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 39° 48′, W. 124° 20′†	30.08	764.0	46	7.8	92	nnw.	7	.....	1	.....	.....	.....	.....	mod.	nw.	clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 34° 21′, W. 119° 40′	30.05	763.3	50	10.0	50	nnw.	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	.....
S. S. Geo. W. Elder, Capt. H. G. Morse	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Idaho, Capt. E. Alexander, Port Townsend, Wash. Ter.†	30.00	762.0	45	7.2	67	w.	6	.....	8	.....	w.	.....	.....	.....	.....	fair	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, N. 34° 24′, W. 119° 58′†	30.17	766.3	50	10.0	68	ne.	1	.....	0	.....	.....	0	0	sm'h	.....	clear	T. Wallace.
S. S. State of California, Capt. G. Debney, San Francisco, Calif	30.09	764.3	37	2.8	80	calm	0	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. Victoria, H. M. Hayward, Nanaimo, Vancouvers Id†	30.12	765.0	35	1.7	90	sw.	2	.....	2	.....	.....	.....	.....	.....	.....	fair	.....
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulley, Supt. New York.*																	
S. S. Australia, Capt. ——, N. 28° 04′, W. 148° 25′	30.14	765.5	65	18.3	100	e.	6	.....	8	.....	ene.	.....	.....	long	ne.	squally	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.75	755.6	76	24.4	76	e.	2	.....	8	.....	.....	0	0	.....	.....	cloudy	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, Yokohama, Japan	.....	.....	46	7.8	54	ne.	2	.....	8	.....	ne.	0	0	.....	.....	cloudy	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn, N. 30° 12′, W. 140° 42′†	30.33	770.4	62	16.7	72	ene.	4	.....	5	.....	ne.	0	0	mod.	ene.	fair	E. Le Salk.
S. S. City of Tokio, Com. J. Maury N. 30° 07′, E. 165° 28′†	29.98	761.5	56	13.3	62	sse.	7	.....	10	.....	sse.	3 h'r	3h'r	r'gh	sse.	threatening	W. Thaxter.
S. S. Collma, Capt. R. R. Searle, N. 7° 14′, W. 80° 10′†	29.86	758.4	78	25.6	100	n	4	.....	0	.....	.....	0	0	mod	n.	clear	.....
S. S. Grenada, Capt M. Connolly, N. 7° 10′, W. 81° 10′†	29.83	757.7	79	26.1	73	ne.	6	.....	0	.....	.....	0	0	small	ne.	clear	.....
S. S. South Carolina, Capt. W. J. Russell, N. 33° 56′, W. 120° 27′*†	30.00	762.0	53	11.7	79	n.	2	.....	0	.....	.....	0	0	h'vy	nw.	fine	.....
S. S. Zealandia, Capt. H. Webber, Sydney, N. S. W	30.00	762.0	71	21.7	75	w.	1	.....	0	.....	.....	.....	.....	.....	.....	clear	.....

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke, Trinidad, W. I.	.....	.....	.....	.....	.....	ne.	3	.....	8	.....	.....	driz.	driz.	sm'h	.....	fair	G. S. Locke
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 45° 25′, W. 37° 19′*†	30.50	774.7	48	8.9	?	ssw.	4	.....	6	.....	s.	0	0	mod.	sw. to s.	fair	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	30.84	783.3	34	1.1	79	sw.	1	.....	.....	.....	.....	0	0	.....	.....	light fog	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 51° 20′, E. 3° 15′*†	31.04	788.4	40	4.4	?	ese.	2	.....	fg	.....	.....	0	0	sm'h	.....	foggy	M. Eymond.
S. S. Waesland, Capt. H. Nickels. N. 41° 19′, W. 64° 13′*	30.20	767.1	33	0.6	.....	n.	5	.....	10	.....	nnw.	2 h'r	2 h'r	mod.	n.	cloudy	.....
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub, Copenhagen, Denmark†	30.54	775 7	42.8	6.0	.....	nw.	1	.....	5?	.....	nw.	0	0	.....	.....	clear?	J. T. Ulberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 42° 20′, W. 62° 44′*†	30.43	772.9	27	—2.8	.....	nw.	4	.....	5	.....	nnw.	3 h'r	3 h'r	mod.	sw.	fair	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jenninge, N. 41° 48′, W. 63° 18′*†	30.38	771.6	32	0.0	.....	nnw.	3	.....	8	.....	nw.	hv'y	h'vy	sm'h	ssw.	d. clouds	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 43° 20′, W. 31° 54′*†	30.35	770.9	44	6.7	92	se.	2	.....	8	.....	se.	0	0	mod.	sw.	cloudy	B. Gleadell.
S. S. Germanic. Capt. C. W. Kennedy. Off Mine Head, Ireland*†	30.90	784.8	54	12.2	.....	wsw.	2	.....	2?	.....	sw.	0	0	sm'h	sw.	gloomy?	H. D. Jay, 4th Officer. H. Goulden, 4th Officer
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 45° 17′, W. 30° 55′*	30.40	772.1	50	10.0	.....	ene.	2	.....	10	.....	sw.	0	0	cross	.....	hazy	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, N. 28° 52′. W. 85° 53′†	30.38	771.6	72	22.2	90	se.	3	0	2 k	.....	s.	0.40	11.7	sm'h	.....	clear	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Alpha, Capt. Ole Grönn,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis. N. 29° 00′, W. 67° 37′*†	30.32	770.1	71	21.7	.....	wnw.	1	.....	5	.....	nw.	0	0	mod.	s; e	fair	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin, S. 20° 03′, W. 33° 02′	.....	.....	.....	.....	.....	var.	.....	.....	.....	.....	ne.	.....	.....	light	ne.	fine	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.82	782.8	.....	.....	.....	sse.	1	.....	fog	.....	.....	0	0	.....	.....	foggy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 3° 23′. W. 32° 14′†	29.90	759.4	.....	.....	.....	se.	3	.....	8	.....	se.	0	0	sm'h	se.	.....	.....
S. Enoch Train, Capt. H. D. Chapman. N. 50° 08′ W. 2° 30′*	30.69	779.5	.....	.....	.....	e.	2	.....	5	.....	e.	0	0	light	wsw.	fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 47° 00′. W. 24° 00′*	30.58	776.7	.....	.....	.....	ssw.	4	.....	3	.....	wsw.	0	0	sm'h	w.	clear	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.42	772.7	39	3.9	63	n.	1	.....	10	.....	calm	.....	.....	sm'h	.....	cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 54° 50′, W. 65° 15′†	29.38	746.2	.....	.....	.....	ene.	6	.....	10	.....	ne.	1 h'r	1 h'r	mod.	ene.	rainy	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 51° 30′, W 22° 50′	.....	.....	52	11.1	.....	w.	3	.....	2	.....	sw.	3 h'r	h'vy	mod.	ssw.	squally	.....
Bk. Gamaliel, Capt. D. J. Anthony	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. Williams.
Bk. Geo. Booth, Capt. D. Williams,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. Minssen.
S. Hedwig, Capt. T. Minssen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Johanne Auguste, Capt. H. Schmidt, S. 23° 52′, W. 26° 58′*	29.95	760.7	.....	.....	.....	sse.	4	.....	8	.....	sse.	.....	.....	long	ssw.	sprinkling	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 37° 26′. W. 11° 04′*†	30.60	777.2	.....	.....	.....	e.	3	.....	.....	.....	e.	2 h'r	2 h'r	h'vy	e.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.42	772.7	55	12.8	68	calm	0	.....	2	.....	nw.	.....	.....	.....	.....	fair	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 24° 37′. W. 41° 05′*†	29.85	758.2	.....	.....	.....	baff.	.....	.....	5	.....	.....	½h'r	½h'r	.....	.....	.....	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 15° 16′, W. 25° 50′*	29.94	760.5	70.7	21.5	97	ne.	1	.....	0	.....	.....	.....	.....	sm'h	.....	.....	.....
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.51	774.9	60	15.6	88	ne.	5	.....	0	.....	.....	0	0	.....	.....	clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 29° 15′, W. 24° 29′*†	30.10	764.5	.....	.....	.....	s.	11	.....	10	.....	s.	.....	.....	hv'y	s.	.....	I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton, N. 30° 42′, W. 51° 18′*†	30.30	769.6	.....	.....	.....	ne. nne.	.....	.....	.....	.....	.....	.....	.....	.....	.....	squally	N. P. Dutton.

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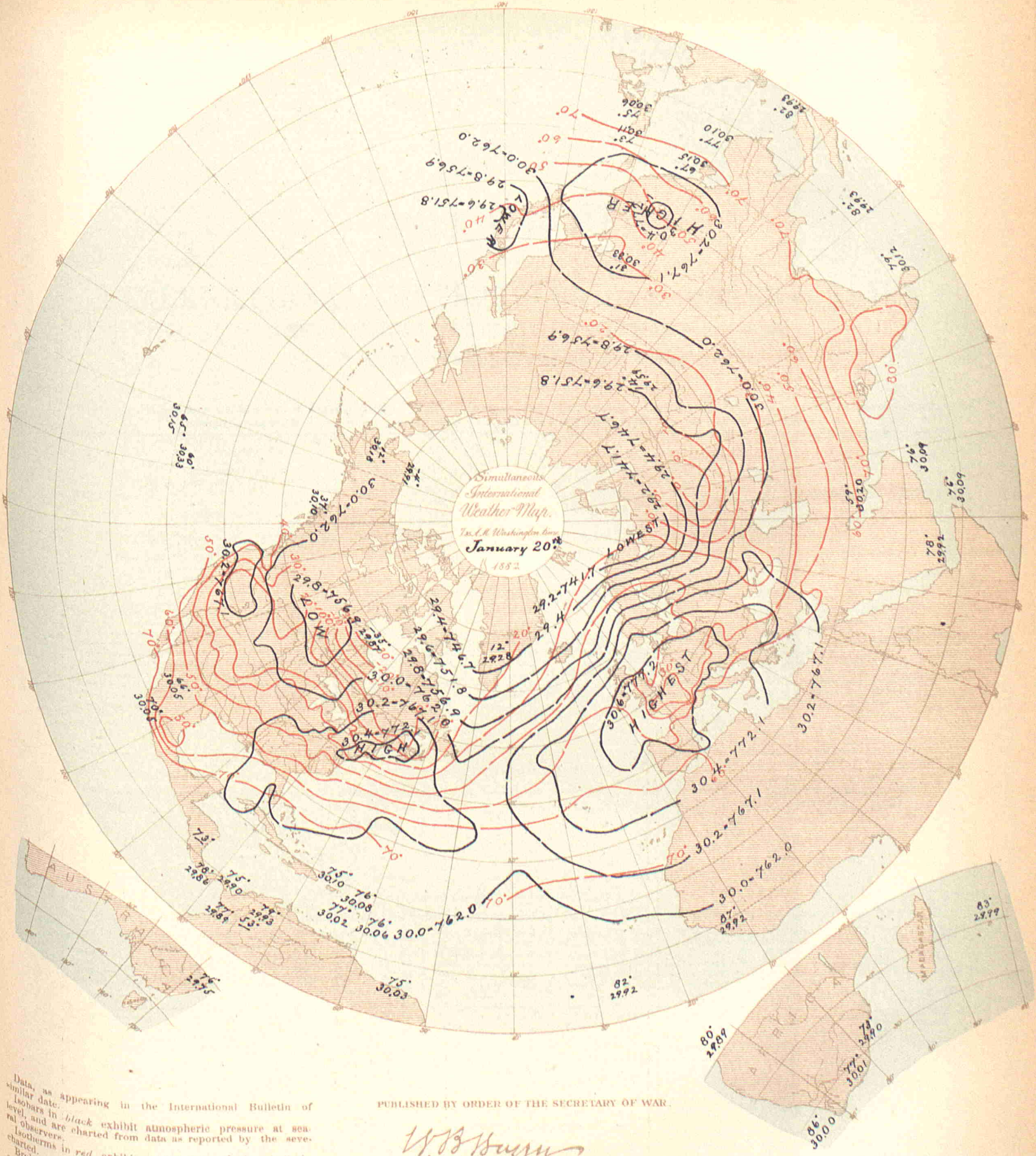
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Heliotype Printing Co Boston

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 21, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.41	772.4	61.5	16.4	80	w.			4		0			0	0	clear	Moiroud.
Algiers			30.45	773.5	54.3	12.4	82	ene.			1		0			0	0	clear	Nicolas.
La Calle			30.45	773.4	61.5	16.4	66	wsw.			2		3			0	0	pretty fair	Foufréde.
Tunis			30.46	773.7															Jacques.
Sfax																			Gau.
Saida			30.51	774.9	50.0	10.0	71	w.			1		2			0	0	fair	Perès.
Tebessa			30.50	774.6	40.3	4.6	94	nw.			1		5			0	0	cloudy	Derché.
Geriville					41.4	5.2	93	ssw.			2		10			0	0	covered	Lonchamp.
Laghouat			30.56	776.1	48.2	9.0	63	w.			1		0			0	0	clear	Herbin.
Biskra			30.50	774.7	60 8	16.0	32	nw.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.58	751.3	29.67	753.6	65.0	18.3	81	ssw.	8	3.6			2			0	0	very fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.01	762.2	30.63	777.9	39.9	4.4	77	sw.			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Observatory	29.74	755.5	30.56	775.1	36.5	2.5	91	w.	6.9	3.1			10			0.020	0.5		Dr. Wierzbiski.
Eperies	29.59	751.6	30.52	775.1	36.3	2.4	84	calm			0		10			0	0		Julius Mikolik.
Gratz	29.29	744.0	30.61	777.6	37.0	2.8	74	ene.			2		10			0	0		Andreas Rospini.
Hermannstadt	29.00	736.7	30.52	775.1	36.3	2.4	93	ne.			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.19	741.3	30.61	777.4	34.7	1.5	89	w.			1		10			0	0	foggy	The Staff.
Lemberg	29.40	746.6	30.43	773.0	35.2	1.8	93	nw.			2		10			0.079	2.0		Dr. T. Stanecki.
Pola	30.35	770.9	30.47	773.8	50.4	10.2	84	sw.			1		0			0	0		I. R. Hydrographic Office.
Szathmar	30.02	762.5	30.49	774.5	36.0	2.2	89	s.			2		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.24	768.1	30.54	775.6	35.6	2.0	85	calm			0		10			0	0		Karl Stancel.
Trieste	30.38	771.7	30.48	774.3	50.4	10.2	67	calm			0		0			0	0		Rieder.
Vienna	29.85	758.1	30.60	777.3	39.4	4.1	76	calm			0		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Aberdeen	30.47	773.9	30.57	776.5	40.9	4.9	69	sw.	7	3.1			3			0	0	blue sky	W. Boswell.
Armagh, Observatory	30.42	772.7	30.66	778.7	43.7	6.5	91	ssw.	6	2.7			10					overcast	S. Call.
Bidston, Liverpool Obs'y			30.70	779.8	45.2	7.3	81	sw.	3	1.3			10					overcast	John Hartnup
Bolton, Sharples	30.14	765.5	30.69	779.5	38.3	3.5	95	ssw.					10					misty	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.28	769.1	30.67	779.0	42.1	5.6	89	sw.			2		10			0	0	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	80.0	26.7	58	ne.			1		2					d. clouds	Corpl. J. Surgenor.
Cardington			30.71	780.0	40.0	4.4	81	w.			0.2		8					overcast	John McLaren.
Chatham, School M. E.	30.60	777.2	30.74	780.8	38.1	3.4	83	calm			0		6					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.52	775.2	30.76	781.3	41.0	5.0	69	e.			1		10					overcast	The Staff.
Fort Napier, Natal	27.55	699.8	29.77	756.1	84.2	29.0	61	ne.			1		0					blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	88.0	31.1	55	nw.			1		5					d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.58	776.7	47	8.3	100	sw.			2		8			0.02	0.5	overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.39	771.9	30.45	773.4	59.2	15.1	87	se.			2		8					overcast	Cpl. O. Baldwin
Glasgow, Observatory	30.41	772.4	30.62	777.7	42.7	5.9	83	wsw.			2		5 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.55	776.0	30.74	780.8	37.4	3.0	80	wsw.			1		0					misty	The Staff.
Guernsey	30.41	772.7	30.73	780.5	40.5	4.7	80	ne.			1		10					overcast	A. Collenette, F. M. S.
Kew, Observatory	30.71	780.0	30.74	780.8	37.8	3.2	80	w.	5	2.2			0					misty	The Staff.
Leicester, Museum	30.45	773.4	30.72	780.3	38.0	3.3	90	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.32	770.1	30.40	772.1	59.8	15.4	67	ne.			2		1					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.21	767.3	30.26	768.6	74.0	23.3	71	se.			1		9					overcast	C. S. Duncombe.
Oscott, St. Mary's College	30.17	766.3	30.72	780.3	40.0	4.4	89	sw.			0–1		9					d. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.50	774.7	30.73	780.5	39.3	4.1	79	sw.			1		10					overcast	The Staff.
Plymouth	30.68	779.3	30.76	781.3	40.0	4.4	77	e.			1		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.41	772.4	44	6.7	76	wsw.	21	9.4			10					misty	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.34	770.6	30.41	772.4	42.0	5.6	79	calm			0		10					gloomy	W. H. Lyne
Sheffield	30.41	772.4	30.70	779.8	45.0	7.2	90	nw.			1		4			0	0	d. clouds	W. F. Cooper.
Stilloth Rectory	30.62	777.7	30.65	778.5	43.3	6.3	95	sw.			1		4			0.010	0.3	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.69	779.5	41.4	5.2	60	sw.	1	0.4			10					misty	Rev. S. J. Perry.
Stratfield Turgiss					40.3	4.6	77	n.			2		0					blue sky	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.64	778.2	30.70	779.8	45	7.2	67	e.			1		10					gloomy	W. Newcombe.
Valencia, Observatory	30.67	779.0	30.69	779.5	49.9	9.9	84	ssw.	15	6.7			9					d. clouds	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.17	766.3	30.21	767.3	26	— 3.3	88	se.	10	4.5			10 n			0.025	0.6	threatening.	H. J. Cundall, C. E.
Chatham, N. B.*	30.12	765.0	30.19	766.8	15	— 9.4	96	calm	0	0			10 n		calm	0.15	3.8	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.04	763.0	30.07	763.8	16	— 8.9	91	sw.	10	4.5		2 k	5 s	calm	calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.49	749.0	30.49	774.4	—27	—32.8	100	n.	5	2.2		0	0			0	0	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.16	766.1	30.29	769.4	26	— 3.3	96	s.	2	0.9			10 k			inap.	inap.	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.70	754.4	30.05	763.3	31	— 0.6	88	se.	3	1.3			10 ks		s.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.87	758.7	30.09	764.3	17	— 8.3	96	w.	6	2.7			10 n			0.04	1.0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.23	742.4	29.95	760.7	30	— 1.1	88	se.	7	3.1			10 n		se.	inap.	inap.	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.24	742.7	29.96	761.0	35	1.7	100	calm	0	0			10 n			0.01	0.3	threatening.	H. Morgan.
Port Stanley, Ontario	29.28	743.7	29.95	760.7	34	1.1	92	se.	3	1.3			10 n		e.	0.03	0.8	cloudy	M. Payne.
Quebec, Quebec*	29.79	756.7	30.13	765.3	18	— 7.8	100	se.			1		10 n		se.	0.02	0.5	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.50	749.3	29.99	761.7	19	— 7.2	84	calm	0	0			10 s			0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.17	740.9	29.91	759.7	30	— 1.1	100	s.	7	3.1			10 ks					light snow	K. Stewart.
St. Andrews, N. B.	30.13	765.3	30.18	766.6	30	— 1.1	86	nw.	1	0.4			10 n			0.27	6.9	light snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	30.29	769.4	30.35	770.9	14	—10.0	91	se.	3	1.3			10 ks			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.58	751.3	29.98	761.5	33	0.6	96	e.	2	0.9			10 n			0.03	0.8	light snow	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	30.14	765.5	30.21	767.3	35	1.7	89	se.	4	1.8			fg.			0.06	1.5	light fog	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.30	769.6	30.58	776.7	12	—11.1		w.	0	0			10			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Cape St. Francis Lt. House	29.82	757.4	29.85	758.2	79.0	26.1	80	e.	4.9	2.2		0	2 s			0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.85	758.2	29.89	759.2	93.3	34.1	38	sse.	19	8.5		0	0			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Sub-Series.																			
Hankow																			N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.22	767.5	30.24	768.1	42.8	6.0	91	ese.	6.3	2.7		0	0			0	0	clear	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.34	770.5	30.38	771.7	41.9	5.5	83	wnw.	22	10			9						Oversergent Fischer.
Fanöe	30.47	773.8	30.48	774.3	42.1	5.6	94	w.			4		1						Overloerer Lauridsen.
Godthaab, Greenland	29.62	752.3	29.66	753.4	4.3	—15.4		ssw.			7		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.47	748.4	29.51	749.5	34.5	1.4		sw.			6		8						A. O. Thorlacius.
Thorshavn	30.11	764.7	30.14	765.6	42.4	5.8	88	sw.	20	9			10						Overloerer Bergh.
Vestervig	30.30	769.7	30.39	772.0	43.5	6.4	90	w.			4		1						Loerrer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.91	759.7	30.60	777.3	35.6	2	93	wnw.			1	ck	0			0	0		M. Labroue, Director.
Alençon, Normal School	30.19	766.8	30.74	780.8	26.6	—3	93	ne.			2		k		n.	0	0		M. Nicot, Director.
Arras, Engineer School	30.43	772.8	30.70	779.8	35.1	1.7	91	ese.			1		10			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.43	773.0	30.51	775.0	41.0	5	57	nne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.11	764.7	30.71	780.0	28.0	—2.2		se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.47	773.8	30.75	781.1	33.3	0.7	88	ne.			1		10			0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.76	781.4	35.6	2	96	ne.			1		fg		ne.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.33	770.3	30.61	777.4	26.1	—3.3	100	n.			1		10			0	0	foggy	M. Rayet, Director.
Bourges, Normal School	30.08	764.0	30.69	779.4	24.8	—4	100	n.			1		fg		ne.	0	0	light fog	M. Postel, Director.
Brest, Naval Observatory	30.46	773.6	30.70	779.8	42.8	6.0	81	ne.			1		9		ne.	0	0		M. de Kennaree, Dir
Caen, Normal School	30.67	778.9	30.74	780.9	31.3	—0.4		ese.			1		10			0	0	covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.32	770.1	30.67	779.0	24.6	—4.1	93	w.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.21	767.4	30.76	781.4	30.6	—0.8		e.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.20	741.6	30.68	779.2	24.1	—4.4	97	n.			1		10			0	0	foggy	M. Allnard, Director.
Cluny, Normal School	29.75	755.7	30.66	778.7	27.3	—2.6	96	n.			3		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.78	756.4	30.71	779.9	30.2	—1	92	e.			1		10	e.	e.	0	0	light fog	Dr. Coulet, Director.
Gap, Normal School	27.93	709.3	30.53	775.5	48.2	9	63									0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.30	744.2	30.43	773.0	61.0	16.1	33	ne.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.80	756.8	30.62	777.8	29.8	—1.2	100	s.			1		10			0	0	covered	M. Ablard, Director.
Guéret, Normal School	28.93	734.9	30.62	777.7	32.9	0.5	82	se.			1	0	5 n		se.	0	0	cloudy	M. Rivoire, Director.
Lamballe, Normal School	30.44	773.1	30.73	780.6	32.9	0.5	98	ne.			1		10		ne.	0	0	foggy	M. Olliitrault, Director.
Lescar, Normal School	30.00	761.9	30.58	776.6	49.1	9.5	79	s.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.61	777.5	30.71	780.1	35.6	2.0	93	ne.			3		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.53	750.1	30.67	779.1	24.6	—4.1	100	nnw.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.43	772.8	30.76	781.4	25.7	—3.5	98	e.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.18	766.5	30.45	773.5	58.8	14.9	53	nw.			0.1		1			0	0	hazy	M. Stephau, Director.
Montlouis l'Instituteur	25.17	639.3	30.01	762.3	45.3	7.4	33	n.	5.6	2.5			7						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.35	771.0	30.47	773.9	54.3	12.4	50	w.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.85	758.3	30.69	779.6	28.8	—1.8	96	wnw.			1		10 kn			0	0	covered	M. Hasse, Director.
Nantes, Observatory	30.57	776.5	30.73	780.6	27.9	—2.3	92	ne.			1-2		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.36	771.2	30.47	774.0	63.5	17.5	16	se.	5.6	2.5			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.54	547.2			32.0	0.0		e.			1		1		e.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.46	748.3	30.61	777.4	30.7	—0.7							fg			0	0	foggy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.53	648.5			42.6	5.9	23	ene.			2		2			0	0	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.66	778.7	30.69	779.5	28.4	—2.0	100	ene.			1		10		e.	0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.50	774.8	30.74	780.9	27.3	—2.6	96	ne.			1		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	28.29	718.6	30.52	775.1	43.2	6.2	24	s.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.70	779.7	30.74	780.9	31.3	—0.4	96	e.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.56	776.3	30.72	780.3	34.2	1.2	76	e.			1		10			0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.55	776.0	30.72	780.2	25.7	—3.5	100	n.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.89	759.1	30.62	777.8	43.3	6.3	78	nw.			1		2	w.		0	0	slightly cl'dy	M Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.20	767.0	30.69	779.5	25.5	—3.6	100	ne.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.74	755.5	30.61	777.6	34.2	1.2	90	e.			1		10	e.		0.016	0.4	rain and fog.	Prof. Dr. Hoh.
Berlin	30.40	772.1	30.58	776.8	34.9	1.6	91	nw.			2		10			0.012	0.3		Prof. Dr. Arndt.
Breslau	30.02	762.5	30.56	776.3	37.4	3.0	96	w.			2		10			0	0		Royal University Obs'y.
Carlsruhe	30.20	767.1	30.67	779.1	31.8	—0.1	92	s.			1		10			0.024	0.6	rain and fog.	Albert Senz.
Cassel	29.92	759.9	30.63	778.1	31.6	—0.2	90	w.			1		10			0	0	foggy	Dr. H. Möhl.
Frankfort on the Main	30.28	769.0	30.67	779.0	34.3	1.3	92	ene.			1		10			0	0		Physical Society.
Friedrichshafen	29.13	739.8	30.67	778.9	29.8	—1.2	96	e.			1		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.51	775.0	30.61	777.4	34.2	1.2	100	wsw.			3		10			0.008	0.2	foggy	E. Preller.
Kiel	30.52	775.2	30.54	775.6	40.1	4.5	85	w.			1		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.21	767.3	30.66	778.7	32.5	0.3	100	nw.			2		10			0.016	0.4		H. Leppig, Asst.
Magdeburg	30.43	773.0	30.64	778.2	34.5	1.4	93	w.			1		10 ks			0.004	0.1	light fog	Dr. Assmann.
Memel	30.19	766.9	30.24	768.1	37.0	3.1	88	wnw.			5	6 c	0						Issermann.
Munich	28.73	729.8	30.63	778.1	25.7	—3.5	96	n.			1		10			0	0	dense fog	Central Station.
Neufahrwasser	30.35	770.9	30.37	771.3	39.4	4.1	74	nw.			4		10			0	0		A. Lothes.
Neustadt, Palatinate	30.11	764.9	30.65	778.5	29.8	—1.2		ne.			3		10			0	0		Dicknether.
Stuttgart	29.64	752.9	30.60	777.3	28.0	—2.2	98	s.			1		10			0	0	foggy	Prof. Dr. Schoder.
Wustrow	30.55	776.0	30.57	776.5	37.6	3.1	93	sw.			5		10			0	0		Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.03	762.8	30.44	773.1	46.4	8.0		n.			1.5		9			0.020	0.5	covered	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	30.03	762.8	30.08	764.2	76.7	24.8	53	sw.					7			0	0	d. clouds	
Deesa	29.55	750.5	30.02	762.5	83.6	28.7	32	wsw.	7.4	3.3			5	nw.		0	0	d. clouds	
Bombay	29.93	760.3	29.97	761.2	81.6	27.6	62	nw.	16	7.2			0			0	0	blue sky	
Poona, Yarrowda.	28.11	714.0	29.94	760.4	88.4	31.3	12	ene.	12	5.4			0			0	0	blue sky	
Belgaum	27.43	696.6	29.94	760.6	82.0	27.8	14	ene.	15	6.7			0			0	0	blue sky	
Lahore	29.31	744.4	30.08	764.0	62.6	17.0	78	calm	0.3	0.1			6			0	0	d. clouds	
Roorkee	29.14	740.2	30.08	763.9	64.8	18.2	73	calm	1.6	0.7			8			0	0		
Agra	29.50	749.2	30.08	764.0	71.7	22.1	46	w.	2.3	1.0						0	0		
Nagpur	28.97	735.8	30.01	762.3	83.5	28.6	22	calm	3.4	1.5			0			0	0	blue sky	
Jubbulpore	28.69	728.7	30.09	764.3	65.5	18.6	38	ne.	1.4	0.6			0			0	0	blue sky	
Lucknow	29.68	753.8	30.07	763.7	65.3	18.5	53	nnw.	1.2	0.5			0			0	0	blue sky	
Allahabad	29.73	755.2	30.06	763.5	67.0	19.4	63	calm	1.6	0.7			0			0	0	blue sky	
Patna	29.88	758.8	30.07	763.7	68.4	20.2	56	nw	2.7	1.2			0			0	0	blue sky	
Hazaribagh	28.02	711.8	30.11	764.8	62.8	17.1	44	n.	5.8	2.6			0			0	0	blue sky	
Cuttack	29.98	761.4	30.06	763.6	75.0	23.9	52	calm	0.1	0.04			0			0	0	blue sky	
Calcutta, Alipore	30.02	762.5	30.04	763.0	70.0	21.1	52	nnw.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.91	759 7	30.03	762.8	70.8	21.6	59	calm	4.3	1.9			0			0	0	blue sky	
Chittagong	29.94	760.5	30.04	762.9	69.8	21.0	69	w.	2.5	1.1			0			0	0	blue sky	
Sibsagar	29.72	754.9	30.07	763.8	64.1	17.8	82	ne.	2.0	0.9			0			0	0	blue sky	
Jeypore	28.59	726.1	30.05	763.3	75.7	24.3	35	nw.	3.2	1.4			7	nw.		0	0	d. clouds	
Zanzibar, Africa	29.91	759.7			88.9	31.6	53	ene.	6.0	2.7			4			0	0	d. clouds	
Trichinopoly	29.74	755 4			79.6	26.4	53	e.	1	0.4			0			0	0	blue sky	
Bellary	28.49	723.6			84.4	29.1	27	ene.	3.0	1.3			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.06	763.5	30.48	774.3	51.4	10.8	47	e.	1.3	0.6			0			0	0		Prof. Giovanni Clodig.
Milan	29.97	761.3	30.52	775 3	42.8	6.0	73	w.	0.7	0.3			5			0.028	0.7		Prof. Schiaparelli.
Padua	30.38	771 6	30.49	774.5	46.6	8.1	56	nnw.	2.5	1.1			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.56	750.7	30.51	775.0	43.0	6.1	69	ene.	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	30.27	768.9	30.47	773.9	57.7	14.3	69	calm	0	0			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.52	724.5	30.53	775.4	49.3	9.6	40	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.43	772.9	30.48	774.3	45.5	7.5	68	n.	8.7	3.9			0			0	0		Prof. Luigi Guidi.
Florence	30.21	767.3	30.48	774.1	48.2	9.0	48	e.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.37	771.4	30.46	773.7	53.8	12.1	49	ne.	4.9	2.2			0			0	0		Prof. P. Monte.
Rome	30.28	769.1	30.46	773.7	54.5	12.5	57	n.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	30.19	766.8	30.45	773.5	53.2	11.8	68	ne.	11.2	5.0			2			0	0		Prof. C. de Giorgi.
Cosenza	29.54	750.3	30.45	773.7	51.8	11.0	75	se.	2.5	1.1			0			0	0		Prof. D. Conti.
Cagliari	30.20	767.1	30.40	772.2	57.2	14.0	60	calm			0		0			0	0		Prof. A. Pacinotti.
Palermo	30.18	766.5	30.44	773.1	56.5	13.6	55	ne.	3.1	1.4			0			0	0		Prof. G. Ciaccatore.
Syracuse	30.37	771.4	30.42	772.6	55.6	13.1	75	wsw.	6.3	2.8			3	nne.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.89	759.3	30.43	772.8	57.6	14.2	47	n.	1.8	0.8			1	nw.		0	0		Prof. T. Brioschi.
Stelvio	22.47	570.8			29.8	— 1.2	22	ne.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22 52	572.0			32.9	0.5	29	e.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.89	759.2	29.92	759.9	32.0	0.0	75	wsw.	8.7	3.9		0	0			0.006	0.2	clear	
Hakodate	29.89	759.2	29.90	759.4	36.0	2.2	66	nnw.	18.0	8.0			0			0	0	clear	
Hiroshima, I. M. Obs'y	30.20	767.1	30.21	767.3	36.4	2.4	94	nne.	4 9	2.2		0	0			0	0	clear	K. Sasaki
Kanazawa	30.15	765 8	30.26	768.6	37.7	3.2	94					ck	10 n					light sleet	S. Endo.
Kioto	30.00	762.0	30.18	766.6	39.5	4.2	84	w.	2.2	1.0			10 n			0.180	4.6	light rain	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.07	763.8	30.28	769.1	38.1	3.4	85	calm	0	0		0	0			0	0	clear	S. Takehayashi.
Niigata	30.03	762.7	30.06	763.5	41 5	5.3	77	nnw.	7.4	3.3		4 ck	0	n.		0.475	12.1	fair	
Nobiru	29.85	758.2	29.87	758.7	37.6	3.1	76	nnw.	9.0	4.0		0	0			0.065	1.6	clear	H. Midzushina.
Sapporo					31.8	— 0.1	69	nw.	18.6	8.3			5			0	0	fair	
Tokei Obs'y, Yeddo	29.86	758.4	29.93	760.2	43.5	6.4	54	w.	13.1	5.9		0	0			0	0	clear	The Staff.
Wakayama	30.14	765.5	30.20	767.1	42.7	5.9	64	nw.	4.0	1.8		0	0			0	0	clear	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.77	756.1	29.96	761.0	83.5	28.6	70	ene.	12.5	5.6		1ck;cs	6k;ks;n		ese.	0.42	10.7	fair	Oliver & Figot.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.72	602.5	29.94	760.5	50.9	10.5	84	calm	0	0		0	0			0	0		Vicente Fernandez.
Leon	24.49	622.0	30.28	769.0	52.4	11.3	82	n.			1	1 c	0			0	0	clear	Prof. M. Leal.
Mazatlan	29.78	756.5	30.05	763.2	62.0	16.6	91	nnw.			3	3 cs	0	sw.		0.079	2.0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.14	587.8	30.32	770.3	45.9	7.7	74	calm	0	0		0	0			0	0		The Staff.
Morelia	24.34	618.3	30.59	777.2	49.1	9.5	73	se.			4	0	0			0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.98	609.0	30.08	764.1	50.0	10.0	75	calm			0	1 c	0			0	0	clear	M. V de Leon, M. E.
Puebla, Catholic Institute	23.47	596.2	30.43	772.9	42.3	5.7	60	n.	0.22	0.1		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.24	615.8	30.43	772.8	50.5	10.3	50	n.			1	0	0			0	0	fine	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.53	572.4	30.26	768.6	43.5	6.4	83	w.	3 6	1.6		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.73	780.5	30.73	780.5	37.9	3.3		nnw			2					0	0		
Groningen	30.60	777.2	30.65	778.6	39.2	4.0		sw.			1					0	0		
Helder	30.66	778.7	30.66	778.7	41.4	5.2		n.			1					0	0		
Hellevoetsluis	30.71	780.0	30.71	780.0	37.6	3.1	85	wnw.			1					0	0		
Utrecht	30.66	778.7	30.71	779.9	37.6	3.1	85	ssw.			1		10			0	0	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.26	768.6	30.32	770.2	41.0	5.0	84	n.	7	3			10			0.323	8.2		
Brono	29.89	759.1	29.93	760.1	30.9	— 0.6	92	nw.	36	16			10			0.197	5.0	snowing	
Christiania	29.92	759.9	30.07	763.7	41.0	5.0	68	sw.	0	0			3			0	0		
Gjæsvær	28.84	732.4	28.86	733.0	24.8	— 4.0		sse.			4		10						
Lodingen	29.27	743.5	29.32	744.7	30.0	— 1.1	84	wsw.			6		10			0.134	3.4	snowing	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					58.6	14.8	78	se.	8.7	3.9			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.47	748.5	30.50	774.6	53.2	11.8	47	e.	3.1	1.4			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.27	768.8	30.35	771.0	64.2	17.9	65	ese.	1.8	0.8			5			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.17	766.3	30.54	775.8	49.6	9.8	62	nne.	15.0	6.7			3	ese.		0	0		The Staff.
Ponta Delgada, Azores	30.40	772.1	30.47	773.9	59.7	15.4	62	ne.	1.3	0.6			4			0	0		
Saint Paul de Loando	29.71	754.7	29.91	759.8	78.8	26.0	92	nnw.	0.7	0.3			9			blank	blank		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.34	719.8	29.48	748.8	13.8	—10.1		sw.	56	25			10 n			0	0		Major K. Lasarew.
Archangel	29.41	747.1	29.43	747.6	— 5.1	—20.6	80	ese.	13	6			10			0.177	4.5		Capt. Sselliwerstow.
Astrakhan	30.28	769.0	30.19	766.9	30.0	— 1.1	63	wsw.	25	11			9 k;n			0	0		Capt. Wisganow.
Barnaul	29.19	741.5	29.72	754.9	20.5	— 6.4	87	sw.	18	8			10			blank	blank		Meteorological Obs'y.
Dorpat	29.60	751.7	29.85	758.1	35.4	1.9	93	w.	11	5			10 n			0	0		Observatory.
Ekaterinburg	28.33	719.5	29.37	745.9	— 4.2	—20.1	63	nnw.	16	7		8 c	0			0	0	light clouds	Meteorological Obs'y.
Kasan	29.52	749.9	29.82	757.3	13.5	—10.3	70	nnw.	4	2			0			0.028	0.7		Observatory.
Kertch	30.23	767.8	30.25	768.3	37.9	3.3	85	calm	0	0			10 n			0	0		Lagorio & Sastyrez.
Kieff	29.54	750.4	30.21	767.3	33.8	1.0	89	nw.	7	3			10ks;n			0.004	0.1		Observatory.
Lugan	29.88	759.0	30.10	764.4	35.1	1.7	93	w.	9	4			10			0.004	0.1		Meteorological Obs'y.
Moscow	29.35	745.5	29.84	758.0	33.8	1.0	89	s.	7.8	3.5			10 s			0	0		Meteorological Obs'y
Nikolaiev	30.25	768.3	30.32	770.1	36.0	2.2	91	nw.	4	2			10 n			0.024	0.6		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.92	760.0	30.01	762.2	— 4.0	—20.0	90	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.00	761.9	30.14	765.5	31.1	— 0.5	66	calm	0	0			10 n			0	0		Physical Observatory.
St. Petersburg	29.69	754.1	29.71	754.5	34.3	1.3	87	w.	9	4			10ks;n			0.012	0.3		Central Physical Obs'y.
Tashkend, Laboratory	28.72	729.6	30.41	772.5	25.7	— 3.5	93	calm	0	0			10			0.087	2.2		Teich, A. M.
Tifilis	28.91	734.3	30.40	772.1	36.9	2.7	40	nw.	9	4			0			0	0		Physical Observatory.
Warsaw	30.00	762.0	30.45	773.4	34.9	1.6	91	w.	11	5			10 ks						Astronomical Obs'y.
Wilna	29.77	756.2	30.21	767.4	36.3	2.4	87	wnw.	9	4			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.21	742.0	29.52	749.7	18.0	— 7.8	86	sw.	11	5			7			0.016	0.4		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.41	772.4	49	9.4	93	sw.			4		10					raining	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.35	770.8	30.45	773.3	53.2	11.8	82	e.	1.3	0.6		4 ck	0			0	0	hazy	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.56	776.3	30.62	777.8	49.6	9.8	75	se.	2.0	0.9		2	0	se.		0	0	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.50	698.5	30.56	776.2	49.5	9.7	30	ne.	2.5	1.1		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.23	717.1	30.53	775.5	50.4	10.2	42	ne.	2.9	1.3		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.40	772.2	30.56	775.3	54.5	12.5	72	sw.	1.1	0.5		3	2	w.		0	0	clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.60	751.9	30.53	775.4	49.8	9.9	69	n.	4.9	2.2		0	0			0	0	clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.08	763.9	30.14	765.6	69.3	20.7	84	ese.	3.1	1.4		1 ck	0	ese.		0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	30.00	762.0	30.06	763.5	75.3	24.1	74	ene.	0	0		1 cs	1 ks		ene.	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.37	771.4	30.47	774.0	55.4	13.0	65	calm	0	0			10		e.	inap.	inap.		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.06	763.4	30.15	765.7	75.2	24.0	68	ne.	16.8	7.5		2 c	3 k	ne.	ne.	0.020	0.5	d. clouds	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.01	762.2	30.14	765.5	73.0	22.8	83	n.	5.6	2.5			10 ks		ne.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.12	739.6	29.16	740.6	39.2	4.0	70	sw.			4		2			0	0		
Umea	29.40	746.8	29.45	748.1	41.0	5.0	69	nw.			5		1			0	0		
Hernosand	29.62	752.3	29.67	753.6	43.0	6.1	43	wnw.			7		2			0	0		
Stockholm	29.77	756.1	29.95	760.6	39.9	4.4	65	w.			6		0			0	0		
Wisby	30.02	762.4	30.08	763.9	39.9	4.4	84	wsw.			4		3			0	0		
SUB SERIES.																			
Upsala	29.82	757.5	29.91	759.7	39.2	4.0	68	wsw.	8.5	3.8			1	nw.		0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.13	739.9	30.63	778.0	30.2	— 1.0	96	ene.			2					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.58	776.6	41.4	5.2	79	n.	6	2.5			10		n.	0	0		The Observatory.
Valona			30.40	772.2	57.7	14.3		w.			1		2			0	0	slightly cl'dy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.13	765.3	52.9	11.6	55	n.			2		9 s		n.	0.13	3.3		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	30.07	763.8	30.16	766.1	33	0.6	78	calm	0	0			10 s			0.02	0.5	cloudy	
Alpena, Michigan	29.19	741.4	29.90	759.4	28	— 2.2	88	s.	7	3.1			10 s			0.01	0.3	cloudy	
Atlanta, Georgia	28.83	732.3	30.06	763.5	53.0	11.7	93	e.	12	5.4			10 n		calm	0.02	0.5	light rain	
Atlantic City, New Jersey	30.15	765.8	30.16	766.1	40.4	4.7	100	ne.	4	1.8			10 n			0.10	2.5	light rain	
Augusta, Georgia	29.95	760.7	30.15	765.8	55.0	12.8	93	ne.	2	0.9			10s;sk			0.06	1.5	cloudy	
Baltimore, Maryland	30.09	764.3	30.14	765.5	38	3.3	89	e.	3	1.3			10n;fog			0.13	3.3	light rain	
Barnegat, New Jersey	30.13	765.3	30.15	765.8	39.2	4.0	96	se.	5	2.2			10 n		s.	0.10	2.5	light rain	
Bismarck, Dakota	28.45	722.6	30.45	773.4	2	—16.7	75	nw.	6	2.7			10 s		calm	0.06	1.5	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.48	698.0	30.41	772.4	12	—11.1	91	calm	0	0			10 s		calm	0	0	cloudy	
Boston, Massachusetts	30.01	762.2	30.18	766.6	32.0	0.0	82	w.	6	2.7			10 s			0.01	0.3	cloudy	
Brownsville, Texas	30.06	763.5	30.11	764.8	56	13.3	100	nw.	8	3.6			10 n		nw.	0.12	3.0	light rain	
Buffalo, New York	29.21	741.9	30.01	762.2	37.8	3.2	85	se.	3	1.3			10 n			0.01	0.3	light rain	
Burlington, Vermont	29.79	756.7	30.10	764.5	31.5	— 0.3	76	s.	7	3.1			10 s		w.	inap	inap.	cloudy	
Cairo, Illinois	29.63	752.6	30.05	763.3	38.3	3.5	97	sw.	5	2.2			10 s		calm	0.02	0.5	threatening.	
Campo, California	27.61	701.3	30.24	768.1	18.2	— 7.7	70	ne.	2	0.9		0	0			0	0	clear	
Camp Thomas, Arizona																			
Cape Henry, Virginia	30.15	765.8	30.17	766.3	49	9.4	86	se.	5	2.2			10 s			0.03	0.8	cloudy	
Cape May, New Jersey																			
Castroville, Texas	29.27	743.4	30.12	765.0	50	10.0	93	nw.	4	1.8		0	0			0.08	2.0	clear	
Cedar Keys Florida	30.11	764.8	30.13	765.3	68	20.0	93	se.	15	6.7		0	8 ks		s.	0.12	3.0	cloudy	
Champaign, Illinois	29.07	738.4	29.94	760.5	35.2	1.8	89	sw.	8	3.6			10 s		sw.	0	0	cloudy	
Charleston, S. Carolina	30.08	764.0	30.14	765.5	58	14.4	100	calm	0	0			fg.			0.01	0.3	dense fog	
Charlotte, N. Carolina	29.22	742.2	30.11	764.8	44.0	6.7	100	w.	2	0.9			fg.			0	0	dense fog	
Chattanooga, Tennessee	29.15	740.4	30.01	762.2	52.5	11.4	95	s.	11	4.9			10 n		sw.	1.15	29.2	heavy rain	
Cheyenne, Wyoming	24.04	610.6	30.29	769.4	17.3	— 8.2	73	n.	16	7.2		0	0			0	0	clear	
Chicago, Illinois	29.15	740.4	29.90	759.4	36.3	2.4	95	sw.	4	1.8			fg.			0.12	3.0	dense fog	
Chincoteague, Virginia	30.15	765.8	30.17	766.3	42	5.6	100	se.	1	0.4			10 n			0.13	3.3	heavy rain	
Cincinnati, Ohio	29.29	744.0	29.98	761.5	44	6.7	83	s.	2	0.9			10 n			0.06	1.5	light rain	
Cleveland, Ohio	29.17	740.9	29.95	760.7	37.5	3.1	100	s.	6	2.7			10 n			0.01	0.3	light rain	
Coleman City, Texas	28.26	717.8			43	6.1	83	nw.	11	4.9		0	0			0.02	0.5	clear	
Columbus, Ohio	29.08	738.6	29.98	761.3	40	4.4	89	se.	4	1.8			10s;fg			0.10	2.5	threatening.	
Concho, Texas	28.17	715.5	30.19	766.8	42	5.6	83	nw.	6	2.7		0	0			0	0	clear	
Davenport, Iowa	29.24	742.7	29.95	760.7	39	3.9	73	w.	8	3.6			10 s		w.	0.01	0.3	cloudy	
Dayton, Washington T'y	28.52	724.4	30.32	770.1	28.5	— 1.9	78	sw.	3	1.3		0	0			0	0	clear	
Deadwood, Dakota	25.46	646.7	30.41	772.4	12	—11.1	83	calm	0	0		hz.	0			0.03	0.8	clear	
Decatur, Texas					45	7.2	76	sw.	8	3.6		0	0			0.02	0.5	clear	
Delaware Breakwater, Del.	30.14	765.5	30.16	766.1	41	5.0	100	se.	6	2.7			10 n		se.	0.09	2.3	light rain	
Denison, Texas	29.29	741.7	30.04	763.0	46.0	7.8	100	calm	0	0			10 n			0.05	1.3	light rain	
Denver, Colorado	24.80	629.9	30.32	770.1	19.5	— 6.9	69	s.	7	3.1		0	0			0	0	clear	
Des Moines, Iowa	29.02	737.1	29.99	761.7	34	1.1	72	n.	8	3.6			10 s		n.	0	0	cloudy	
Detroit, Michigan	29.17	740.9	29.93	760.2	45.0	7.2	100	s.	10	4.5			10 n		calm	0.05	1.3	light rain	
Dodge City, Kansas	27.48	698.0	30.23	767.8	22.5	— 5.3	78	nw.	12	5.4		0	0			0	0	clear	
Dubuque, Iowa	29.16	740.7	29.93	760.2	32.8	0.4	74	w.	2	0.9			10 s		calm	0	0	cloudy	
Duluth, Minnesota	29.18	741.2	29.94	760.5	16	— 8.9	83	nw.	25	11.2		0	0			0	0	clear	
Eagle Pass, Texas	29.38	746.2	30.22	767.6	41.2	5.1	92	nw.	1	0.4		0	0			inap.	inap.	clear	
Eagle Rock, Idaho	25.43	645.9	30.39	771.9	4	—15.6	57	n.	7	3.1			10 s			0.57	14.5	cloudy	
Eastport, Maine	30.10	764.5	30.18	766.6	33	0.6	94	w.	3	1.3			10 n			0.07	1.8	light snow	
El Paso, Texas	26.50	673.1	30.38	771.6	33.1	0.6	71	nw.	6	2.7		0	0			0.07	1.8	clear	
Erie, Pennsylvania	29.18	741.2	29.95	760.7	39	3.9	89	s.	8	3.6			10 s			0	0	cloudy	
Escanaba, Michigan	29.12	739.6	29.84	757.9	21	— 6.1	91	s.	1	0.4			10 s		s.	0.04	1.0	cloudy	
Florence, Arizona																			
Fort Apache, Arizona	25.16	639.1	30.28	769.1	18	— 7.8	61	ne.	6	2.7		0	0			0	0	clear	
Fort Assinnaboine, Montana	27.38	695.4	30.42	772.7	11	—11.7	64	sw.	11	4.9		0	1 s			0.02	0.5	clear	
Fort Bennett, Dakota	28.67	728.2	30.41	772.4	11	—11.7	80	n.	15	6.7			10 s			0.05	1.3	cloudy	
Fort Benton, Montana	27.42	696.5	30.40	772.1	1	—17.2	72	calm	0	0		0	0			0.05	1.3	clear	
Fort Buford, Dakota	28.32	719.3	30.52	775.2	—10	—23.3	57	w.	9	4.0		0	0			0.05	1.3	clear	
Fort Custer, Montana	27.07	687.6	30.45	773.4	16	— 8.9	83	calm	0	0		0	0			0	0	clear	
Fort Davis, Texas	25.21	640.3	30.19	766.8	39	3.9	76	nw.	8	3.6		0	0			0	0	clear	
Fort Elliott, Texas	27.25	692.1	30.18	766.6	28	— 2.2	47	nw.	16	7.2		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.46	748.3	30.06	763.5	43.0	6.1	93	se.	2	0.9			10 s			0	0	cloudy	
Fort Grant, Arizona	25.40	645.1	30.30	769.6	26	— 3.3	80	ne.	3	1.3		0	0			0	0	clear	
Fort Griffin, Texas	28.74	730.0	30.12	765.0	43	6.1	93	sw.	4	1.8		0	0			0	0	clear	
Fort Keogh, Montana	27.80	706.1	30.49	774.4	6	—14.4	57	nw.	3	1.3		0	0			0.03	0.8	clear	
Fort Macon, North Carolina	30.14	765.5	30.15	765.8	52	11.1	100	e.	3	1.3			10 ks		s.	0	0	cloudy	
Fort McKavett, Texas	27.86	707.6	30.26	768.6	41.4	5.2	76	sw.	8	3.6		0	0			inap.	inap.	clear	
Fort Missoula, Montana	26.97	685.0	30.43	772.9	8	—13.3	100	e.	2	0.9		0	0			0.08	2.0	clear	
Fort St. Michaels, Alaska	29.58	751.3	29.62	752.3	21	— 6.1	100	sw.	80	35.8			10 s		sw.	0	0	threatening.	
Fort Shaw, Montana	26.56	674.6	30.42	772.7	0	—17.8	72	w.	7	3.1		0	0			0.06	1.5	clear	
Fort Sill, Indian Territory	28.81	731.8	30.14	765.5	40	4.4	96	nw.	11	4.9			10 s			0	0	cloudy	
Fort Stevenson, Dakota	28.40	721.3	30.46	773.7	3	—16.1	79	nw.	8	3.6			10 s		nw.	0.03	0.8	cloudy	
Fort Verde, Arizona					18.9	— 7.3	70	n.				0	0			0	0	clear	
Fredericksburg, Texas	28.33	719.6	30.15	765.8	50	10.0	74	nw.	12	5.4	1	0	0			0	0	clear	
Galveston, Texas	29.99	761.7	30.03	762.7	52	11.1	100	nw.	6	2.7			10 n			0.70	17.8	light rain	
Grand Haven, Michigan	29.16	740.7	29.86	758.4	37.5	3.1	89	w.	3	1.3			10 s			0.11	2.8	cloudy	
Hatteras, North Carolina	30.15	765.8	30.17	766.3	51	10.6	93	calm	0	0			10 k		s.	0	0	cloudy	
Helena, Montana	25.85	656.6	30.28	769.1	10	—12.2	60	nw.	2	0.9		0	0			0.20	5.1	clear	
Henrietta, Texas	29.04	737.6	30.11	764.8	42	5.6	82	sw.	6	2.7		0	0			0	0	clear	
Huron, Dakota	28.81	731.8	30.35	770.9	7.3	—13.7	73	nw.	16	7.2			10 s			0	0	cloudy	
Indianapolis, Indiana	29.08	738.6	29.92	760.0	38	3.3	86	s.	3	1.3			10s;fg		s;calm	0	0	cloudy	
Indianola, Texas	30.06	763.5	30.09	764.3	52.1	11.2	100	nw.	13	5.8			10 s		nw.	0.15	3.8	cloudy	
Jacksboro, Texas	28.85	732.8	30.09	764.3	45	7.2	83	w.	10	4.5		0	0			0	0	clear	
Jacksonville, Florida	30.12	765.0	30.17	766.3	67	19.4	90	se.	9	4.0		1 cs	9 s		se.	0	0	cloudy	
Keokuk, Iowa	29.25	742.9	29.95	760.7	35.5	1.9	89	w.	4	1.8		5 k	0	w.		0.13	3.3	fair	
Key West, Florida	30.13	765.3	30.16	766.1	73.0	22.8	71	se.	9	4.0		0	3 k;s		se.	0	0	clear	
Kittyhawk, North Carolina	30.16	766.1	30.18	766.6	47	8.3	100	s.	4	1.8			10 s			0	0	cloudy	
Knoxville, Tennessee	28.90	734.0	29.98	761.5	46.4	8.0	100	e.	8	3.6			10 n			1.97	50.0	light rain	
La Crosse, Wisconsin	29.07	738.4	29.91	759.7	31	— 0.6	68	w	4	1.8			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.29	667.8	30.32	770.1	24.5	— 4.2	86	calm	0	0		0	0			0.02	0.5	clear	
Leavenworth, Kansas	29.14	740.1	30.10	764.5	33	0.6	78	calm	0	0		0	0			0.01	0.3	clear	
Lewiston, Idaho	29.56	750.8	30.42	772.7	22.8	— 5.1	67	e.	3	1.3		0	0			0.01	0.3	clear	
Little Rock, Arkansas	29.71	754.6	30.04	763.0	43	6.1	93	calm	0	0			10 s			0.06	1.5	cloudy	
Los Angeles, California	29.90	759.4	30.30	769.6	37.2	2.9	82	s.	10	4.5		0	0			0	0	clear	
Louisville, Kentucky	29.35	745.5	29.94	760.5	45.0	7.2	68	s.	1	0.4			fg.		calm	0.06	1.5	dense fog	
Lynchburg, Virginia	29.37	746.0	30.09	764.3	44.0	6.7	88	sw.	4	1.8			10s;fg			0.86	21.8	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	28.81	731.8	29.90	759.4	31	— 0.6	78	sw.	5	2.2			10 s		calm	inap.	inap.	cloudy	
Marquette, Michigan	29.04	737.6	29.82	757.4	28	— 2.2	77	w.	2	0.9			10 s		w.	0	0	cloudy	
Mason, Texas	28.43	722.1	30.17	766.3	47.2	8.4	71	w.	18	8.0		0	0			0	0	clear	
Memphis, Tennessee	29.72	754.9	30.08	764.0	43	6.1	93	calm	0	0			10 s			0.76	19.3	cloudy	
Milwaukee, Wisconsin	29.09	738.9	29.89	759.2	38	3.3	89	s.	3	1.3			10s;fg			0.01	0.3	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.99	761.7	30.03	762.7	67.2	19.6	100	sw.	4	1.8	.....	.....	10 s	.....	sw.	0.03	c.8	cloudy	
Montgomery, Alabama	29.78	756.4	30.02	762.5	64	17.8	93	s.	6	2.7	.....	.....	10 s	.....	s.	0	0	cloudy	
Moorhead, Minnesota	29.22	742.2	30.33	770.4	—10	—23.3	100	n.	22	9.8	.....	.....	10 s	.....	.....	0.04	1.0	cloudy	
Morgantown, W. Virginia	28.93	734.8	29.99	761.7	40.5	4.7	89	calm	0	0	.....	.....	10 n	.....	.....	0.04	1.0	light rain	
Mt. Washington, N. H.	23.62	599.9	30.25	768.3	15.0	— 9.4	91	nw.	42	18.8	.....	.....	10 s	.....	nw.	0.14	3.6	cloudy	
Nashville, Tennessee	29.44	747.8	30.00	762.0	45.9	7.7	96	s.	2	0.9	.....	.....	10n;fg	.....	.....	2.14	54.4	light rain	
New Haven, Connecticut	30.04	763.0	30.16	766.1	29	— 1.7	82	calm	0	0	.....	10 c	sk	sw.	.....	0	0	cloudy	
New London, Connecticut	30.14	765.5	30.19	766.8	33	0.6	78	n.	1	0.4	.....	.....	10 s	.....	calm	inap.	inap.	cloudy	
New Orleans, Louisiana	29.96	761.0	30.02	762.5	69.0	20.6	93	sw.	10	4.5	.....	0	9 s	.....	sw.	0	0	cloudy	
Newport, Rhode Island	30.13	765.3	30.18	766.6	38.3	3.5	84	n.	2	0.9	.....	.....	10 s	.....	w.	0.09	2.3	cloudy	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd.	30.14	765.5	30.18	766.6	37.8	3.2	82	calm	0	0	.....	.....	10 s	.....	.....	0.14	3.6	cloudy	
New York, New York	29.99	761.7	30.18	766.6	36	2.2	89	e.	2	0.9	.....	.....	10s;fg	.....	.....	inap.	inap.	cloudy	
Norfolk, Virginia	30.13	765.3	30.16	766.1	46	7.8	93	se.	4	1.8	.....	.....	10s;fg	.....	.....	0.04	1.0	cloudy	
North Platte, Nebraska	27.14	689.3	30.26	768.6	17.6	— 8.0	84	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Olympia, Washington T'y	30.07	763.8	30.11	764.8	35.0	1.7	89	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	
Omaha, Nebraska	28.83	732.3	30.10	764.5	32.3	0.2	74	nw.	10	4.5	.....	0	0	.....	.....	0	0	clear	
Ogglaamie, Pt. Barrow, Alas.	30.09	764.3	30.11	764.8	1.0	—17.2	100	sse.	24	10.7	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	
Oswego, New York	29.70	754.4	30.14	763.0	34.0	1.1	78	se.	7	3.1	.....	.....	10 n	.....	.....	inap.	inap.	light snow	
Palestine, Texas	29.50	749.3	30.00	763.5	47	8.3	100	nw.	.....	.....	.....	.....	10 s	.....	.....	0	0	threatening.	
Pensacola, Florida	30.02	762.5	30.04	763.0	67.3	19.6	97	s.	12	5.4	.....	.....	10 s	.....	s.	0	0	cloudy	
Philadelphia, Pa.	30.10	764.5	30.16	766.1	35	1.7	100	e.	4	1.8	.....	.....	10 n	.....	.....	0.10	2.5	light rain	
Pike's Peak, Colorado	17.46	443.5	30.16	766.1	— 1	—18.3	70	nw.	32	14.3	.....	0	0	.....	.....	0	0	clear	
Pioche, Nevada	24.21	614.9	30.41	772.4	18	— 7.8	61	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.14	740.1	29.99	761.7	40.0	4.4	86	e.	2	0.9	.....	.....	10n;fg	.....	.....	0.02	0.5	light rain	
Port Eads, Louisiana	30.06	763.5	30.07	763.8	61.0	16.1	100	s.	4	1.8	.....	.....	fg	.....	calm	0.01	0.3	dense fog	
Port Huron, Michigan	29.20	741.7	29.93	760.2	33.0	0.6	100	s.	7	3.1	.....	.....	10 n	.....	calm	0.14	3.6	light snow.	
Portland, Maine	30.10	764.5	30.16	766.1	28	— 2.2	88	n.	6	2.7	.....	.....	10 s	.....	nw.	0.17	4.3	cloudy	
Portland, Oregon	30.12	765.0	30.19	766.8	37.2	2.9	82	calm	0	0	.....	7 cs	0	calm	.....	0	0	fair	
Portsmouth, N. Carolina	.....	.....	.....	.....	52	11.1	72	se.	1	0.4	.....	0	5 ks	.....	se.	0	0	fair	
Prescott, Arizona	24.91	632.7	30.29	769.4	13	—10.6	38	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Punta Rassa, Florida	30.13	765.3	30.14	765.5	68.5	20.3	87	se.	9	4.0	.....	hz	0	.....	.....	0	0	clear	
Red Bluff, California	29.93	760.2	30.31	769.9	32.5	0.3	90	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Rio Grande City, Texas	29.95	760.7	30.20	767.1	52	11.1	93	nw.	5	2.2	.....	4 c	0	calm	.....	0.02	0.5	fair	
Rochester, New York	29.29	744.0	30.00	762.0	35	1.7	89	se.	5	2.2	.....	.....	10s;fg	.....	calm	0.02	0.5	cloudy	
Roseburg, Oregon	29.63	752.6	30.20	767.1	31.4	— 0.3	90	calm	0	0	.....	0	1 s	.....	.....	0	0	clear	
Sacramento, California	30.21	767.3	30.29	769.4	38.0	3.3	82	e.	4	1.8	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.36	745.7	30.00	762.0	36.0	2.2	89	sw.	7	3.1	.....	.....	10 n	.....	.....	inap.	inap.	light rain	
St. Paul, Minnesota	29.03	737.3	29.98	761.5	24.0	— 4.4	88	nw.	15	6.7	.....	0	4 ks	.....	nw.	0	0	fair	
St. Vincent, Minnesota	29.44	747.8	30.42	772.7	—26	—32.2	100	n.	19	8.5	.....	0	0	.....	.....	0.08	2.0	clear	
Salt Lake City, Utah	25.85	656.6	30.42	772.7	16	— 8.9	54	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	
San Antonio, Texas	29.36	745.7	30.09	764.3	49.1	9.5	100	calm	0	0	.....	.....	fg	.....	.....	0.03	0.8	dense fog	
San Diego, California	30.15	765.8	30.22	767.6	43.0	6.1	71	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Sandusky, Ohio	29.22	742.2	29.94	760.5	39	3.9	89	s.	6	2.7	.....	.....	10 s	.....	.....	0.08	2.0	cloudy	
Sandy Hook, New Jersey	30.13	765.3	30.17	766.3	37.0	2.8	89	se.	1	0.4	.....	.....	10 n	.....	calm	0.01	0.3	light rain	
San Francisco, California	30.21	767.3	30.28	769.1	44	6.7	83	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Santa Fé, New Mexico	23.27	591.0	30.28	769.1	24.8	— 4.0	59	nw.	12	5.4	.....	0	0	.....	.....	inap.	inap.	clear	
Savannah, Georgia	30.05	763.3	30.15	765.8	62	16.7	93	s.	4	1.8	.....	.....	fg	.....	.....	0.01	0.3	dense fog	
Shreveport, Louisiana	29.86	758.4	30.11	764.8	45	7.2	100	nw.	3	1.3	.....	.....	10 s	.....	nw.	0.36	9.1	cloudy	
Silver City, New Mexico	24.36	618.7	30.22	767.6	27	— 2.8	61	nw.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Sitka, Alaska	30.08	764.0	30.15	765.8	33	0.6	78	n.	7	3.1	.....	0	0	.....	.....	0.37	9.4	clear	
Smithville, North Carolina	30.12	765.0	30.16	766.1	53	11.7	100	nw.	3	1.3	.....	.....	fg	.....	.....	0	0	dense fog	
Spokane Falls, Wash. Ter.	28.24	717.3	30.38	771.6	10	—12.2	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Springfield, Illinois	29.23	742.4	29.96	761.0	37.5	3.1	85	w.	8	3.6	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	
Springfield, Massachusetts	30.04	763.0	30.18	766.6	25.1	— 3.8	80	calm	0	0	.....	.....	10s;fg	.....	.....	inap.	inap.	cloudy	
Springfield, Mo.	28.55	725.2	30.13	765.3	39	3.9	89	nw.	7	3.1	.....	.....	10 n	.....	.....	inap.	inap.	light rain	
Stockton, Texas	27.08	687.8	30.22	767.6	36.3	2.4	100	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Thatcher's Island, Mass.	30.22	767.6	30.28	769.1	35.0	1.7	79	w.	4	1.8	.....	.....	10 s	.....	w.	0.04	1.0	cloudy	
Toledo, Ohio	29.20	741.7	29.94	760.5	39	3.9	89	s.	6	2.7	.....	.....	10 n	.....	.....	0.02	0.5	light rain	
Tucson, Arizona	27.78	705.6	30.28	769.1	35	1.7	89	calm	0	0	.....	0	0	.....	.....	0.27	6.9	clear	
Umatilla, Oregon	29.93	760.2	30.32	770.1	31.0	— 0.6	88	se.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.78	756.4	30.05	763.3	50	10.0	93	nw.	2	0.9	.....	.....	10 s	.....	calm	2.25	57.1	cloudy	
Visalia, California	29.86	758.4	30.20	768.6	33	0.6	68	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Washington, D. C.	30.02	762.5	30.14	765.5	38	3.3	100	e.	2	0.9	.....	.....	10n;fg	.....	.....	0.46	11.7	heavy rain	
West Los Animas, Colorado	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wickenburg, Arizona	.....	.....	.....	.....	32	0.0	88	calm	.....	.....	0	0	0	.....	.....	0	0	clear	
Williamsport, Pa.	29.46	748.3	30.09	764.3	34	1.1	81	e.	3	1.3	.....	.....	10 s	.....	.....	inap.	inap.	threatening.	
Wilmington, N. Carolina	30.11	764.8	30.17	766.3	55	12.8	93	calm	0	0	.....	.....	fg	.....	calm	inap.	inap.	dense fog	
Winnemucca, Nevada	25.81	655.6	30.35	770.9	10	—12.2	61	ne.	10	4.5	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass.	30.13	765.3	30.17	766.3	38	3.3	82	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	
Yankton, Dakota	28.82	732.0	30.24	768.1	14	—10.0	64	nw.	22	9.8	.....	.....	10 s	.....	s.	0	0	cloudy	
Yuma, Arizona	30.14	765.5	30.29	769.4	39.3	4.1	85	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.03	559.6	.....	.....	47.5	8.6	71	calm	0	0	.....	0	2 s	.....	.....	0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.04	763.0	30.05	763.3	74	23.3	85	e.	.....	.....	.....	5 ck	2 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.92	760.0	29.94	760.5	78	25.6	86	calm	0	0	.....	2 ck	6 ks	sw.	calm	0.05	1.3	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.00	762.0	30.02	762.5	75	23.9	87	se.	.....	.....	.....	0	5 ks	.....	s.	0	0	.....	B. Bigar.
Havana, Cuba, W. I.	30.15	765.8	30.20	767.1	72	22.2	84	calm	0	0	.....	0	5 ks	.....	calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.10	764.5	30.11	764.8	69.8	21.0	84	n.	1	0.4	.....	0	5 s	.....	e.	0	0	fair	Robert Johnstone
Navassa, W. I.	29.98	761.5	30.06	763.5	76	24.4	67	ne.	10	4.5	.....	5 ck	5 s	se.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	76	24.4	91	e.	.....	.....	2	6 k	8 ps	e.	.....	0.610	15.5	cloudy	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mba	29.41	747.0	29.96	761.0	80	26.7	89	calm	.....	.....	0	7 ck	3 ks	se.	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	74	23.3	92	ne.	.....	.....	3	0	7 ks	.....	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.11	764.8	30.14	765.5	74	23.3	72	n.	2.4	1.1	.....	1 ck	0	.....	.....	0	0	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.15	765.8	30.20	767.1	—45.0	—42.8	.....	nw.	14	6.3	.....	3 k	4 s	nw.	nw.	0.05	1.3	cloudy	J. Fortescue & W. Wood

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 20° 05′, E. 110° 18′	30.19	766.8	67	19.4		ne.			1-2		0							blue sky	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India	29.93	760.2	79.5	26.4	84	ne.			1		7							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.42	772.7	58	14.4	76	calm			0		3							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 5° 50′, E. 87° 20′	29.91	759.7	81	27.2	87	ne.			4		4	n.				4	nne.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.83	757.7	78.5	25.8	67	s.			2-3		1	calm						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.94	760.5	69	20.6	95	sse.			1		9	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.45	773.4	42	5.6	74	e.			1		10	nne.						overcast	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.42	772.7	55	12.8		ene.			4		4	ene.				1	wsw.	raining	Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, N. 32° 13′, E. 119° 27′	30.21	767.3	48.5	9.2	92	se.			2		0							blue sky	Capt. S. Long.
H. M. S. Diamond, Tristan, D'Achina, S. Atlan	30.07	763.8				ssw.			1		8					4	ssw.	d. clouds.	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.27	768.8	64	17.8	94	calm			0		2							d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 23° 41′, W. 80° 27′	30.18	766.6	74.5	23.6	98	ese.			3		8	ese.				2	se.	showery	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 19′, W. 59° 58′	29.54	750.3	54	12.2	86	ene.			2-3		10					2	ene.	overcast	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.94	760.5	84	28.9		ese.			1-2		5							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald, S. 43° 20′, E. 147° 45′	29.82	757.4	60	15.6	88	n.			2		5					4	s.	d. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	29.92	760.0	44	6.7		nw.			1		3							d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, S. 18° 44′, W. 28° 50′	30.11	764.8	77	25.0	95	e.			3		4	ese.				2	ene.	d. clouds	Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.89	759.2	78.5	25.8	75	sse.			5		0					3	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.19	766.8	44	6.7	84	calm			0		5							misty	Capt. R. F. Moskyn.
H. M. S. Gannet, Coquimbo, Chili	29.92	760.0	63	17.2	88	ne.			2		10							d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 52° 12′, W. 60° 47′	29.51	749.5	55	12.8	80	ne.			6		10							squally	Capt. L. Jones.
H. M. S. Iris, Ayas Bay, Asiatic Turkey	30.20	767.1	50	10.0	45	nne.			4		1					2	nne.	blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.26	768.6	63	17.2	83	e.			1		3	e.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark, S. 34° 14′, E. 156° 20′	29.73	755.1	70.3	21.3	98	se.			4		7					2	se.	d. clouds	Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. B. Ayler.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.19	766.8	63.5	17.5	83	e.			1		2							misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 15° 20′, E. 55° 30′	30.04	763.0	75	23.9	90	ne.			1		2	ne.				2	ne.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, Grenada, West Indies	29.99	761.7	76	24.4	86	calm			0		5	ne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 2° 09′, E. 67° 55′	29.91	759.7	82	27.8	78	nne.			3		3	n.				2	n.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 10° 32′, W. 11° 41′	29.92	760.0	74	23.3	100	sse.			3		8					2	se.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, Bushire, Persia	30.12	765.0	58.1	14.5		n.			2-3									showery	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.14	765.5	39	3.9	81	nnw.			2		2							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.12	765.0	79.5	26.4	78	nne.			2		7	nne.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 13° 31′, E 49° 10′	30.08	764.0	80	26.7	91	e.			2		3	e.				sm'h		d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 27′, W. 88° 12′	30.02	762.5	78	25.6	84	ene.			2		6							d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, Off Panama, Panama	29.92	760.0	74	23.3	90	nnw.			2		1	calm						blue sky	Capt. A. H. Markham.
H. M. S. Tyne, N. 11° 38′, E. 55° 50′	30.03	762.7	77	25.0	95	ene.			2		1	ene.				2	ene.	blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.08	764.0	74	23.3		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark																			Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Brava, Cape Verd Ids.	30.00	762.1	76.1	24.5	80	calm			0		9		sw.					d. clouds	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallho.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stocknolm.																			
H. M. Corvette Balder, N. 11° 53′, W. 65° 10′	30.03	762.7	77.0	25.0	97	ene.			5		1							blue sky	Capt. A. L. Broberg.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
N. Yard, Pensacola, Fla	30.03	762.7	69	20.6	85	sse.	7	3.1			8		se.	0	0			fair	
N. Yard, Portsmouth, N. H.	30.18	766.6	23	— 5.0		w.	7	3.1			10		nw.	0	0			cloudy	
Naval Hospital Yokohama, Japan	29.78	756.4	41.5	5.3	49	nnw.			1		0			sli't	sli't			clear	
Adams, Callao, Peru	29.72	754.9	70	21.1	95	sse.			1		8					gr'd		cloudy	
Alaska, Valparaiso, Chili	29.89	759.2	61	16.1	94	calm			0		10			0	0	sm'h		cloudy	
Alert, N. 11° 13′, E. 109° 08′*	29.88	758.9	77	25.0	82	nnw.			5		2		calm	0	0	sm'h	nnw.	clear	
Alliance, Boston, Mass.*†	30.18	766.6	37	2.8	80	wnw.			1		10			0	0			foggy	
Ashuelot, Tientsin, China	30.13	765.3	34	1.1	100	ne.			1		10							overcast	
Brooklyn, S. 27° 02′, W. 44° 59′	30.02	762.5	73	22.8	?	ene.	11	4.9			8		ene.	0	0	mod.	ene.	fair	
Colorado, New York, N. Y	30.27	768.8	35	1.7	90	calm	0	0			10			sli't	sli't			rain & fog	
Essex, N. 34° 32′, W. 46° 50′	30.20	767.1	65	18.3	89	e.			2		2		e.			long	ne.	clear	
Franklin, Norfolk, Va	30.18	766.6	47	8.3	85	se	5	2.2			10			0.03	0.8			cloudy	
Galena, N. 19° 35′, W. 23° 11′	30.09	764.3	71	21.7	90	ene.			1		0					long	ne.	clear	
Independence, N. Yard, Mare I'd, Cal	30.11	764.8	40	4.4	73	calm	0	0			2			0	0			fair	
Kearsarge, New Orleans, La	30.01	762.2	69	20.6	95	ssw.			3		10							cloudy	
Lackawanna, Valparaiso, Chili†	30.03	762.7	62	16.7	?	calm			0		10							cloudy	
Lancaster, Leghorn, Italy	30.42	772.7	55	12.8	74	sse.			1		0							hazy	
Michigan, Erie, Pa	29.89	759.2	39	3.9	73	sw.			2		10							cloudy	
Minnesota, Newport, R. I	30.17	766.3	37	2.8	100	calm	0	0			10		sw.			sm'h		misty	
Monocacy, Yokohama, Japan	29.94	760.5	45	7.2	76	wnw.			1		0							clear	
Nipsic, Naples, Italy	30.46	773.7	60	15.6	50	n.			1		2					sm'h		clear	
Onward, Callao, Peru†	30.05	763.3	69	20.6	95	sse.			1		10		nnw.			long	w.	cloudy	
Palos, Hong Kong, China	30.22	767.6	62	16.7	88	e.			1		0							clear	
Passaic, Washington, D. C	30.15	765.8	36	2.2		ne.			1		10		calm					rainy	
Pensacola, Valparaiso, Chili	29.97	761.2	60	15.6	94	ene.	3	1.3			10			0	0			foggy	
Powhatan, Boston, Mass	30.16	766.1	32	0.0	90	calm			0		8		sw					cloudy	
Quinnebaug, Villafranca, France	30.46	773.7	62	16.7	61	e.			1		0					sm'h		clear	
Ranger, N. 19° 06′, W. 104° 23′*	29.90	759.4	79	26.1	74	ne.			2		0			0	0	sm'h		clear	
Richmond, S. 8° 06′, W. 169° 28′*	29.56	750.8	79	26.1	95	wnw.			4		10			0.90	22.9	mod.	w.	rainy	
Shenandoah, Montevideo, Uruguay*	29.94	760.5	75	23.9	77	nne.			4		5					sm'h		fair	
St. Louis, League Island, Pa	30.40	772.1	33	0.6	100	e.	1	0.4			10			0.06	1.5			raining	
Swatara, Kobe, Japan*	30.02	762.5	47	8.3	70	nnw.			3		0					sm'h		clear	
Tennessee, New York, N. Y	30.15	765.8	35	1.7	?	calm	0	0			10			0	0			foggy	
Vandalia, Port Spain, Trinidad, W.I.	30.00	762.0	77	25.0	82	se.			1		2		calm					fair	
Wabash, Boston, Mass	30.14	765.5	32	0.0	90	calm	0	0			10		w.	0	0			misty	
Wachusetts, N. 45° 33′, W. 124° 40′	30.04	763.0	44	6.7	84	ese.			5		10		ese.	0	0	long	wsw.	overcast	
Wyoming, Port Royal, S. C	30.13	765.3	59	15.0	100	sse.	6	2.7			10		calm	0	0			foggy	
Yantic, N. 15° 50′, W. 76° 59′*	30.00	762.0	75	23.9	81	n.			1		2					mod.	ne.	hazy	

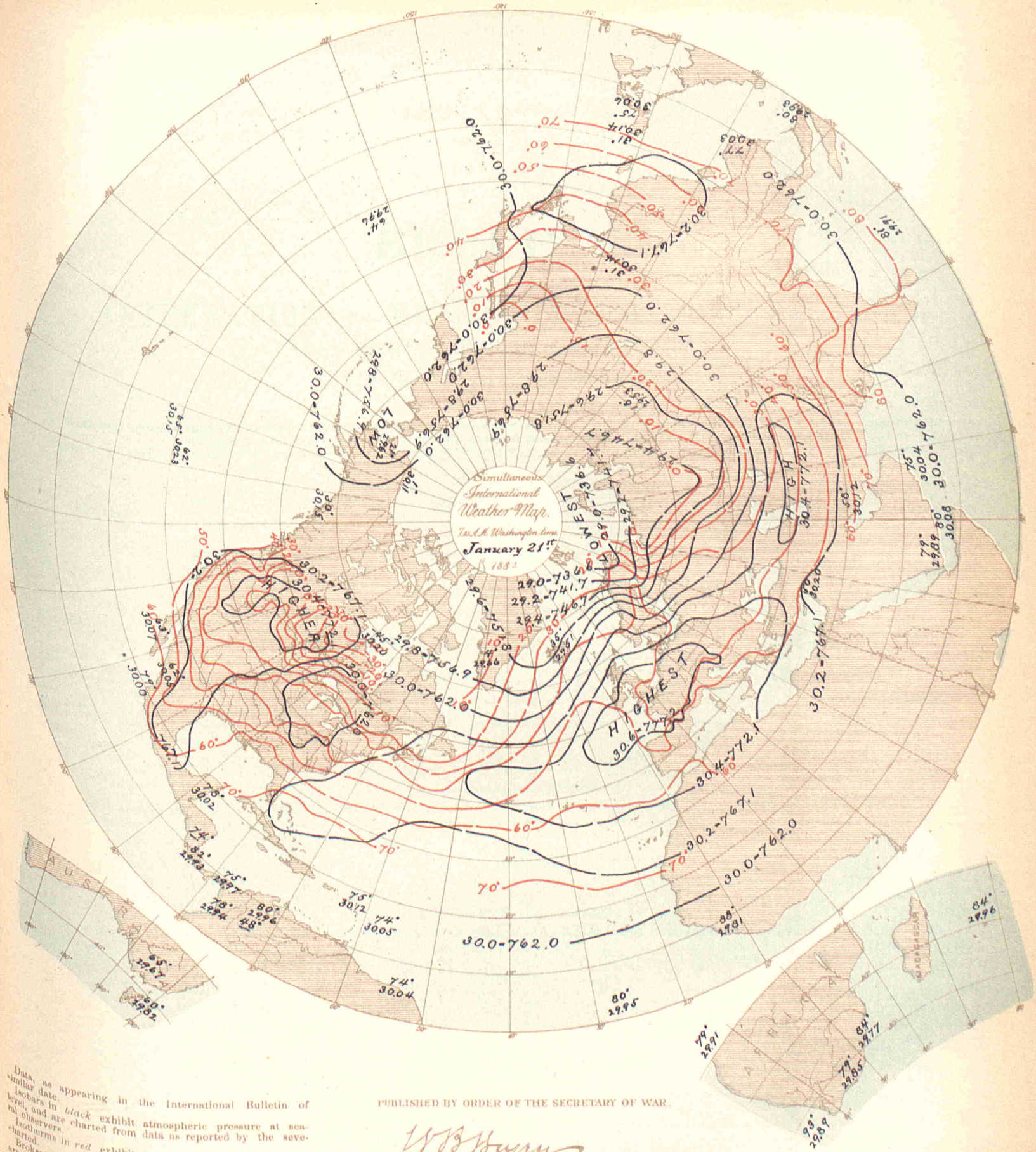
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 54° 30′, W. 18° 47′	30.64	778.2	51	10.6	100	s.	6	.....	10	.....	ssw	1 h'r	1 h'r	3-4	s;sw.	showery	C. Gapon.
S. S. Polynesian, Capt. Robt. Brown, Halifax, N. S *.	30.07	763.8	25	—3.9	.....	s.	1	.....	9	.....	sw.	12 h'r	12 h'r	.....	.....	cloudy	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. Portland, Oregon*.	30.14	765.5	24	—4.4	.....	n.	2	.....	10	.....	.....	.....	.....	.....	.....	fair	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, N. 55° 21′, W. 8° 18*	30.55	776.0	48	8.9	.....	sw.	4	.....	.....	.....	w.	0	0	sm'h	sw.	cloudy	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	30.01	762.2	33	0.6	100	nw.	2	.....	10	.....	se.	.....	.....	.....	.....	rainy	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. W. Walker, 2d Off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†.	30.72	780.3	46	7.8	100	wnw.	5	.....	10	.....	w.	.....	.....	.....	.....	hazy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†.	30.67	779.0	54	12.2	93	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown, N. 44° 15′, W. 47° 44′*†	30.50	774.7	42	5.6	.....	ne.	5	.....	10	.....	ne.	.....	.....	mod.	ne.	overcast	J. Brown.
Utopia, Capt. A. McRitchie,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 18° 14′, W. 72° 34*†	30.19	766.8	68	20.0	84	n.	6	.....	3	.....	calm	0	0	long	se.	fine	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Savanilla, U. S. C*.	29.97	761.2	77	25.0	.....	ne.	6	.....	0	.....	.....	0	0	.....	.....	very fine	J. Sandberg.
S. S. Arden, Capt. R. de Echevarrieta, N. 37° 05′, W. 73° 30′	.....	.....	36	2.2	.....	calm	0	.....	.....	.....	.....	0	0	sm'h	.....	cloudy	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Fisher & Welden.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russel, N. 38° 29′, W. 16° 49′	30.52	775.2	55.5	13.1	70	e.	4	.....	3	.....	.....	.....	.....	.....	.....	d clouds	.....
British Merchant, Capt. E. J. Molony, N. 15° 04′, E. 85° 39′	30.00	762.0	76.5	24.7	72	ne.	3	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
Caldew, Capt. W. Peterson, S. 33° 24′, W. 83° 12′	30.20	767.1	65.5	18.6	.....	sse.	3	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Cipero, Capt. W. N. Lalley, N. 32° 56′, W. 30° 27′	30.35	770.9	66	18.9	78	ese.	3	.....	4	.....	.....	.....	.....	2	e.	d. clouds	.....
S. City of Agra, Capt. Thos. Young, N. 6° 06′, W. 28° 52′	29.93	760.2	80.0	26.7	.....	nne.	4	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Bk. Glaramara, Capt. R. Morton, N. 29° 24′, W. 38° 10′	30.08	764.0	67.5	19.7	90	e.	5	.....	9	.....	.....	.....	.....	.....	.....	misty	.....
Glencairn, Capt. R. S. Tannock, S 43° 15′, E. 40° 17′	29.59	751.6	52	11.1	100	w.	6	.....	10	.....	.....	.....	.....	.....	.....	drizzling	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. G. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 21° 25′, W. 68° 30′	30.00	762.0	78.5	25.8	90	se.	4	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, S. 26° 29′, W. 38° 39′	30.07	763.8	75.7	24.3	85	ese.	5	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Minho, Capt. J. Lawson, S. 11° 19′, W. 35° 45′	29.97	761.2	81.6	27.6	78	e.	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. John Smith, N. 0° 41′, W. 27° 18′	29.95	760.7	79.7	26.5	95	ne.	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry, S. 44° 00′, E. 26° 17′	29.47	748.5	50.2	10.1	93	w.	6	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Strathleven, Capt. C. W. Pearson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge N. 18° 56′, W. 39° 50′	30.02	762.5	74.3	23.5	90	ssw.	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO.																	
J. Birmingham, Agent, San Francisco.																	
S. S. Newbern, Capt. E. Y. Rogers, N. 23° 58′, W. 111° 22′†	30.07	763.8	63	17.2	83	ne.	3	.....	1	.....	nw.	0	0	small	ne.	clear	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman, N. 26° 40′, W. 79° 45′†*	30.33	770.4	76	24.4	.....	ese.	3-4	.....	10	.....	se.	0	0	gentle	se.	fair	B. J. Henry, 1st Off.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul, Havre, France	30.72	780.2	32.0	0.0	.....	ese.	1	.....	10	.....	ese.	0	0	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Servan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York.																	
S. S. Gellert, Capt. Kuhlewein,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. Froehlich, 3d Off.
S. S. Silesia, Capt. A. Albers, N. 41° 17′, W. 64° 24′*†	30.27	768.8	43.2	6.2	.....	e.	4	.....	10	.....	ese.	2½h'r	2½h'r	3	ese.	overcast	.....
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, S. 21° —′, W. 39° —′*†	30.21	767.3	82	27.8	.....	nnw.	1	.....	8	.....	nw.	2 h'r	2 h'r	light	ssw.	.....	J. Carroll

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 47° 06′, W. 46° 50′						nnw.	1		2		nw.	8 h'r	8h'r	light	nw.		E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.80	782.3				ssw.	1		8		sw.	0	0			cloudy	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, N. 30° 35′, W. 79° 55′*†	30.29	769.4	74	23.3		s.	2		10			rain	rain	small		cloudy	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips, N. 29° 45′, W. 74′ 15′†	30.36	771.1	69	20.6		sse.	2		10		s.	0	0	mod.	ese.	cloudy	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Alisa, Capt. J. W. Sanson Kingston, Jamaica, W. I†	30.10	764.5	77	25.0		wsw.	0–1									fair	
S. S. Bothnia, Capt. W. McMickan, N. 44° 49′, W. 48° 00′*	30.31	769.9	42	5.6		ne.	3							con.		cloudy	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Timmer-man																	
Campeche Roads, C. A..*†..... [holds	30.15	765.8	76	24.4		se.	4								se.	clear	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Maas, Capt. T. H. Bonjer, N. 49° 47′ W. 8° 47′*..	30.75	781.0	52	11.1		e.								sm'h		covered	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier,																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Hohenzollern, Capt. R. Sander, N. 46° 53′, W. 28° 07′*	30.40	772.1	50.9	10.5		s.	5		8		s.	0	0	mod.	ssw.	fair	G. H. Lose, 3d Off.
S. S. Main, Capt. Julius Barre, N. 40° 46′, W. 73° 00′*	30.14	765.5	44.0	6.7		se.	1–2		10		se.	light	light	light	se.	raining	
S. S. Mosel, Capt. J. Hesse,																	J. Hesse.
S. S. Nurnburg, Capt. A. Jaeger, N. 50° 03′, W. 4° 00′*	30.77	781.5	41.9	5.5		nne.	2		10			0	0	2	nne.	cloudy	Montz & Kohlenbeck.
S. S. Oder, Capt. Undeutsch, N. 49° 48′, W. 8° 24′*	30.79	782.1	46.4	8.0		calm.	0		5		e.	0	0	mod.	sw.	fine	
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany			37.4	3.0		wnw.	5		5			0	0			foggy	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal			44	6.7	84	n.	1		0			0	0			clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Yokohama, Japan†*	30.12	765.0	59	15.0	37	calm	0		0							clear	
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.21	767.3	64	17.8	73	ne.	2		0							fine	
OCEAN S. S CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.93	760.2				sw.	1		8		sw.					smoky	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, N. 35° 55′, W. 75° 00′†	30.27	768.8	56	13.3	80	calm	0		10		sw.	0	0	sm'h	se.	cloudy	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 48° 10′, W. 122° 46′†	30.07	763.8	40	4.4	63	e.	1		10		se.					cloudy	E. W. Holmes.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	L. Meyer.
S. S. Columbia, Capt. F. Bolles, Kalomat†	30.13	765.3	37	2.8	80	wnw.	2		8							foggy	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 44° 16′, W. 124° 03′†	30.13	765.3	47	8.3	85	s.	1		5		s.			light	nw.	clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, N. 36° 48′, W. 122° 20′†	30.20	767.1	49	9.4	77	nne.	1		0							clear	
S. S. G. W. Elder, Capt. H. G. Morse, N. 40° 54′, W. 124° 40′†	30.19	766.8	48	8.9		s	6		4?		sw.	0	0	light	sw.	cloudy.†	
S. S. Idaho, Capt. E. Alexander, N. 47° 19′, W. 124° 51′†	30.01	762.2	45	7.2	76	se.	7		10		se.			mod.	se.	cloudy	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 35° 09′, W. 120° 43′†	30.20	767.1	48	8.9	56	se.	3				se.	0	0	long	wsw.	fair	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, N. 34° 54′, W. 120° 50′†	30.34	770.6	48	8.9	78	ne.	1		0			0	0	sm'h		clear	T. Wallace.
S. S. State of California, Capt. G. Dabney, San Francisco, Cal†	30.23	767.8	42	5.6	91	calm	0		0			0	0			clear	
S. S. Victoria, Capt. H. M. Hayward, Nanaimo, Vancouver I'd†	30.18	766.5	37	2.8	80	calm	0		10							drizzling	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Fran-cisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. N. 30° 55′, W. 143° 54′	30.23	767.8	62	16.7	83	ene.	4		8		ene.			mod.	ne.	cloudy	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.77	756.1	74	23.3	85	calm	0		8			0	0			cloudy	W. H. Hawes, 2d Off
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 34° 50′, E. 142° 20′†	29.96	761 0	53	11.7	66	nnw.	7		5		nw.	0.1	3.	h'vy	nw.	fair	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn, N. 27° 41′, W. 145° 51′†	30.15	765.8	65	18.3	73	ne.	4		8		ne.	0	0	mod.	ese.	cloudy	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 30° 16′, E. 161° 16′†	29.96	761.0	64	17.8	67	w.	9		5		wnw.	10 h'r	10 h'r	high	wnw.	squally	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 80 33′, W. 84° 01′†	29.93	760.2	82	27.8	70	wnw.	3		1		calm	0	0	mod.	wsw.	clear	
S. S. Grenada, Capt. M. Connolly, Panama, Panama..†	29.87	758.7	75	23.9	90	nnw.	2		0			0	0			hazy	
S. S. South Carolina, Capt. W. J Russell, N. 36° 42′, W. 122° 24′*†	30.12	765.0	50	10.0	64	ne.	3		0			0	0	h'vy	nw.	hazy	
S. S. Zealandia, Capt. H. Webber, Sydney, N. S. W	29.97	761.2	72	22.2	?	wnw.	1		0							clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke N. 11° 30′, W. 60° 39′						nne.	3		2			0	0	mod.		clear	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 44° 20′, W. 43° 41′*†	30.43	772.9	44	6.7	?	n.	4		8		n.	12 h'r	light	mod.	w.	cloudy	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	30.73	780.5	38	3.3	80	calm	0					0	0			light fog	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, Antwerp, Belgium*†	30.98	786.9	40	4.4	?	ese.	1		5?		se.	0	0			cloudy?	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 40° 40′, W. 70° 32′*	30.02	762.5	42	5.6		sse.	3		10		ssw.	3 h'r	light	sm'h	s.	cloudy	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis																	
THINGVALLA LINE *Funch, Edye & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub Copenhagen, Denmark†	30.46	773.7	43.7	6.5		wnw.	1		10		wnw.	0	0			covered	J. T. Uiberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 42° 21′, W. 69° 10′*†	30.40	772.1	40	4.4		sw.	3		10		wsw.	0	0	sli't	s.	hazy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 40° 44′, W. 70° 32′*†	30.25	768.3	42	5.6		wsw.	2		8		wnw.	shr's	shr's	sm'h	ssw.	d. clouds	J. Moore. W. Thomas.
S. S. Britannic, Capt. H. H. Perry,																	
S. S. Celtic, Capt. B. Gleadell N. 50° 03′, W. 23° 53′*†	30.30	769.6	55	12.8	80	s.	5		10		s.	0	0	sm'h		cloudy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 51° 31′, W. 15° 00′*†	30.83	783.1	52	11.1		wsw.	4		5		sw.	0	0	sm'h	sw.	d. clouds	H. D. Jay, 4th Officer. H. Goulden, 4th Officer
S. S. Republic, Capt. P. J. Irving,																	
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 46° 20′ W. 26° 05′*	30.45	773.2	57	13.9		sw.	4		8			0	0	sm'h		cloudy	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 30° 16′, W. 87° 17′†	30.24	768.1	70	21.1	90	ssw.	2	0	5 k		s.	0	0	mod.	s.	fair	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona,																	
Bk. Alpha, Capt. Ole Grönn,																	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis N. 27° 48′, W. 67° 09′*†	30.32	770.1	73	22.8		ene.	1		0			0	0	mod	sse.	clear	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin S. 19° 02′ W. 33° 53′						var.					e.			light	ne.	fine	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.77	781.5				sse.	1				w.	0	0			cloudy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 6° 01′, W. 33° 46′†	30.00	762.0				se.	3		2		se.	0	0	sm'h	se.		
S. Enoch Train, Capt. H. D. Chapman. N. 50° 20′, W. 2° 15′*	30.75	781.0				e.	2		10		e.	0	0	sm'h		overcast	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 47° 26′, W. 20° 50′*	30.64	778.2				sse	3		2?		sse.	0	0	mod.	w.	cloudy?	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C.			43	6.1	83	nne.	1		10		calm			sm'h		rainy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 56° 43′, W. 67° 00′†	29.01	736.8	51	10.6		wnw.	3		10		wnw.	15 h'r	15 h'r	mod	e.	cloudy	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 51° 07′, W. 23° 57′			52	11.1		ssw.	6		10		ssw.	10 h'r	light	mod	sw.	raining	
Bk. Gamaliel, Capt. D. J. Anthony,																	
Bk. Geo. Booth, Capt. D. Williams																	D. Williams.
S. Hedwig, Capt. T. Minssen																	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 25° 17′, W. 28° 10′*	29.90	759.4				se.	3		2		sse.	0	0	h'vy	s.	fair	G. Kaswurm.
Bk. New York, Capt. J. F. Sorensen. N. 36° 12′, W. 10° 33′*†	30.50	774.7				e.	3				e.	0	0	long	e.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.38	771.6	55	12.8	68	nw.	1		0							clear	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly N. 23° 32′. W. 39° 50′*†	29.90	759.4				ssw.			0			0	0			clear	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 13° 40′, W. 25° 50′*	29.89	759.2	71.6	22.0	97	ne.	2		6		e.			sm'h			
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.46	773.7	60	15.6	88	ne.	5		2		se.	0	0			clear	J. Green.
Bg. Wanburn, Capt. I. W. Covert, S. 28° 50′, W. 23° 15′*†	30.23	767.8				s.	6		4		s.			mod.	s.		I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton. N. 29° 54′. W. 48° 25′*†	30.10	764.5				ne.											N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

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Chief Signal Officer. U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 22, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.35	770.8	62.6	17.0	80	w.			2		0			0	0	clear	Moiroud.
Algiers			30.39	771.9	56.8	13.8	67	s.			2		1			0	0	fair	Nicolas.
La Calle			30.41	772.5	63.0	17.2	27	n.			1		2			0	0	fair	Fonfréde.
Tunis			30.46	773.6															Jacques.
Sfax																			Gau.
Saida			30.45	773.4	51.8	11.0	50	sw.			3		1			inap.	inap.	fair	Perès.
Tebessa			30.45	773.5	51.4	10.8	41	sw.			1		6			0	0	cloudy	Derché.
Geriville					46.8	8.2	90	w.			2		0			0	0	clear	Louchamp.
Laghouat			30.53	775.5	42.8	6.0	70	e.			1		3			0	0	fair	Herbin.
Biskra			30.47	774.0	59.0	15.0	45	nw.			1		0					clear	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.65	753.1	29.74	755.4	66.5	19.2	87	sw.	8	3.6			1			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.07	763.7	30.65	778.5	36.7	2.6	83	sw.			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.82	757.5	30.64	778.2	34.2	1.2	92	w.	3.1	1.4			10			0.012	0.3		Dr. Wierzbiski.
Eperies	29.63	752.6	30.56	776.1	28.1	3.4	66	nw.			2		10		s.	0	0		Julius Mikolik.
Gratz	29.30	744.3	30.63	778.1	34.5	1.4	73	s.			1		10			0	0		Andreas Rospini.
Hermannstadt	29.02	737.1	30.54	775.6	34.9	1.6	89	nw.			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.21	741.8	30.64	778.2	31.3	— 0.4	94	e.			2		10			0	0	gloomy	The Staff.
Lemberg	29.51	749.6	30.56	776.1	35.2	1.8	88	nw.			2		10			0	0		Dr. T. Stanecki.
Pola	30.37	771.3	30.48	774.3	48.7	9.3	65	n.			1		0			0	0		I. R. Hydrographic Office.
Szathmar	30.04	763.0	30.52	775.1	37.2	2.9	71	nw.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.29	769.4	30.59	777.0	36.3	2.4	91	calm			0		10			0	0		Karl Stancel.
Trieste	30.42	772.6	30.52	775.2	48.2	9.0	41	e.			2		0			0	0		Rieder.
Vienna	29.93	760.2	30.69	779.6	33.8	1.0	75	nnw.			2		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.18	766.6	30.28	769.1	45.4	7.4	71	s.	6	2.7			7			0	0	d clouds	W. Boswell.
Armagh, Observatory	30.26	768.6	30.50	774.7	43.9	6.6	76	ssw.	14	6.3									S. Call.
Bidston, Liverpool Obs'y			30.56	776.2	46.1	7.8	79	wsw.	14	6.3			1					blue sky	John Hartnup
Bolton, Sharples	30.01	762.2	30.56	776.2	41.7	5.4	94	ssw.					10					foggy	Thomas Mackereth [A.S.
Bradford, Yorkshire																0	0		J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.97	761.2	30.00	762.0	74.0	23.3	95	ne.			2		8					overcast	Corpl. J. Surgenor.
Cardington			30.58	776.7	44.4	6.9	80	sw.			0.2		9					overcast	John McLaren.
Chatham, School M.E.	30.50	774.7	30.64	778.2	40.3	4.6	91	calm			0		10					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.36	771.1	30.59	777.0	43.2	6.2	75	ne.			1		10					foggy	The Staff.
Fort Napier, Natal	27.47	697.7	29.68	753.9	94.2	34.6	46	ne.			1		0					blue sky	Pvt. E. K. Annis. A. H. C.
Free Town, Sierra Leone	29.66	753.4	29.89	759.2	87.0	30.6	69	w.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.44	773.2	46	7.8	85	s.			3		10			0	0	overcast	J. O'Donnghue.
Gibraltar, Mediterranean	30.35	770.9	30.40	772.1	59.4	15.2	87	e.			4		7						Cpl. O. Baldwin
Glasgow, Observatory	30.15	765.8	30.35	770.9	44.5	6.9	79	sw.			4	5 c	0					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.44	773.2	30.62	777.7	41.0	5.0	83	se.			1		10					overcast	The Staff.
Guernsey	30.26	768.6	30.57	776.5	41.0	5.0	79	ene.			1		10					overcast	A. Collenette, F. M. S.
Kew, Observatory	30.58	776.7	30.62	777.7	41.1	5.1	87	w.	1	0.4			9					misty	The Staff.
Leicester, Museum	30.26	768.6	30.52	775.2	44.0	6.7	84	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.40	772.1	30.47	773.9	60.0	15.6	66	ne.			1		4					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.19	766.8	30.24	768.1	74.5	23.6	70	sw.			1		7					d. clouds	C. S. Duncombe.
Oscott, St.-Mary's College	30.05	763.3	30.60	777.2	42.3	5.7	85	s.			0-1		9					d. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.37	771.4	30.60	777.2	42.3	5.7	79	calm			0		7					foggy	The Staff.
Plymouth	30.51	774.9	30.58	776.7	43.2	6.2	79	e.			1		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.14	765.5	48.1	8.9	90	sw.	32	14.3			10					showery	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.34	770.6	30.41	772.4	39.4	4.1	90	nne.			2		10					drizzling	W. H. Lyne
Sheffield	30.28	769.1	30.57	776.5	47.0	8.3	81	sw.			1		7			0	0		W. F. Cooper.
Silloth Rectory	30.46	773.7	30.50	774.7	44.0	6.7	85	sw.			3		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.56	776.2	43.4	6.3	91	w.	9	4.0			10					overcast	Rev. S. J. Perry.
Stratfield Turgiss					41.4	5.2	85	n.			1		3					blue sky	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.49	774.4	30.55	775.0	45	7.2	67	e.			2		10					gloomy	W. Newcombe.
Valencia, Observatory	30.50	774.7	30.52	775.2	48.9	9.4	70	ssw.	18	8.0			10					gloomy	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.36	745.7	29.40	746.7	30	— 1.1	100	ne.	2	0.9			10 n			0.400	10.2	foggy	H. J. Cundall, C. E.
Chatham, N. B.*	29.44	747.8	29.50	749.3	24	— 4.4	100	ne.	13	5.8			10 n		ne.	0.21	5.3	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.44	747.8	29.46	748.3	22	— 5.6	100	ne.	40	17.9			10 n			0.30	7.6	heavy snow	J. McWilliams.
Fort Garry, Manitoba*	29.86	758.4	30.90	784.8	—35	—37.2	100	nw.	3	1.3		0	0			0	0	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.28	743.7	29.41	747.0	34	1.1	100	e.	3	1.3			fg.			0.283	7.2	foggy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.30	744.2	29.64	752.8	29	— 1.7	80	w.	19	8.5			10 k		nw.	0.28	7.1	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.22	742.2	29.43	747.5	26	— 3.3	88	w.	24	10.7			10 s			0.40	10.2	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.22	742.2	30.00	762.0	— 4	—20.0	65	n.	24	10.7		0	2 ks		n.	0.53	13.5	fair	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.28	743.7	30.03	762.7	18	— 7.8	98	w.	16	7.2			10 n			0.16	4.1	threatening	H. Morgan.
Port Stanley, Ontario	29.41	747.0	30.10	764.5	17	— 8.3	83	w.	36	16.1			10 n		w.	0.10	2.5	cloudy	M. Payne.
Quebec, Quebec*	28.98	736.1	29.31	744.5	26	— 3.3	100	e.			8		10 n		e.	0.35	8.9	heavy snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.28	743.7	29.78	756.4	5	—15.0	76	nw.	9	4.0			10 n			0.40	10.2	light snow	W. H. McIntyre.
Saugeen, Ontario*	29.28	743.7	30.06	763.5	11	—11.7	91	nw.	51	22.8			10 s			0.25	6.3	cloudy	K. Stewart.
St. Andrews, N. B.	29.28	743.7	29.33	745.0	33	0.6	98	ese.	3	1.3			10 n			0.40	10.2	light snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.31	744.5	29.37	746.0	33	0.6	96	n.	3	1.3			10 n			0.10	2.5	foggy	T. C. Hill, C. E.
Toronto, Ontario*	29.52	749.8	29.93	760.2	19	— 7.2	76	w.	33	14.8		0	1 ks		w.	0.16	4.1	clear	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.28	743.7	29.35	745.5	34	1.1	100	e.	3	1.3			fg			0.43	10.9	foggy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.77	756.1	30.03	762.7	27	— 2.8		se.	3	1.3			10					snowing	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.98	761.5	30.01	762.2	78.0	25.6	79	s.	6.4	2.9		0	3 k			0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.93	760.2	29.96	761.0	90.0	32.2	47	sse.	21	9.4		0	1			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow																			N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.01	762.2	30.03	762.8	52.2	11.2	85	sse.	5.6	2.5		0	0			0	0	clear	M. Marc Dechevrens, S. J.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.50	774.8	30.55	776.0	37.2	2.9	94	wnw.	18	8			10						Oversergent Fischer.
Fanöe	30.52	775.2	30.54	775.7	39.0	3.9	90	wsw.			4		8						Overloerer Lauridsen.
Godthaab, Greenland	29.43	747.5	29.47	748.6	2.3	—16.5	70	nne.			4		4						S. Kleinschmidt.
Stykkisholm, Iceland	29.56	750.7	29.60	751.8	23.7	—4.6		sw.			8		10					snowing	A. O. Thorlacius.
Thorshavn	29.90	759.4	29.93	760.3	38.1	3.4	52	nw.	25	11			2						Overloerer Bergh.
Vestervig	30.37	771.4	30.46	773.7	40.1	4.5	94	sw.			4		10						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.80	757.0	30.48	774.3	37.4	3	82	sse.			1	0	8 n			0	0	very cloudy	M. Labroue, Director.
Alençon, Normal School	30.04	762.9	30.59	776.9	31.6	—0.2	96	ne.			2		k			0	0		M. Nicot, Director.
Arras, Engineer School	30.34	770.6	30.62	777.7	29.7	—1.3	80	ese.			2		10			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.43	772.8	30.50	774.8	43.5	6.4	65	n.			1		c			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.97	761.2	30.56	776.3	32.4	0.2	88	se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.34	770.6	30.62	777.8	31.1	—0.5	96	e.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.50	774.6	33.8	1	78	ne.			1		fg		ne.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.21	767.2	30.49	774.4	25.9	—3.4	100	e.			1		10			0.012	0.3	foggy	M. Rayet, Director.
Bourges, Normal School	29.95	760.8	30.55	775.9	27.5	—2.5	100	nw.			1		fg		nw.	0	0	light fog	M. Postel, Director.
Brest, Naval Observatory	30.30	769.7	30.54	775.8	36.0	2.2	85	ne.			1		10		ne.	0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.50	774.7	30.58	776.7	31.6	—0.2	100	se.			1		fg			0	0	foggy	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.19	766.9	30.53	775.5	33.4	0.8	96	ese.			2		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.07	763.8	30.62	777.7	32.0	0		ene.			2		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.09	738.9	30.56	776.2	25.3	—3.7	95	n.			1		10			0	0	foggy	M. Alluard, Director.
Cluny, Normal School	29.67	753.6	30.58	776.7	28.4	—2	96	e.			1		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.69	754.1	30.61	777.5	32.9	0.5	96	e.			3		10	e.	e.	0	0	covered	Dr. Coulet, Director.
Gap, Normal School	27.85	707.4	30.45	773.3	48.2	9	30									0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.31	744.4	30.45	773.4	55.9	13.3	45	n.			1		5		s.	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.77	756.1	30.59	777.0	31.5	—0.3	100	sse.			1		kn		se.	0	0		M. Ablard, Director.
Guéret, Normal School	28.82	732.0	30.49	774.5	31.1	—0.5	92	se.			1		mist			0	0	misty	M. Rivoire, Director.
Lamballe, Normal School	30.28	769.1	30.58	776.6	31.6	—0.2	98	ne.			1		10		ne.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	29.87	758.6	30.45	773.3	47.1	8.4	67	w.			1	0	5 k			0	0	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	30.48	774.2	30.58	776.8	32.0	0.0	100	ene.			2		fg			0	0	foggy	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.47	748.5	30.60	777.3	27.7	—2.4	98	wsw.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.27	768.8	30.60	777.3	29.3	—1.5	98	e.			3		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.19	766.9	30.47	773.8	57.4	14.1	55	se.			0.1		5		se.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.05	636.2	29.89	759.2	40.6	4.8	35	e.	9.4	4.2			3	ne.					M. Cave, for Dr. Fines.
Montpellier, Normal School	30.35	770.8	30.46	773.6	48.2	9	58	nw.			2		5			0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	29.76	756.0	30.60	777.2	32.0	0	97	nne.			2		10 kn			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.41	772.5	30.58	776.6	29.3	—1.5	90	ene.			1-3		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.37	771.5	30.49	774.5	45.5	7.5	62	se.	5.6	2.5			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.40	543.5			28.6	—1.9		sse.			1		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.44	747.8	30.60	777.1	26.6	—3.0							fg			0	0	foggy	M. Tailleu.
Puy de Dôme Obs'y, Summit	25.44	646.1			41.2	5.1	31	w.			2		2			0	0	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.50	774.8	30.54	775.6	28.8	—1.8	83	e.			2		10			0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.38	771.6	30.61	777.5	28.0	—2.2	92	ne.			3		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	28.19	716.1	30.41	772.4	43.5	6.4	26	e.			1	1 c	0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.56	776.3	30.61	777.5	31.6	—0.2	96	e.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.40	772.1	30.56	776.1	32.0	0	91	e.			1		10			0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.42	772.7	30.59	776.9	30.2	—1.0	99	e.			1		10		ese.	0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.76	755.8	30.49	774.4	36.1	2.3	96	sse.			1		fg			0	0	light fog	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.07	763.8	30.56	776.3	28.0	—2.2	100	ne.			1					0	0		Dr. A. Bérigny, Director.
SUB-SERIES.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.76	756.0	30.64	778.2	33.8	1.0	80	se.			3		9 s			0.024	0.6		Prof. Dr. Hoh.
Berlin	30.46	773.6	30.64	778.3	33.6	0.9	92	nw.			2		10			0.004	0.1	light rain	Prof. Dr. Arndt.
Breslau	30.12	765.1	30.67	778.9	32.7	0.4	94	wnw.			2		10			0.031	0.8	light rain	Royal University Obs'y.
Carlsruhe	30.15	765.8	30.61	777.6	34.5	1.4	88	ne.			1		10		ne.	0	0		Albert Senz.
Cassel	29.87	758.8	30.59	777.0	33.8	1.0	85	ne.			1		8			0	0	foggy	Dr. H. Möhl.
Frankfort on the Main	30.27	768.8	30.66	778.8	33.1	0.6	80	e.			1		10			0.004	0.1		Physical Society.
Friedrichshafen	29.10	739.1	30.63	778.1	29.5	—1.4	74	ne.			2		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.55	776.0	30.65	778.4	35.1	1.7	98	w.			2		10			0.008	0.2	foggy	E. Preller.
Kiel	30.58	776.8	30.60	777.2	38.5	3.6	88	w.			2		10			0.012	0.3		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.23	767.9	30.68	779.3	34.2	1.2	92	ssw.			1		10			0	0		H. Leppig, Asst.
Magdeburg	30.47	773.8	30.67	779.0	33.8	1.0	96	w.			1		10 ks			0	0	foggy	Dr. Assmann.
Memel	30.45	773.4	30.50	774.6	35.2	1.8	88	nw.			2	1 c	0						Issermann.
Munich	28.70	728.9	30.60	777.1	28.2	—2.1	95	ne.			3		10			0	0		Central Station.
Neufahrwasser	30.52	775.1	30.53	775.5	41.2	5.1	74	w.			1		5			0	0		A. Lothes.
Neustadt, Palatinate	30.08	764.0	30.01	777.6	32.5	0.3	94	calm			0		10	nw.		0.020	0.5		Dicknether.
Stuttgart	29.60	751.9	30.55	776.0	33.8	1.0	81	e.			1		10			0	0	foggy	Prof. Dr. Schoder.
Wustrow	30.59	777.0	30.61	777.6	37.2	2.9	100	w.			2		10			0	0	dense fog	Profs. Brandes & Reimer.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.00	762.1	30.40	772.2	52.9	11.6		n.			1.0		8			0	0	covered	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.98	761.6	30.04	762 9	74.9	23.8	74	wsw.					4	wsw.		0	0	d. clouds	
Deesa	29.49	749.1	29.98	761.2	84.3	29.1	31	wsw.	6.0	2.7			4	w.		0	0	d clouds	
Bombay	29.90	759.4	29.94	760.3	81.6	27.6	73	nw.	8	3.6			0			0	0	blue sky	
Poona, Yarrowda	28.10	713.7	29.93	760.3	87.0	30.6	24	e.	7	3.1			0			0	0	blue sky	
Belgaum	27.41	696.2	29.93	760.2	81.6	27.6	19	ene.	11	4.9			0			0	0		
Lahore	29.30	744.3	30.08	763.9	66.1	18.9	66	ne.	0.8	0.4			8			0	0	d. clouds	
Roorkee	29.12	739.5	30.04	763.1	67.8	19.9	65	s.	1.1	0.5			7			0	0		
Agra	29.47	748.4	30.04	763.1	74.2	23.4	48	ne.	0.9	0.4			3		n.	0	0		
Nagpur	28.93	734.9	29.97	761.2	85.9	29.9	25	calm	2.7	1.2			0			0	0	blue sky	
Jubbulpore	28.67	728.2	30.07	763.7	68.0	20.0	45	calm	1.2	0.5			0			0	0	blue sky	
Lucknow	29.67	753.6	30.06	763.5	71.2	21.8	52	calm	0.6	0.3			0			0	0	blue sky	
Allahabad	29.71	754.6	30.03	762.8	67.3	19.6	67	calm	0.6	0.3			0			0	0	blue sky	
Patna	29.85	758.1	30.04	763.0	68.8	20.3	60	w.	1.1	0.5			0			0	0	blue sky	
Hazaribagh	27.97	710.4	30.01	762 2	73.0	22.8	33	w.	3.3	1.5			0			0	0	blue sky	
Cuttack	29.93	760.2	30.02	762.4	74.8	23.8	52	ene.					0			0	0	blue sky	
Calcutta, Alipore	29.99	761.6	30.01	762.2	69.5	20.8	66	wnw.	2.0	0.9			0			0	0	blue sky	
Dhubri	29.87	758.8	30.00	761.9	71.8	22.1	56	calm	3.8	1.7			0			0	0	blue sky	
Chittagong	29.92	760.0	30.01	762.3	69.6	20.9	70	w.	2.3	1.0			1			0	0	blue sky	
Sibsagar	29.69	754.2	30.04	763.1	62.7	17.1	80	ne.	2.3	1.0			0			0	0	blue sky	
Jeypore	28.57	725.7	30.03	762.8	75.9	24.4	36	ssw.	4.1	1.8			4	ssw.		0	0	d. clouds	
Zanzibar, Africa	29.83	757.7			86.1	30.1	70	ssw.	4.2	1.9		cs	2 fk		e.	0	0	d. clouds	
Trichinopoly	29.71	754.6			81.1	27.3	52	e.	2	0.9			0			0	0	blue sky	
Bellary	28.50	723.9			83.2	28.4	29	e.	3.9	1.7			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.09	764.2	30.51	775.0	48.0	8.9	51	e.	0.7	0.3			0			0	0		Prof. Giovanni Clodig.
Milan	30.00	762.1	30.56	776.1	42.8	6.0	76	sw.	0.7	0.3			8			0	0		Prof. Schiaparelli.
Padua	30.41	772.3	30.52	775.2	44.6	7.0	55	n.	4.9	2.2			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.58	751.4	30.54	775.7	41.4	5.2	67	ne.	0.7	0 3			1			0	0		Prof. P. F. Denza.
Genoa	30.29	769.3	30.48	774.3	55.9	13.3	61	calm	0	0			2			0	0		Prof. G. M. Garibaldi.
Mondovi	28.54	724.9	30.54	775.8	43.5	6.4	44	w.			2		1	s.		0	0		Prof. D. C. Bruno.
Pesaro	30.45	773.5	30.51	774.9	43.9	6.6	77	nw.	9.4	4.2			0			0	0		Prof. Luigi Guidi.
Florence	30.22	767.7	30.49	774.5	44.6	7.0	63	se.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.39	771.9	30.48	774.2	52.3	11.3	72	ne.	3.1	1.4			2			0	0		Prof. P. Monte.
Rome	30.27	768.9	30.45	773.5	51.6	10.9	53	n.	0.7	0.3			0			0	0		Prof. P. S. Ferrari.
Lecce	30.20	767.0	30.45	773.7	54.3	12.4	77	nnw.	7.4	3.3			7	nw.		0	0		Prof. C. de Giorgi.
Cosenza	29.52	749.9	30.45	773.3	54.0	12.2	76	sse.	1.8	0.8			0			0	0		Prof. D. Conti.
Cagliari	30.21	767.4	30.41	772.5	57.0	13.9	72	calm			0		0			0	0		Prof. A. Pacinotti.
Palermo	30.19	766.9	30.45	773.5	56.8	13.8	63	ne.	2.5	1.1			1			0	0		Prof. G. Ciaccintore.
Syracuse	30.51	774.9	30.56	776.1	55.0	12.8	67	sw.	6.9	3.1			2	ne.		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.88	758.9	30.41	772.4	55.4	13.0	73	se.	0.7	0.3			1	n.		0	0		Prof. T. Brioschi.
Stelvio	22.44	570.0			27.3	— 2.6	40	s.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.50	571.4			30.7	— 0.7	21	e.			2		0			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.07	763.8	30.10	764.5	35.1	1.7	73	wnw.	3.8	1.7			10ks;s			0	0	covered	
Hakodate	30.08	764.0	30.09	764.3	30.8	— 0.7	68	n.	9.0	4.0			6		n.	0	0	fair	
Hiroshima, I. M. Obs'y	30.20	767.1	30.22	767.6	37.5	3.1	85	nne.	8.6	3.8		0	0			0	0	clear	K. Sasaki.
Kanazawa	30.15	765.8	30.26	768.6	36.0	2.2	84					ck	3 s					fair	S. Endo.
Kioto	30.07	763.8	30.26	768.6	33.3	0.7	83	nnw.	1.1	0.5		0	0			0	0	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.03	762.7	30.24	768.1	42.6	5.9	89	se.	0.5	0.2		0	0			0	0	clear	S. Takehayashi.
Niigata	30.16	766.0	30.19	766.8	42.2	5.7	65	wnw.	9.8	4.4		10 ck	0			0.005	0.1	cloudy	
Nobiru	30.08	764.0	30.10	764.5	37.9	3.3	85	n.	3.9	1.7			10 s			0	0	cloudy	H. Midzushina.
Sapporo					25.0	— 3.9	74	calm	0	0			10			0	0	covered	
Tokei Obs'y, Yeddo	30.05	763 3	30.12	765.0	40.6	4.8	59	nw.	10.2	4.6		0	0			0	0	clear	The Staff.
Wakayama	30.19	766.8	30.25	768.3	36.3	2.4	80	nne.	2.9	1.3		0	0			0	0	clear	Y. Kuwamnea.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.76	755.9	29.95	760.7	82.0	27.8	65	e.	16.0	7.2		1 cs	4 k;ks		ese.	0.33	8.4	fair	Oliver & Figot.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.77	603.8	29.99	761.8	50.0	10.0	89	ne.	5.6	2.5		0	1			0	0	clear	Vicente Fernandez.
Leon	24.53	623.0	30.33	770.3	52.2	11.2	84	n.			1	1 ck	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.76	756.0	30.03	762.7	61.5	16.3	94	nnw.			3	0	0			0	0	fine	F. Quijano, C. E.
Mexico, Central Obs'y	23.22	589.8	30.44	773.3	44.6	7.0	80	calm	0	0		0	0			0	0		The Staff.
Morelia	24.35	618.4	30.60	777.3	49.3	9.6	77	sse.			3	0	0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	24.05	610.8	30.11	764.8	54.1	12.3	77	calm			0		10 k		n.	0	0	covered	M. V de Leon, M. E.
Puebla, Catholic Institute	23.48	596.4	30.42	772.6	43.7	6.5	70	n.	0.9	0.4		0	1			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.40	619.8	30.25	768.3	50.7	10.4	54	e.			1		10		e.	0	0	covered	G. Barroeta, M. D
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.55	572.9	30.34	770.7	41.7	5.4	93	calm	0	0		10	0	e.				covered	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.65	778.5	30.65	778.5	39.0	3.9		ese.			3					0	0		
Groningen	30.61	777.5	30.67	778.9	39.2	4.0		ssw.			1					0	0		
Helder	30.63	777.9	30.63	777.9	41.0	5.0		ssw.			1					0	0		
Hellevoetsluis	30.65	778.4	30.65	778.4	36.5	2.5	85	e.			1					0	0		
Utrecht	30.61	777.6	30.66	778.8	36.3	2.4	87	ssw.			1		10			0	0	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.14	765.5	30.20	767.1	42.1	5.6	85	s.	27	12			10			1.158	29.4		
Brono	29.49	749.0	29.53	750.0	39.9	4.4	90	sw.	30	16			10			0.598	15.2	raining	
Christiania	30.00	762.0	30.15	765.9	37.6	3.1	68	ssw.	4	2			4			0	0		
Gjesvær	29.53	750.1	29.56	750.7	23.5	— 4.7		ne.			6		10					snowing	
Lodingen	29.47	748.5	29.52	749.7	30.7	— 0.7	58	se			2		7			0.362	9.2		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.4	15.2	68	se.	7.4	3.3			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.32	744.6	30.34	770.6	52.5	11.4	61	s.	1.8	0.8			7			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.22	767.7	30.32	770.0	64.4	18.0	63	se.	1.8	0.8			9			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.05	763.3	30.42	772.6	55.4	13.0	59	nnw.	8.1	3.6			1			0	0		The Staff.
Ponta Delgada, Azores	30.33	770.3	30.40	772.1	61.2	16.2	61	calm	0	0			4			0.252	6.4		
Saint Paul de Loando	29.67	753.7	29.88	758.9	81.3	27.4	81	ssw.	1.8	0.8			7	s.		0	0		
Serra da Estrella	25.47	647.0	30.34	770.5	39.0	3.9	84	e.	9.8	4.4			5			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.04	737.6	30.30	769.6	—20.4	—29.1		wsw.	16	7		0	0			0	0		Major K. Lasarew.
Archangel	29.32	744.8	29.34	745.3	13.6	—10.2	90	w.	13	6			10			0.177	4.5	snowing	Capt. Ssellwerstow.
Astrakhan	30.22	767.5	30.13	765.4	35.2	1.8	90	wsw.	11	5			10 ks			0.028	0.7		Capt. Wisganow.
Barnaul	29.26	743.3	29.81	757.2	4.8	—15.1	89	sw.	18	8			10			0.008	0.2		Meteorological Obs'y.
Dorpat	30.01	762.2	30.26	768.7	33.1	0.6	75	wnw.	11	5		0	1 k			0	0		Observatory.
Ekaterinburg	28.71	729.3	29.76	755.9	— 2.4	—19.1	64	s.	7	3			10			0.012	0.3		Meteorological Obs'y.
Kasan	29.11	739.4	29.39	746.4	30.6	— 0.8	95	ssw.	9	4			10			0.063	1.6		Observatory.
Kertch	30.19	766.9	30.21	767.4	30.9	2.7	87	nw.	4	2			9 n			0	0		Lagorio & Sastyrex.
Kieff	29.56	750.8	30.22	767.7	35.4	1.9	84	nw.	7	3		ck	10ks;n			0.008	0.2		Observatory.
Lugan	29.86	758.5	30.08	763.9	34.3	1.3	82	wsw.	9	4			10			blank	blank		Meteorological Obs'y.
Moscow	29.28	743.7	29.78	756.4	28.8	— 1.8	50	n.	27	12		0	0			0	0		Meteorological Obs'y
Nikolaiev	30.28	769.2	30.35	771.0	34.5	1.4	94	nw.	9	4			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.93	760.1	30.07	763.7	32.9	0.5	68	calm	0	0		0	4 ks			0	0		Physical Observatory.
St. Petersburg	29.95	760.8	29.97	761.2	29.7	— 1.3	82	wnw.	18	8		0	0			0.008	0.2		Central Physical Obs'y.
Tashkend, Laboratory	28.80	731.6	30.50	774.6	26.6	— 3.0	96	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.86	733.1	30.36	771.1	34.9	1.6	44	nw.	2	1			0			0	0		Physical Observatory.
Warsaw	30.11	764.7	30.54	775.6	36.9	2.7	91	wnw.	9	4			10 ks						Astronomical Obs'y.
Wilna	29.98	761.4	30.43	772.8	33.4	0.8	58	nnw.	9	4			2			0	0		Berg, Assistant.
Yeniseisk	29.26	743.1	29.56	750.8	17.6	— 8.0	81	sw.	13	6			9			0.122	3.1		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.18	766.6	46	7.8	92	sw.			6		10			0.3	8.	raining	J. Youngclause.
North Unst, Shetland Pds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.28	769.1	30.38	771.6	54.5	12.5	65	e.	3.1	1.4			3			0.059	1.5		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.43	772.8	30.48	774.3	50.7	10.4	72	nw.	0.7	0.3		3	2	n.		0	0	cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.36	694.9	30.48	774.3	36.7	2.6	81	ne.	5.4	2.4		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.10	713.7	30.38	771.7	51.8	11.0	43	e.	4.3	1.9		1	0			0	0	light clouds	The Staff.
Murcia, Met. Obs'y	30.28	769.2	30.45	773.3	50.7	10.4	81	s.	1.8	0.8		2	4	se.		0.185	4.7	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.43	747.6	30.37	771.4	43.5	6.4	84	ne.	2.5	1.1		0	7			0	0	cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.11	764.8	30.18	766.5	65.3	18.5	89	calm	0	0		0	1 k		n.	0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	30.00	762.0	30.06	763.4	77.1	25.1	70	ene.	2.2	1.0		0	1 ks		ene.	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.30	769.5	30.40	772.1	57.0	13.9	53	calm	0	0		0	3		n.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.02	762.5	30.11	764.8	70.9	21.6	98	calm	0	0		7 k	3 ku	s.	s.	0.079	2.0	cloudy	E. Gadea, Chief Engn'r.
Tuguegurao, Philippine Id's	29.99	761.7	30.13	765.3	73.1	22.8	79	wnw.	1.1	0.5		0	6 ks		sw.	0	0	cloudy	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.81	757.2	29.85	758.2	21.9	— 5.6	80	sw.			2		8			0.126	3.2	snowing	
Umea	29.85	758.3	29.91	759.6	28.4	— 2.0	74	sw.			2		10			0	0		
Hernosand	29.93	760.3	29.98	761.6	35.4	1.9	46	sw.			2		10			0	0		
Stockholm	30.08	764.0	30.26	768.5	30.0	2.2	61	sw.			2		0			0	0		
Wisby	30.31	769.8	30.37	771.3	36.7	2.6	69	sw.			4		0			0	0		
Sub Series.																			
Upsala	30.10	764.5	30.19	766.7	34.9	1.6	65	sw.	15.9	7.1			0			0.031	0.8		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.15	740.5	30.65	778.6	29.8	— 1.2	92	ne.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.46	773.7	40.6	4.8	82	n.	8	3.5			10		n.	0.087	2.2		The Observatory.
Valona			30.41	772.3	54.7	12.6		nw.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.13	765.4	48.0	8.9	53	n.			4	0	4 ks		n.	0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	29.52	749.8	29.60	751.8	38	3.3	73	w.	10	4.5		0	3 s			0.27	6.9	clear	
Alpena, Michigan	29.50	749.3	30.22	767.6	3.5	—15.8	72	nw.	26	11.6			10 n			0.09	2.3	light snow	
Atlanta, Georgia	29.11	739.4	30.34	770.6	38.0	3.3	67	nw.	21	9.4		0	0			0.91	23.1	clear	
Atlantic City, New Jersey	29.85	758.2	29.86	758.4	37.8	3.2	61	w.	11	4.9		0	0			0.67	17.0	clear	
Augusta, Georgia	30.04	763.0	30.24	768.1	48.0	8.9	71	nw.	8	3.6		0	0			0.54	13.7	clear	
Baltimore, Maryland	29.90	759.4	29.95	760.7	40	4.4	65	w.	6	2.7		4 k	0	nw.		0.78	19.8	fair	
Barnegat, New Jersey	29.80	756.9	29.82	757.4	36.8	2.7	82	w.	12	5.4		0	0			0.77	19.6	clear	
Bismarck, Dakota	28.71	729.2	30.71	780.0	— 3	—19.4	68	nw.	6	2.7		1 cs	0	calm		0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.31	693.7	30.24	768.1	16	— 8.9	91	ne.	2	0.9			10 s		calm	0	0	cloudy	
Boston, Massachusetts	29.35	745.5	29.52	749.8	36.0	2.2	84	w.	16	7.2		0	0			0.28	7.1	clear	
Brownsville, Texas	30.32	770.1	30.37	771.4	52	11.1	93	n.	4	1.8		0	0			inap.	inap.	clear	
Buffalo, New York	29.18	741.2	29.58	761.5	23	— 5.0	80	w.	29	13.0			10 s		w.	0.18	4.6	cloudy	
Burlington, Vermont	29.20	741.7	29.51	749.5	31.5	— 0.3	76	w.	15	6.7			10 s		w.	0.08	2.0	cloudy	
Cairo, Illinois	30.29	769.4	30.71	780.0	26.0	— 3.3	88	w.	14	6.3		0	0			0	0	clear	
Campo, California	27.55	699.8	30.18	766.6	20.8	— 6.2	87	e.	2	0.9		0	0			0	0	clear	
Camp Thomas, Arizona																			
Cape Henry, Virginia	30.00	762.0	30.02	762.5	46	7.8	53	w.	16	7.2		0	0			0.26	6.6	clear	
Cape May, New Jersey	29.86	758.4	29.89	759.2	40	4.4	73	w.	30	13.4		0	0			0.92	23.4	clear	
Castroville, Texas	29.69	754.1	30.54	775.7	44	6.7	68	n.	8	3.6		0	0			0	0	clear	
Cedar Keys Florida	30.13	765.3	30.15	765.8	66	18.9	78	nw.	18	8.0			10 s		w.	0.01	0.3	cloudy	
Champaign, Illinois	29.77	756.1	30.64	778.2	10.8	—11.8	50	nw.	12	5.4		0	0			0	0	clear	
Charleston, S. Carolina	30.06	763.5	30.12	765.0	56	13.3	86	nw.	12	5.4		0	0			0.24	6.1	clear	
Charlotte, N. Carolina	29.28	743.7	30.17	766.3	41.0	5.0	57	n.	13	5.8		0	0			0.77	19.6	clear	
Chattanooga, Tennessee	29.60	751.8	30.46	773.7	35.0	1.7	64	nw.	16	7.2		1 k	0	nw.		0.73	18.5	clear	
Cheyenne, Wyoming	24.20	614.7	30.45	772.4	11.1	—11.6	66	nw.	2	0.9		0	3 s			0	0	clear	
Chicago, Illinois	29.75	755.6	30.50	774.7	10.8	—11.8	75	nw.	10	4.5		0	0			0	0	clear	
Chincoteague, Virginia	29.94	760.5	29.96	761.0	42	5.6	65	nw.	24	10.7		0	2 s		nw.	0.31	7.9	clear	
Cincinnati, Ohio	29.78	756.4	30.47	773.9	26	— 3.3	76	nw.	14	6.3		0	0			inap.	inap.	clear	
Cleveland, Ohio	29.44	747.8	30.22	767.6	21.5	— 5.8	78	nw.	31	13.9		0	7 s		nw.	0.04	1.0	fair	
Coleman City, Texas	28.74	730.0			32	0.0	88	n.	10	4.5		0	0			0	0	clear	
Columbus, Ohio	29.42	747.3	30.32	770.1	25	— 3.9	64	nw.	26	11.6		0	8 ks		nw.	0.05	1.3	clearing	
Concho, Texas	28.59	726.2	30.61	777.5	33	0.6	88	n.	10	4.5		0	0			0	0	clear	
Davenport, Iowa	29.92	760.0	30.63	778.0	11	—11.7	61	w.	6	2.7		0	0			0	0	clear	
Dayton, Washington T'y	28.26	717.8	30.06	763.5	31	— 0.6	88	w.	1	0.4			10 s			0	0	cloudy	
Deadwood, Dakota	25.60	650.2	30.55	776.0	2	—16.7	76	calm	0	0		0	0			0	0	clear	
Decatur, Texas					38	3.3	72	ne.	16	7.2		0	0			0	0	clear	
Delaware Breakwater, Del.	29.88	758.9	29.90	759.4	41	5.0	73	w.	25	11.2		0	1 s			0.50	12.7	clear	
Denison, Texas	29.83	757.7	30.67	779.0	30.3	— 0.9	78	ne.	9	4.0		0	0			inap.	inap.	clear	
Denver, Colorado	24.94	633.5	30.46	773.7	17.4	— 8.1	69	s.	10	4.5		0	0			0	0	clear	
Des Moines, Iowa	29.72	754.9	30.69	779.5	9	—12.8	76	nw.	5	2.2		0	0			0	0	clear	
Detroit, Michigan	29.49	749.0	30.25	768.3	18.1	— 7.7	83	nw.	18	8.0		0	9 s		nw.	0.09	2.3	cloudy	
Dodge City, Kansas	27.95	709.9	30.70	779.8	11.5	—11.4	71	s.	4	1.8		0	0			0	0	clear	
Dubuque, Iowa	29.85	758.2	30.62	777.7	4.8	—15.1	49	w.	5	2.2		0	0			0	0	clear	
Duluth, Minnesota	29.85	758.2	30.61	777.5	— 8	—22.2	78	w.	2	0.9		0	0			0	0	clear	
Eagle Pass, Texas	29.75	755.6	30.59	777.0	41.0	5.0	82	nw.	4	1.8		0	0			0	0	clear	
Eagle Rock, Idaho	25.42	645.7	30.38	771.6	4	—15.6	57	n.	5	2.2		0	0			0	0	clear	
Eastport, Maine	29.27	743.4	30.34	770.6	36	2.2	94	e.	2	0.9			10 n		e.	0.52	13.2	light rain	
El Paso, Texas	26.63	676.4	30.51	774.9	34.2	1.2	65	ne.	9	4.0		0	0			0	0	clear	
Erie, Pennsylvania	29.32	744.7	30.10	764.5	20	— 6.7	84	nw.	34	15.2			10 n			0.16	4.1	light snow	
Escanaba, Michigan	29.70	754.4	30.42	772.7	— 2	—18.9	76	nw.	8	3.6		0	0			0.01	0.3	clear	
Florence, Arizona																			
Fort Apache, Arizona	25.22	640.6	30.34	770.6	24	— 4.4	67	ne.	1	0.4		0	0			0	0	clear	
Fort Assinnaboine, Montana	27.48	698.0	30.52	775.2	11	—11.7	64	ne.	19	8.5			10 s			0	0	cloudy	
Fort Bennett, Dakota	28.79	731.3	30.53	775.4	0	—17.8	72	calm	0	0		0	0			0	0	clear	
Fort Benton, Montana	27.48	698.0	30.46	773.7	11	—11.7	64	ne.	8	3.6			10 s		calm	0	0	cloudy	
Fort Buford, Dakota	28.56	725.4	30.76	781.3	5	—15.0	76	ne.	4	1.8		0	0			0	0	clear	
Fort Custer, Montana	27.19	690.6	30.57	776.5	7	—13.9	58	calm	0	0		0	5 s		calm	0	0	fair	
Fort Davis, Texas	25.45	646.4	30.43	772.9	30	— 1.1	81	calm	0	0		0	0			0	0	clear	
Fort Elliott, Texas	27.72	704.1	30.65	778.5	16	— 8.9	44	calm	0	0		0	0			0	0	clear	
Fort Gibson, Indian T'y	30.12	765.0	30.72	780.3	25.0	— 3.9	88	n.	6	2.7		0	0			0	0	clear	
Fort Grant, Arizona	25.40	645.1	30.30	769.6	36	2.2	61	se.	16	7.2		0	0			0	0	clear	
Fort Griffin, Texas	29.34	745.2	30.72	780.3	31	— 0.6	88	ne.	5	2.2		0	0			0	0	clear	
Fort Keogh, Montana	27.87	707.9	30.56	776.2	2	—16.7	75	se.	4	1.8		3 cs	0			0	0	clear	
Fort Macon, North Carolina	30.01	762.2	30.02	762.5	53	11.7	80	nw.	20	8.9		hz.	hz.	calm	calm	0.06	1.5	light haze	
Fort McKavett, Texas	28.22	716.8	30.61	777.5	35.8	2.1	72	e.	7	3.1		4 k	0			0	0	fair	
Fort Missoula, Montana	26.89	683.0	30.35	770.9	19	— 7.2	87	sw.	3	1.3			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	30.11	764.8	30.14	765.5	28	— 2.2	100	sw.	19	8.5			10 s			inap.	inap.	cloudy	
Fort Shaw, Montana	26.61	675.9	30.47	773.9	15	— 9.4	100	calm	0	0			10 n			0.04	1.0	light snow	
Fort Sill, Indian Territory	29.41	747.0	30.74	780.8	24.8	— 4.0	81	n.	13	5.8		0	0			0	0	clear	
Fort Stevenson, Dakota	28.69	728.7	30.75	781.0	0	—17.8	72	nw.	10	4.5			10 s		calm	0	0	cloudy	
Fort Verde, Arizona					18	— 7.8	70	nw.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.74	730.0	30.56	776.2	39	3.9	82	n.	6	2.7		0	0			0	0	clear	
Galveston, Texas	30.39	771.9	30.43	772.9	49	9.4	85	ne.	18	8.0		1 c	0	n.		inap.	inap.	clear	
Grand Haven, Michigan	29.66	753.4	30.37	771.4	15.5	— 9.2	83	nw.	24	10.7			10 s		w.	0.55	14.0	cloudy	
Hatteras, North Carolina	29.97	761.2	29.99	761.7	52	11.1	86	nw.	14	6.3		3 c	0			0.33	8.4	clear	
Helena, Montana	25.92	658.4	30.35	770.9	21	— 6.1	73	nw.	6	2.7			10 s			0	0	cloudy	
Henrietta, Texas	29.66	753.4	30.74	780.8	29	— 1.7	77	ne.	7	3.1		c	0			0	0	clear	
Huron, Dakota	29.13	739.9	30.67	779.0	6.8	—14.0	63	nw.	3	1.3		0	0			inap.	inap.	clear	
Indianapolis, Indiana	29.63	752.6	30.47	773.9	18	— 7.8	61	nw.	12	5.4		0	0			0.03	0.8	clear	
Indianola, Texas	30.42	772.7	30.45	773.4	49.5	9.7	93	n.	21	9.4		0	0			0	0	clear	
Jacksboro, Texas	29.45	748.0	30.69	779.5	29	— 1.7	77	n.	6	2.7		0	0			0	0	clear	
Jacksonville, Florida	30.12	765.0	30.18	766.6	63	17.2	78	nw.	8	3.6			10 s		nw.	0.15	3.8	cloudy	
Keokuk, Iowa	30.00	762.0	30.70	779.8	12.0	—11.1	61	w.	6	2.7		0	0			0	0	clear	
Key West, Florida	30.15	765.8	30.18	766.6	71.5	21.9	87	calm	0	0		1 cs	1 k			0	0	clear	
Kittyhawk, North Carolina	29.98	761.5	30.00	762.0	49	9.4	82	sw.	17	7.6		hz.	1 s		calm	0.29	7.4	clear	
Knoxville, Tennessee	29.35	745.5	30.43	772.9	36	2.2	55	nw.	8	3.6		0	1 s			0.77	19.6	clear	
La Crosse, Wisconsin	29.76	755.9	30.60	777.2	3	—16.1	72	w.	5	2.2			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.43	671.3	30.46	773.7	24.3	— 4.3	86	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.80	756.9	30.76	781.3	19	— 7.2	70	calm	0	0		0	0			0	0	clear	
Lewiston, Idaho	29.27	743.4	30.14	765.5	32.8	0.4	60	e.	7	3.1			10 s		e.	0	0	cloudy	
Little Rock, Arkansas	30.32	770.1	30.65	778.5	35	1.7	69	n.	14	6.3		0	0			0	0	clear	
Los Angeles, California	29.84	757.9	30.24	768.1	41.0	5.0	73	n.	8	3.6		0	0			0	0	clear	
Louisville, Kentucky	29.91	759.7	30.50	774.7	25	— 3.9	67	w.	18	8.0		1 k	0	w.		0	0	clear	
Lynchburg, Virginia	29.35	745.5	30.07	763.8	43.5	6.4	37	w.	12	5.4		0	0			0.15	3.8	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.45	748.0	30.54	775.7	3	—16.1	72	w.	12	5.4		0	0			inap.	inap.	clear	
Marquette, Michigan	29.62	752.3	30.40	772.1	— 1	—18.3	68	nw.	20	8.9			10 s		nw.	0.05	1.3	cloudy	
Mason, Texas	28.87	733.3	30.61	777.5	38	3.3	79	n.	6	2.7		0	0			0	0	clear	
Memphis, Tennessee	30.30	769.6	30.66	778.7	32	0.0	60	n.	16	7.2		0	0			0	0	clear	
Milwaukee, Wisconsin	29.70	754.4	30.50	774.7	3	—16.1	72	nw.	14	6.3		0	0			0	0	clear	

STATIONS.	Barometer. Corrected for instrumental error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.34	770.6	30.38	771.6	46.0	7.8	76	n.	17	7.6	.....	0	0	.....	.....	1.25	31.7	clear	
Montgomery, Alabama	30.16	766.1	30.40	772.1	42.9	6.1	68	n.	10	4.5	.....	0	0	.....	.....	0.29	7.4	clear	
Moorhead, Minnesota	29.58	751.3	30.69	779.5	—13	—25.0	100	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Morgantown, W. Virginia	29.11	739.4	30.17	766.3	32.0	0.0	74	n.	27	12.1	.....	.....	10 s	.....	nw.	0.39	9.9	cloudy	
Mt. Washington, N. H.	22.94	582.7	29.57	751.1	15.0	— 9.4	100	nw.	70	31.3	.....	.....	10n;fg	.....	nw.	0.40	10.2	light snow	
Nashville, Tennessee	30.00	762.0	30.56	776.2	29.7	— 1.3	73	nw.	12	5.4	.....	0	0	.....	.....	inap.	inap.	clear	
New Haven, Connecticut	29.54	750.3	29.66	753.4	39	3.9	54	w.	14	6.3	.....	0	0	.....	.....	0.50	12.7	clear	
New London, Connecticut	29.59	751.6	29.64	752.8	37	2.8	82	w.	11	4.9	.....	0	0	.....	.....	0.60	15.2	clear	
New Orleans, Louisiana	30.33	770.4	30.39	771.9	51.0	10.6	61	n.	15	6.7	.....	0	0	.....	.....	0.68	17.3	clear	
Newport, Rhode Island	29.57	751.1	29.62	752.3	39.0	3.9	89	w.	18	8.0	.....	3 k	2 ks	nw.	w.	0.56	14.2	fair	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd.	29.59	751.6	29.62	752.3	40.5	4.7	82	w.	29	13.0	.....	0	0	.....	.....	0.78	19.8	clear	
New York, New York	29.58	751.3	29.77	756.1	37	2.8	72	w.	16	7.2	.....	0	5 s	.....	.....	0.51	13.0	fair	
Norfolk, Virginia	29.98	761.5	30.01	762.2	47	8.3	68	nw.	9	4.0	.....	0	0	.....	.....	0.22	5.6	clear	
North Platte, Nebraska	27.52	699.0	30.64	778.2	11.6	—11.3	80	w.	5	2.2	.....	0	0	.....	.....	inap.	inap.	clear	
Olympia, Washington T'y	29.82	757.4	29.86	758.4	40.0	4.4	89	s.	6	2.7	.....	0	4 s	.....	calm	0.51	13.0	fair	
Omaha, Nebraska	29.44	747.8	30.71	780.0	14.3	— 9.8	70	sw.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.14	740.1	29.15	740.4	18.3	— 7.6	100	s.	52	23.2	.....	.....	10 n	.....	.....	0.08	2.0	light snow	
Oswego, New York	29.39	746.5	29.74	755.4	32.0	0.0	88	nw.	22	9.8	.....	.....	10 s	.....	nw.	0.28	7.1	cloudy	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	30.32	770.1	30.34	770.6	47.1	8.4	68	n.	15	6.7	.....	0	0	.....	.....	0.56	14.2	clear	
Philadelphia, Pa.	29.80	756.9	29.86	758.4	38	3.3	89	w.	9	4.0	.....	3 ck	0	nw.	.....	0.57	14.5	clear	
Pike's Peak, Colorado	17.73	450.3	30.43	772.9	7	—13.9	55	w.	20	8.9	.....	0	0	.....	.....	0	0	clear	
Picoche, Nevada	24.22	615.2	30.42	772.7	28	— 2.2	61	s.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.27	743.4	30.12	765.0	28.1	— 2.2	84	w.	16	7.2	.....	.....	10 n	.....	w.	0.10	2.5	light snow	
Port Eads, Louisiana	30.34	770.6	30.35	770.9	54.0	12.2	93	n.	34	15.2	.....	0	9 s	.....	n.	0.47	11.9	cloudy	
Port Huron, Michigan	29.50	749.3	30.23	767.8	12.6	—10.8	82	w.	24	10.7	.....	0	4 s	.....	w.	0.66	16.8	fair	
Portland, Maine	29.34	745.2	29.40	746.7	31	— 0.6	78	sw.	11	4.9	.....	0	6 s	.....	sw.	0.37	9.4	fair	
Portland, Oregon	29.90	759.4	29.97	761.2	43.0	6.1	93	sw.	6	2.7	.....	.....	10 n	.....	sw.	0.16	4.1	light rain	
Portsmouth, N. Carolina	.....	.....	.....	.....	49	9.4	71	n.	10	4.5	.....	0	1 k	.....	n.	0.20	5.1	clear	
Prescott, Arizona	24.93	633.2	30.31	769.9	11	—11.7	50	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Punta Rassa, Florida	30.14	765.5	30.15	765.8	70	21.1	87	s.	8	3.6	.....	0	7 k	.....	nw.	0	0	fair	
Red Bluff, California	29.87	758.7	30.25	768.3	36.2	2.3	89	n.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	
Rio Grande City, Texas	30.19	766.8	30.44	773.2	50	10.0	72	n.	7	3.1	.....	4 c	0	calm	.....	0	0	fair	
Rochester, New York	29.10	739.1	29.81	757.2	27	— 2.8	77	w.	37	16.5	.....	.....	10 s	.....	w.	0.11	2.8	cloudy	
Roseburg, Oregon	29.40	746.7	29.97	761.2	48.3	9.1	76	sw.	5	2.2	.....	.....	10 s	.....	.....	0	0	cloudy	
Sacramento, California	30.18	766.0	30.26	768.6	38.8	3.8	73	se.	2	0.9	.....	0	3 s	.....	.....	0	0	clear	
St. Louis, Missouri	30.07	763.8	30.71	780.0	19.4	— 7.0	69	nw.	13	5.8	.....	0	0	.....	.....	inap.	inap.	clear	
St. Paul, Minnesota	29.63	752.6	30.58	776.7	3.8	—15.7	77	sw.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	
St. Vincent, Minnesota	29.82	757.4	30.80	782.3	—34	—36.7	100	n.	7	3.1	.....	0	0	.....	.....	0.03	0.8	clear	
Salt Lake City, Utah	25.84	656.3	30.41	772.4	17	— 8.3	56	calm	0	0	.....	0	0	.....	.....	0	0	clear	
San Antonio, Texas	29.75	755.6	30.48	774.2	43.7	6.5	68	calm	0	0	.....	0	0	.....	.....	0	0	clear	
San Diego, California	30.12	765.0	30.19	766.8	43.7	6.5	72	n.	7	3.1	.....	0	0	.....	.....	0	0	clear	
Sandusky, Ohio	29.55	750.6	30.27	768.8	22	— 5.6	87	w.	32	14.3	.....	.....	10 s	.....	w.	0.04	1.0	cloudy	
Sandy Hook, New Jersey	29.74	755.4	29.78	756.4	39.0	3.9	73	w.	27	12.1	.....	0	hz	.....	calm	0.57	14.5	clear	
San Francisco, California	30.19	766.8	30.26	768.6	44	6.7	83	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Santa Fé, New Mexico	23.49	596.6	30.50	774.7	19.5	— 6.9	78	s.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Savannah, Georgia	30.08	764.0	30.18	766.6	55	12.8	80	nw.	12	5.4	.....	0	0	.....	.....	0.51	13.0	clear	
Shreveport, Louisiana	30.34	770.6	30.58	776.7	40	4.4	82	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Silver City, New Mexico	24.48	621.8	30.34	770.6	32	0.0	65	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Sitka, Alaska	30.19	766.8	30.26	768.6	30.5	— 0.8	61	e.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Smithville, North Carolina	30.02	762.5	30.06	763.5	54	12.2	86	nw.	12	5.4	.....	0	1 s	.....	nw.	0.06	1.5	clear	
Spokane Falls, Wash. Ter.	28.07	713.0	30.21	767.3	28	— 2.2	88	e.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	
Springfield, Illinois	29.94	760.5	30.67	779.0	18	— 7.8	67	nw.	12	5.4	.....	0	0	.....	.....	0.09	2.3	clear	
Springfield, Massachusetts	29.47	748.5	29.61	752.1	37.4	3.0	64	w.	10	4.5	.....	3 k	0	w.	.....	0.41	10.4	clear	
Springfield, Mo.	29.19	741.4	30.77	781.5	19	— 7.2	84	n.	6	2.7	.....	0	0	.....	.....	inap.	inap	clear	
Stockton, Texas	27.45	697.2	30.59	777.0	27.0	— 2.8	100	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Thatcher's Island, Mass.	29.43	747.5	29.49	749.0	35.5	1.9	84	w.	15	6.7	.....	0	0	.....	.....	0.47	11.9	clear	
Toledo, Ohio	29.54	750.3	30.28	769.1	22	— 5.6	64	nw.	13	5.8	.....	0	2 k	.....	nw.	0.02	0.5	clear	
Tucson, Arizona	27.73	704.3	30.23	767.8	35	1.7	89	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Umatilla, Oregon	29.70	754.4	30.09	764.3	30.0	— 1.1	88	nw.	2	0.9	.....	9 cs	0	.....	.....	0	0	cloudy	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	30.26	768.6	30.53	775.4	42	5.6	74	n.	7	3.1	.....	0	0	.....	.....	inap.	inap.	clear	
Visalia, California	29.84	757.9	30.22	767.6	39	3.9	50	e.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Washington, D. C.	29.87	758.7	29.99	761.7	41	5.0	48	w.	10	4.5	.....	1 k	0	w.	.....	0.49	12.4	clear	
West Los Animas, Colorado	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wickenburg, Arizona	.....	.....	.....	.....	30	— 1.1	70	calm	.....	.....	0	0	0	.....	.....	0	0	clear	
Williamsport, Pa.	29.20	741.7	29.83	757.7	36	2.2	69	w.	16	7.2	.....	.....	10 ks	.....	w.	0.21	5.3	cloudy	
Wilmington, N. Carolina	30.01	762.2	30.07	763.8	55	12.8	74	n.	10	4.5	.....	5 k	0	n.	.....	0.12	3.0	fair	
Winnemucca, Nevada	25.72	653.3	30.26	768.6	17	— 8.3	70	ne.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass.	29.53	750.0	29.57	751.1	38	3.3	82	w.	25	11.2	.....	0	2 s	.....	sw.	0.37	9.4	clear	
Yankton, Dakota	29.24	742.7	30.66	778.7	9	—12.8	55	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	30.10	764.5	30.25	768.3	44.0	6.7	60	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.03	559.6	.....	.....	52.0	11.1	76	calm	0	0	.....	3 c;k	1 s	.....	.....	0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.02	762.5	30.03	762.7	77	25.0	82	e.	.....	.....	.....	5 k	5 ks	e.	e	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.96	761.0	29.98	761.5	79	26.1	86	sw.	5	2.2	.....	.....	10 ks	.....	sw.	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.00	762.0	30.02	762.5	73	22.8	95	e.	.....	.....	.....	7 k	5 ks	.....	.....	.....	.....	light rain	B. Bigar.
Havana, Cuba, W. I.	30.14	765.5	30.19	766.8	70	21.1	84	calm	0	0	.....	0	5 ks	.....	calm	0	0	fair	A. Van Oaneghem, Ass't
Kingston, Jamaica, W. I.	30.09	764.3	30.10	764.5	65.0	18.3	88	calm	0	0	.....	0	0	.....	.....	0	0	fine	Robert Johnstone.
Navassa, W. I.	29.98	761.5	30.06	763.5	75	23.9	72	ne.	15	6.7	.....	5 ck	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.05	763.3	77	25.0	91	e.	.....	.....	1	.....	8 k	.....	e.	1.400	35.6	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.96	761.0	80	26.7	80	calm	.....	.....	0	5 ck	5 ks	calm	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	74	23.3	86	ne.	.....	.....	4	0	6 ks	.....	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.11	764.8	30.14	765.5	73	22.8	76	nne.	7.2	3.2	.....	0	0	.....	.....	0	0	clear	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.57	776.5	30.63	778.0	—44.0	—42.2	.....	nw.	22	9.8	.....	hz	hz	.....	.....	0	0	hazy	J. Fortescue & W. Wood

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 20° 05′, E. 110° 18′	30.13	765.3	66	18.9		ne.			2		10							overcast	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads. India.	29.94	760.5	79	26.1	86	ene.			1		4							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.52	775.2	58	14.4	65	e.			1		8							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 5° 45′ E. 85° 00′	29.90	759.4	81	27.2	91	ne.			4–5		6	ne.				5	n.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.94	760.5	76	24.4	69	ese.			3		2	calm						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.93	760.2	68	20.0	94	calm			0		6	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.49	774.4	40	4.4		n.			1–2		10							showery	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.35	770.9	62	16.7		ene.			1		1	ene.						blue sky	Lieut. J. L. Burr
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, N. 32° 13′, E. 119° 27′	29.82	757.4	54.5	12.5	93	se.			2–3		0							blue sky	Capt. S. Long.
H. M. S. Diamond, S. 36° 38′, W. 9° 27′	29.89	759.2	64.5	18.1	76	wnw.			4		6	wnw.				3	nw.	d. clouds	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	30.09	764.3	65.5	18.6	94	s.			1–2		7	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 22° 44′, W. 78° 38′	30.20	767.1	73	22.8	97	e.			2		9					1	e.	d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 19′, W. 59° 37′	29.31	744.5	55	12.8	87	wsw.			4–5		4					3-4	wnw.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.94	760.5	83	28.3		ene.			1		6	nw.						d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald, S. 42° 53′, E. 147° 22′	29.71	754.6	63	17.2	83	nw.			1		6	nw.						d. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.18	766.6	43	6.1		nnw.			3		0							blue sky	Capt. G. Robinson.
H. M. S. Espiegle, S. 20° 00′, W. 28° 35′	30.11	764.8	79	26.1	95	ene.			1		5	sse.				1	ene.	d. clouds	Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.24	768.1	44	6.7	84	calm			0		3							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.91	759.7	62	16.7	86	n.			4–5		2							misty	Comm. E. G. Bourke.
H. M. S. Garnet, Port Stephens, Falkland Ids	29.25	742.9	54	12.2	73	nnw.			6		6							squally	Capt. L. Jones.
H. M. S. Iris, Ayas Bay, Asiatic Turkey	30.22	767.6	47	8.3	48	ne.			1–2		2					1	ne.	d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.13	765.3	64	17.8	83	ene.			2		5	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark, S. 33° 10′, E. 158° 41′	29.90	759.4	72.3	22.4	93	ne.			1		1					1	se.	blue sky	Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.11	764.8	64.5	18.1	83	e.			1		0							misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 14° 20′, E. 51° 28′	29.99	761.7	75	23.9	95	ene.			1–2		3	ne.				2	ne.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, Grenada, West Indies	29.97	761.2	77	25.0	84	ne.			1		7	ne.						d. clouds	Capt. E. Drummond
H. M. S. Orontes, N. 15° 55′, E. 68° 30′	29.90	759.4	81	27.2		nne.			3		4	n.				2	nne.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 8° 53′, W. 12° 38′	29.93	760.2	78	25.6	100	ene.			1		10					2	sse.	overcast	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, Bushire, Persia	30.06	763.5	61.1	16.2		nnw.			1									d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	29.77	756.1	40	4.4	?	ese.			2		4							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, Ind	30.05	763.3	78.5	25.8	78	n.			3		8	n.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 14°30′, E. 53° 56′	30.00	762.0	79	26.1	90	e.			2		3	e.				sm'h		d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 27′, W. 88° 12′	30.12	765.0	77.5	25.3	80	ne.			1		2							d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, Off Panama, Panama	29.96	761.0	75	23.9	90	nnw.			2		2	calm						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.09	764.3	77	25.0		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark																			Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Brava, C. Verd Ids	30.00	762.0	77.0	25.0	76	ne.			2		5		sw.			2	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 17° 07′, W. 65° 19′	30.00	762.1	75.2	24.0	94	calm			0		6							threatening.	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.24	768.1	49	9.4	78	n.	13	5.8	.....	.....	8	.....	nw.	0.38	9.7	.....	.....	fair	
N. Yard, Portsmouth, N. H.	29.46	748.3	31	— 0.6	.....	sw.	17	7.6	.....	.....	2	.....	sw.	0	0	.....	.....	clear	
Naval Hospital Yokohama, Japan	29.94	760.5	42.5	5.8	50	n.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	clear	
Adams, Callao, Peru	29.75	755.6	69	20.6	95	sse.	.....	.....	1	.....	8	.....	.....	.....	.....	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	29.77	756.1	61	16.1	77	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert, N. 10° 32′, E. 106° 56′*	29.85	758.2	82	27.8	67	calm	.....	.....	0	.....	8	.....	n.	0	0	sm'h	.....	cloudy	
Alliance, Boston, Mass.*†	29.68	753.9	38	3.3	80	w.	.....	.....	2	.....	0	.....	.....	mod.	mod.	.....	.....	clear	
Ashuelot, Tientsin, China	30.04	763.0	35	1.7	100	e.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, S. 29° 21′, W. 47° 05′	29.95	760 7	76	24.4	91	ne.	12	5.4	.....	.....	8	.....	ene.	0	0	mod	ene.	fair	
Colorado, New York, N. Y	29.75	755.6	38	3.3	72	w.	9	4.0	.....	.....	2	.....	calm	0.05	1.3	.....	.....	clear	
Essex, N. 34° 20′, W. 46° 33′	30.18	766.6	66	18.9	79	ese.	.....	.....	1	.....	2	.....	se.	.....	.....	long	se.	clear	
Franklin, Norfolk, Va	30.01	762.2	46	7.8	69	wnw.	12	5.4	.....	.....	2	.....	nw.	0.05	1.3	.....	.....	clear	
Galena, N. 22° 17′, W. 20° 59′	30.10	764.5	71	21.7	90	e.	.....	.....	1	.....	5	.....	e.	.....	.....	long	ne.	fair	
Independence, N. Yard, Mare I'd, Cal	30.11	764.8	40	4.4	73	calm	0	0	.....	.....	2	.....	.....	0	0	.....	.....	fair	
Kearsarge, New Orleans, La	30.44	773.2	52	11.1	73	n.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	clear	
Lackawanna, Valparaiso, Chili†	29.97	761.2	65	18.3	84	calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	.....	clear	
Lancaster, Leghorn, Italy	30.39	771.9	53	11.7	73	ne.	.....	.....	1	.....	2	.....	calm	0	0	.....	.....	misty	
Michigan, Erie, Pa	30.10	764.5	24	— 4.4	48	n.	.....	.....	9	.....	10	.....	.....	.....	.....	.....	.....	snowing	
Minnesota, Newport, R. I	29.61	752.1	39	3.9	100	w.	12	5.4	.....	.....	10	.....	w.	.....	.....	.....	.....	cloudy	
Monocacy, Yokohama, Japan	30.14	765 5	44	6.7	76	nnw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear	
Nipsic, N. 42° 45′, E. 10° 33′	30.47	773.9	55	12.8	80	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.07	763.8	68	20.0	95	se.	.....	.....	1	.....	8	.....	n.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.15	765.8	64	17.8	83	ene.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C	30.00	762 0	37	2.8	90	w.	.....	.....	2	.....	2	.....	w.	.....	.....	.....	.....	clear	
Pensacola, Valparaiso, Chili	29.90	759.4	64	17.8	73	calm	0	0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Powhatan, Boston, Mass	29.56	750.8	36	2.2	90	w.	.....	.....	3	.....	2	.....	w.	.....	.....	.....	.....	fair	
Quinnebaug, Villafranca, France*†	30.53	775.4	58	14.4	76	ese.	.....	.....	2	.....	5	.....	calm	.....	.....	sm'h	.....	fair	
Ranger, Browning Bay*	29.95	760 7	74	23.3	86	se.	.....	.....	1	.....	2	.....	calm	0	0	sm'h	.....	clear	
Richmond, S. 5° 20′, W. 169° 15′*	29.58	751.3	81	27.2	91	wnw.	.....	.....	3	.....	8	.....	w.	1 07	27.2	mod.	n.	raining	
Shenandoah, Montevideo, Uruguay*	29.91	759.7	71	21.7	90	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy	
St. Louis, League Island, Pa	30.09	764.3	44	6.7	92	w.	10	4.5	.....	.....	2	.....	ese.	0.43	10.9	.....	.....	fair	
Swatara, Kobe, Japan*	30.07	763.8	47	8.3	70	n.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Tennessee, New York, N. Y	29.72	754.9	39	3.9	73	w.	12	5.4	.....	.....	2	.....	.....	0 51	13.0	.....	.....	clear	
Vandalia, N. 11° 30′, W. 63° 17′	29.98	761.5	75	23.9	90	nne.	.....	.....	3	.....	8	.....	nne.	.....	.....	.....	.....	drizzling	
Wabash, Boston, Mass	29.54	750.3	35	1.7	90	w.	2	0.9	.....	.....	2	.....	w.	0.64	16.3	.....	.....	fair	
Wachusetts, N. 45° 29′, W. 124° 17′	29.68	753.9	47	8.3	100	sw.	.....	.....	5	.....	5	.....	sw.	0	0	.....	s;w.	fair	
Wyoming, Port Royal, S. C	30.13	765.3	53	11.7	86	wnw.	16	7.2	.....	.....	2	.....	wnw	0.60	15.2	.....	.....	clear	
Yantic, N. 12° 53′, W. 78° 07′*	29.97	761.2	76	24.4	86	ene.	.....	.....	4	.....	2	.....	ene.	.....	.....	mod	ne.	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 55° 02′, W. 9° 55′	30.65	778.5	51	10.6	86	ssw.	6	.....	6	.....	sw.	2 h'r	2 h'r	4	sw.	d. clouds.	C. Gapon, 2d Officer.
S. S. Polynesian, Capt. R. Brown, N. 45° 18′, W. 58° 48′*	29.31	744.5	34	1.1	.....	sw.	3	.....	10	.....	sw.	0	0	.....	wsw.	cloudy	Roberts & Spark
S. S. Prussian, Capt. J. G. Stephens, Portland, Maine*	29.50	749.3	36	2.2	.....	nw.	3	.....	2	.....	nw.	.....	.....	.....	.....	fair	J. G. Stephens.
S. S. Waldensian Greenock, Scotland*	30.46	773.7	50	10.0	.....	sw.	5	.....	.....	.....	sw.	1 h'r	1 h'r	.....	.....	clear	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	29.70	754.4	37	2.8	90	e.	1	.....	0	.....	.....	.....	.....	.....	.....	fine	Cauffman & Morse.
S. S. Ohio, Capt. Henry Morrison, N. 51° 30′, W. 9° 52′*†	30.64	778.2	50	10.0	78	sw.	4	.....	10	.....	ssw.	.....	.....	mod.	wsw.	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†	30.66	778.7	54	12.2	93	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown.. N. 45° 57′, W. 43° 23′†*	30.30	769.6	46	7.8	.....	ne.	3	.....	5	.....	ne.	.....	.....	sm'h	ne.	foggy	J. Brown.
Utopia, Capt. A. McRitchie,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 18° 08′, W. 73° 42′*†	30.20	767.1	75	23.9	81	n.	4	.....	4	.....	calm	0	0	sm'h	se.	fine	C. P. Krause.
S. S. Alvo, Capt. D. W. Williams, Savanilla, U. S. C.*	29.92	760 0	76	24.4	.....	ne.	6	.....	0	.....	.....	0	0	.....	.....	very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 35° 34′, W. 71° 00′	.....	.....	60	15.6	.....	wnw.	3	.....	5?	.....	n.	0	0	high	sw; nw	cloudy?	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Fisher & Weldon.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, N. 43° 13′, W. 67° 50′*†	29.45	748.0	43	6.1	83	wnw.	4	.....	.....	.....	nw.	light	light	.....	wsw.	clearing	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell N. 36° 05′, W. 17° 58′	30.35	770.9	59.3	15.2	81	sw.	4	.....	10	.....	.....	.....	.....	.....	.....	showery	.....
British Merchant, Capt. E. J. Molony, N. 17° 34′, E. 84° 39′.	30.01	762.2	75.5	24.2	72	ne.	2	.....	0	.....	.....	.....	.....	.....	.....	misty	.....
Bk. Caldew, Capt. W. Peterson S. 34° 50′, W. 84° 00′	29.84	757.9	68.5	20.3	.....	nw.	8	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Cipero, Capt. W. N. Laily N. 30° 29′, W. 33° 01′	30.23	767.8	67.2	19.6	84	ese.	4	.....	2	.....	.....	.....	.....	2	e.	d. clouds	.....
S. City of Agra, Capt. Thos. Young, N. 8° 13′, W. 31° 00′	29.91	759.7	78.5	25.8	.....	nne.	5	.....	7	.....	.....	.....	.....	.....	.....	gloomy	.....
Bk. Glaramara, Capt. R. Morton, N. 31° 51′, W. 37° 19′	30.26	768.6	66	18.9	84	e.	4	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
Glencairn, Capt. R. S. Tannock, S. 43° 23′, E. 44° 40′	29.77	756.1	49	9.4	93	w.	4–5	.....	10	.....	.....	.....	.....	.....	.....	foggy	.....
Bq. Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jaffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, S. 22° 20′ E. 65° 00′	29.88	758.9	79.5	26.4	78	se.	4	.....	3	.....	.....	.....	.....	.....	.....	showery	.....
May Hulse, Capt. H. Youlden, S. 29° 30′ W. 41° 00′	30.01	762.2	73	22.8	81	e.	6	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Mertola, Capt. E. W. Turner, N. 36° 53′, W. 7° 45′	30.41	772.4	62.5	16.9	66	e.	1	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Minho, Capt. J. Lawson, S. 15° 31′, W. 37° 31′	30.06	763.5	81.6	27.6	78	ene.	5	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. John Smith N. 1° 55′, W. 28° 12′	29.94	760.5	80.8	27.1	91	ne.	2	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry, S. 44° 00′, E. 30° 30′	29.84	757.9	53	11.7	73	w.	5	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. C. W. Pearson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge, N. 20° 36′ W. 39° 22′	30.02	762.5	75.5	24.2	81	sw.	1	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. Fitt.
CALIFORNIA, AND MEXICAN S. S. CO.																	
J. Birmingham, Agent San Francisco.																	
S. S. Newbern, Capt. E. Rogers, N. 26° 12′, W. 113° 43′†	30.06	763.5	64	17.8	63	nnw.	2	.....	0	.....	.....	0	0	small	nw.	clear	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman N. 32° 07′, W. 75° 10′ †*	30.14	765.5	70	21.1	.....	nw.	6	.....	4	.....	nw.	0	0	r'gh	w. to nw.	cloudy	R. H. Freeman.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul, Havre, France	30.64	778.2	35.6	2.0	.....	ese.	1	.....	10	.....	ese.	0	0	.....	.....	hazy	.....
S. S. St. Laurent, Capt. A. Servan, N. 49° 41′, W. 10° 33′†*	30.67	779 0	51.8	11.0	.....	calm	0	.....	.....	.....	.....	0	0	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York.																	
S. S. Gellert, Capt. Kuhlewein,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. Frochlich, 3d Off.
S. S. Silesia, Capt. A. Albers N. 42° 39′, W. 57° 00′*†	29.57	751.1	52.2	11.2	.....	ssw.	6	.....	10	.....	sw.	5 h'r	5 h'r	4	ssw.	raining	.....
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, S. 25° —′. W. 42° —′*†	30.19	760.8	80	26.7	.....	nnw.	2	.....	10	.....	w.	driz.	driz.	mod.	ssw.	drizzling	J. Carroll.

MERCHANT-MARINE SERIES.

Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
LEYLAND LINE.																	
Thayer & Lincoln, Agents, Boston.																	
S. S. Iberian, Capt. E. Parry, N. 44° 22′, W. 52° 08′						sse.	3		10		wnw.	2 h'r	sleet			overcast	E. Parry.
NATIONAL LINE.																	
F. W. J. Hurst, Manager, New York.																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.66	778.7				se.	1		8		se.	0	0			cloudy	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO.																	
Jas. E. Ward & Co., Agents, New York.																	
S. S. Niagara, Capt. J. B. Baker N. 34° 52′, W. 75° 31′†*	30.08	764.0	52	11.1		nw.	3		0			0	0			clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, N. 34° 05′, W. 74° 05′†	29.60	751.8	69	20.6		wnw.	5		10		nw.	1 h'r	1h'r	h'vy	wsw.	cloudy	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, Kingston, Jamaica†	30.10	764.5	75	23.9		calm	0									clear	
S. S. Bothnia, Capt. MacMackan, N. 43° 04′, W. 54° 50′*	29.50	749.3	46	7.8		s.	6								s.	misty	E.F.Stembridge,3d off
S. S. City of Alexandria, Capt. L. F. Timmerman, Sisal Roads, C. A.*†	30.19	766.8	75	23.9		se.	3								se.	hazy	
S. S. City of Washington, Capt. J. W Reynolds, N. 25° 35′, W. 79° 52′*†	30.25	768.3	77	25.0		w.	1							sm'h		fine	
S. S. Maas, Capt. T. N. Bonjer, N. 50° 14′, W. 14° 46′*	30.77	781.5	41	5.0		sw.	1							sm'h	w.		
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke																	
S. S. Schiedam, Capt. E. M. Chevalier,																	
NORTH GERMAN LLOYD.																	
A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.																	
S. S. Hohenzollern, Capt. R. Sander, N. 47° 57′, W. 22° 22′*	30.46	773.7	50.0	10.0		s.	5		5		s.	0	0	sm'h	s.	fair	G. H. Lose, 3d officer.
S. S. Nurnburg, Capt. A. Jaeger, N. 46° 44′, W. 8° 48′*	30.54	775.7	48.2	9.0		ene.	2		10			0	0	2	ene.	cloudy	
S. S. Oder, Capt. C. Undeutsch, N. 50° 18′, W. 15° 41′*	30.50	774.7	53.6	12.0		wsw.	4		5		nw.	0	0	mod.	sw.	fair	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany			44.6	7.0		nw.	4		6		nw.	3 h'r	3 h'r				E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO.																	
Leland Stanford, President, San Francisco.																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal			48	8.9	92	sw.	2		0			0	0			clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Yokohama, Japan*†	30.30	769.6	47	8.3	54	n	4		0					sm'h	ne.	clear	
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.12	765.0	65	18.3	73	ene.	3		3		sw.					fine	
OCEAN S. S. CO.																	
George Young, Agent, New York.																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.93	760.2				nw.	2		0							clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 39° 16′, W. 73° 25′†	29.87	758.7	49	9.4	64	wnw.	6		0			2 h'r	2 h'r	mod.	n.	clear	H. K. Hallett.
OREGON IMPROVEMENT CO.																	
John L. Howard, Agent, San Francisco.																	
S. S. Mississippi, Capt. E. W. Holmes, N. 46° 52′, W. 124° 45′†	29.77	756.1	45	7.2	76	ssw.	5		8		ssw.					rain & snow	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO.																	
K. Van Otterendorp, Agent, San Francisco.																	
S. S. City of Chester, Capt. G. Reichmann N. 40° 00′, W. 124° 22′†	30.18	766.6	48	8.9		sse.	5		5		se.	0	0	mod.	ssw.	hazy	A. C. James, 2d Off.
S. S. Columbia, Capt. Fred Bolles, N. 43° 13′, W. 124° 17′†	29.90	759.4	50	10.0	78	sw.	5		5		wsw.	8 h'r	8 h'r	r gh	wsw.	squally	W. Irvine.
S. S. Oregon, Capt. E. Poleman, Astoria, Oregon†	29.82	757.4	43	6.1	83	se.	2		8		s.					raining	G. Boese.
PACIFIC COAST S. S. CO.																	
Goodal, Perkins & Co., Agents, San Francisco.																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	30.18	766.6	41	5.0	91	calm	0		0							clear	
S. S. Geo. W. Elder, Capt. H. G. Morse, N. 45° 17′, W. 124° 51′†	29.89	759.2	40	7.8		sw.	7		8		sw.	3 h'r	light	long	sw.	cloudy	
S. S. Idaho, Capt. E. Alexander, N. 44° 58′, W. 124° 43′†	29.83	757.7	49	9.4	85	sw.	7		8		sw.			h'vy	sw.	cloudy	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 42′, W. 118° 14′†	30.22	767.6	54	12.2	73	nw.	1		0			0	0	sm'h	nw.	clear	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace. Monterey, Cal †	30.38	771.6	41	5.0	91	se	1		2			0	0	sm'h		fair	T. Wallace.
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	29.96	761.0	42	5.6	83	calm	0		0			0	0			clear	
S. S. Victoria, H. M. Hayward, Nanaimo, Vancouvers Id†	29.86	758.5	40	4.4	91	calm	0		10							rain & sleet	
PACIFIC MAIL S. S. CO.																	
Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.																	
S. S. Australia, Capt. ——, N. 32° 51′, W. 138° 28′	30.22	767.0	57	13.9	81	ene.	2		10					sm'h		hazy	A. Bauserman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.85	758.2	74	23.3	90	n.	2		8			0	0			cloudy	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 34° 45′, E. 148° 16′†	30.06	763.5	50	10.0	64	nw.	5		2		nw.	0	0	h'vy	nw.	fine	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn, N. 25° 03′, W. 150° 52′†	29.98	761.5	69	20.6	90	ese.	5		10		sw.	0	0	med	ese.	cloudy	E. Le Sank.
S. S. City of Tokio, Com. J. Maury N. 30° 08′, E. 157° 03′†	29.96	761.0	58	14.4	69	wnw.	6		5		nw.	10 h'r	10 h'r	r'gh	nw.	squally	W. Thaxter.
S. S. Colima, Capt. H. R. Searle, N. 110 36′, W. 87° 35′†	29.92	760.0	78	25.6	73	ne.	5		0			0	0	mod.	ne.	clear	
S. S. Granada, Capt. M. Connolly, Panama, Panama*†	29.85	758.2	83	28.3	64	n.	3		8		n.	0	0			light haze	
S. S. South Carolina, Capt. W. J. Russell, S. Zelandia, Capt. H. Webber, Sydney, N. S. W	29.90	759.4	72	22.2	?	w.	2		5?		w.					clear?	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO.																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke, N. 13° 20′, W. 60° 16′	.....	.....	.....	.....	.....	ne.	3	.....	0	.....	.....	0	0	sm'h	.....	clear	G. S. Locke
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes N. 43° 30′, W. 50° 30′*†	30.03	762.7	45	7.2	?	calm	0	.....	10	.....	.....	0	0	sm'h	w.	hazy	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, Off Beachy Head, Eng*	30.65	778.5	44	6.7	67	ene.	3	.....	10	.....	ene.	0	0	.....	ene.	cloudy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A Beynon, Antwerp, Belgium	.....	.....	37	2.8	90	sse.	1	.....	10	.....	.....	0	0	.....	.....	foggy	M. Eymond.
S. S. Waesland, Capt. H. Nickels. Off New York, N. Y*	29.60	751.8	39	3.9	.....	w.	5	.....	2	.....	w.	3 h'r	light	.....	.....	fair	.....
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
THINGVALLA LINE.																	
Funch, Edye, & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub, Copenhagen, Denmark†	30.55	776.0	46.4	8.0	.....	wnw.	1	.....	10	.....	wnw.	0	0	.....	.....	covered	J. T. Ulberling.
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent, New York.																	
S. S. Adriatic, Capt. J. W. Jennings, New York Bay, N. Y.*†	29.80	756.9	38	3.3	.....	wnw.	5	.....	8	.....	w.	0	0	sm'h	.....	d. clouds	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 40° 51′, W. 66° 52′*†	29.48	748.8	48	8.9	.....	wsw.	4	.....	10	.....	sw.	12 h'r	driz.	sm'h	.....	misty	W. Thomas.
S. S. Celtic, Capt. B. Gleadell N. 51° 00′, W. 14° 57′*†	30.37	771.4	52	11.1	86	s.	4	.....	8	.....	s.	0	0	sm'h	.....	fair	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. N. 51° 02′, W. 23° 59′*†	30.42	772 7	52	11.1	.....	s.	2	.....	2	.....	w.	7 h'r	light	sm'h	nw	misty	H. D. Jay, 4th Officer.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th Officer.
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell, N. 47° 36′, W. 20° 01′½	30.15	765.8	54	12.2	.....	sse.	3	.....	2	.....	.....	0	0	sm'h	.....	clear	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.43	772.9	56	13.3	75	ne.	4	2 cs	0	.....	sw.	0.38	9.7	.....	.....	clear	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Alpha, Capt. Ole Grönn,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis. N. 26° 38′, W. 66° 27′*†	30.22	767.6	75	23.9	.....	ne.	1	.....	2	.....	sse.	0	0	mod.	se; e.	clear	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin, S. 16° 43′, W. 34° 17′	.....	.....	.....	.....	.....	var.	.....	.....	.....	.....	e.	.....	.....	light	ne.	fine	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.47	773 9	.....	.....	.....	sw.	1	.....	0	.....	.....	0	0	.....	.....	clear	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 7° 44′, W. 34° 37′†	30.00	762.0	.....	.....	.....	sse.	3	.....	2	.....	se.	0	0	sm'h	se.	.....	.....
S. Enoch Train, Capt. H. D. Chapman. Off Isle Wight, Eng*	30.61	777.5	.....	.....	.....	e.	3	.....	9	.....	e.	0	0	sm'h	.....	overcast	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 47° 40′, W. 19° 10′*	30.55	776.0	.....	.....	.....	s.	1	.....	10	.....	s.	0	0	sm'h	w.	cloudy	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.38	771.6	42	5.6	75	w.	4	.....	3	.....	w.	.....	.....	sm'h	.....	fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 57° 29′, W. 69° 43′†	28.96	735.6	49	9.4	.....	wsw.	4	.....	8	.....	w.	5 h'r	5 h'r	mod.	e. nw.	misty	G. D. Morrison.
Bk. Freya, Capt. Blauuw, N. 50° 27′, W. 22° 07′	.....	.....	53	11.7	.....	ssw.	6	.....	10	.....	sw.	13 h'r	13 h'r	mod.	sw.	cloudy	.....
Bk. Gamaliel, Capt. D. J. Anthony,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. Williams.
Bk. Geo. Booth, Capt D. Williams,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. Mussen.
S. Hedwig, Capt. T. Mussen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Johanne Auguste, Capt. H. Schmidt, S. 26° 28′, W. 28° 28′*	29.96	761.0	.....	.....	.....	ese.	3	.....	5?	.....	se.	0	0	long	sse.	cloudy?	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 14′, W. 10° 27′*†	30.55	776.0	.....	.....	.....	var.	.....	.....	.....	.....	e.	10 h'r	10 h'r	mod.	e.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.39	771.9	56	13.3	62	sw.	1	.....	0	.....	.....	.....	.....	.....	.....	clear	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 23° 00′, W. 40° 00′*†	29.85	758.2	.....	.....	.....	baff.	.....	.....	0	.....	.....	0	0	.....	.....	clear	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 11° 10′, W. 25° 15′*	29.85	758.2	73.4	23.0	96	ene.	3	.....	4	.....	e.	.....	.....	sm'h	.....	.....	.....
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.36	771.1	60	15.6	94	calm	0	.....	0	.....	.....	0	0	.....	.....	clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 28° 40′, W. 21° 29′*†	30.20	767.1	.....	.....	.....	s.	6	.....	10	.....	s.	.....	.....	hv'y	sw.	.....	I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton, N. 28° 52′, W. 46° 30′*†	30.10	764.5	.....	.....	.....	ene	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. P. Dutton.

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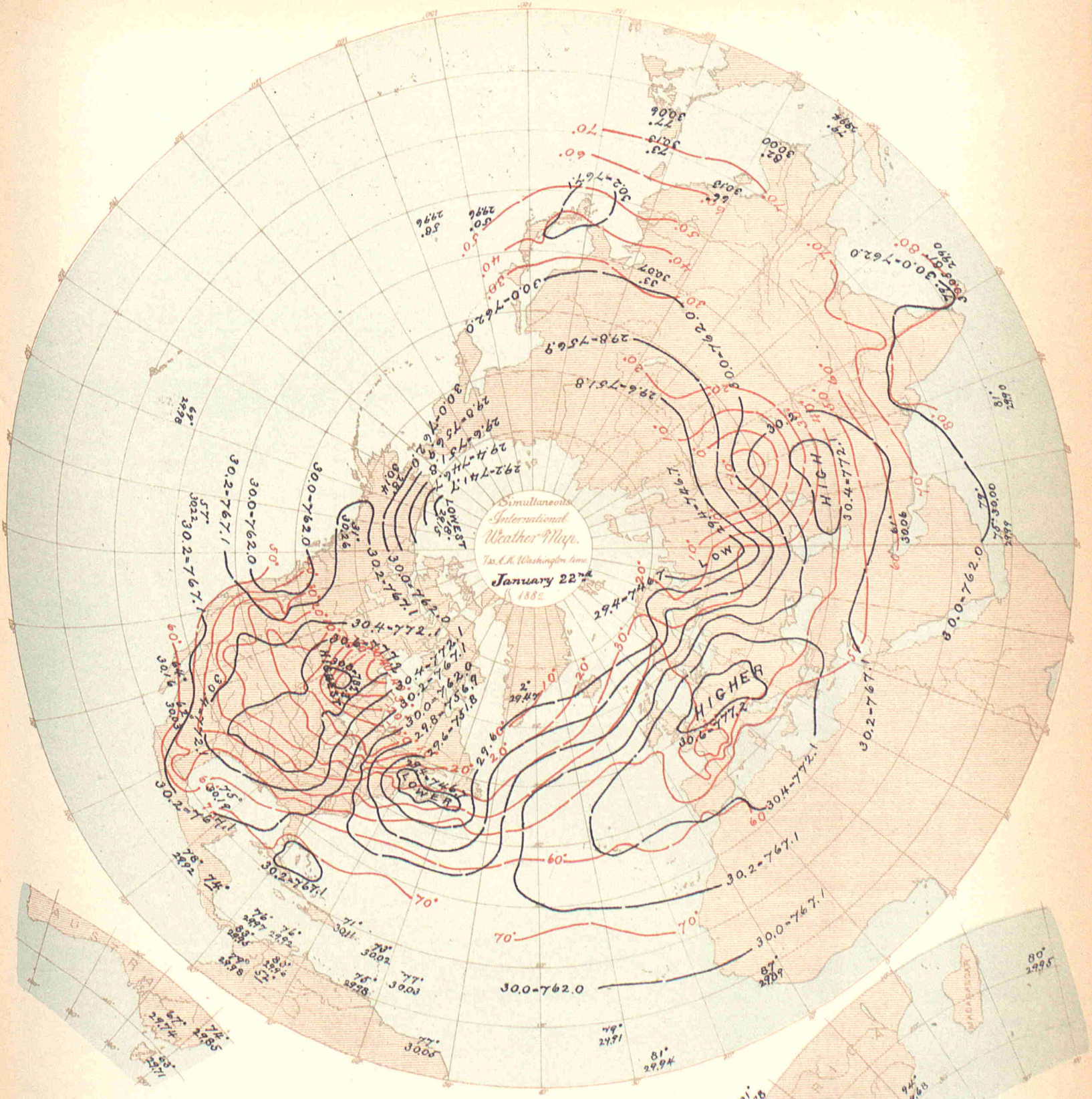
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 23, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.35	771.0	64.0	17.8	76	nw.			2		0			0	0	clear	Moiroud.
Algiers			30.41	772.3	56.1	13.4	71	n.			2		1			0	0	fair	Nicolas.
La Calle			30.44	773.1	60.4	15.8	48	ssw.			2		2			0	0	fair	Fonfrède.
Tunis			30.48	774.1															Jacques.
Sfax																			Gau.
Saida			30.42	772.6	53.6	12.0	29	w.			5		2			inap.	inap.	fair	Perès.
Tebessa			30.47	773.9	50.0	10.0	60	sw.			1		5			0	0	cloudy	Derché.
Geriville					47.5	8.6	93	s.			2		2			0	0	fair	Lonchamp.
Laghouat			30.55	776.0	50.4	10.2	53	se.			1		3			0	0	pretty fair	Herblu.
Biskra			30.47	774.0	57.9	14.4	42	nw.			1		4			0	0	cloudy	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.96	761.0	30.05	763.3	62.8	17.1	83	ssw.	15	6.7			10			0	0	dull	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.04	762.9	30.62	777.8	34.9	1.6	82	sw.			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.77	756.1	30.58	776.7	36.3	2.4	68	sw.	2.5	1.1			10			0	0		Dr. Wierzbiski.
Eperies	29.65	753.0	30.58	776.6	36.3	2.4	79	calm			0		10		s.	0	0		Julius Mikolik.
Gratz	29.30	744.3	30.64	778.2	32.4	0.2	72	w.			2		10			0	0		Andreas Rospini.
Hermannstadt	29.12	739.7	30.64	778.3	36.1	2.3	74	nw.			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.13	739.8	30.56	776.2	30.9	—0.6	90	e.			1		10			0	0	foggy	The Staff.
Lemberg	29.52	749.7	30.56	776.2	34.9	1.6	75	nw.			1		10			0	0		Dr. T. Stanecki.
Pola	30.41	772.3	30.52	775.3	48.2	9.0	48	ese.			2		3			0	0		I. R. Hydrographic Office.
Szathmar	30.13	765.4	30.60	777.3	37.0	2.8	79	s.			2		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.34	770.7	30.64	778.2	37.0	2.8	86	calm			0		10			0	0		Karl Stancel.
Trieste	30.45	773.4	30.55	776.0	48.2	9.0	53	w.			1		0			0	0		Rieder.
Vienna	29.84	758.0	30.61	777.4	34.5	1.4	78	se.			2		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Meeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer: Corrected for instrumental error and temperature. Inch.	Barometer: Corrected for instrumental error and temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Aberdeen	30.18	766.6	30.28	769.1	41.2	5.1	99	w.	1	0.4						0	0	foggy	W. Boswell.
Armagh, Observatory	30.21	767.3	30.45	773.4	46.4	8.0	88	sw.	15	6.7		10						overcast	S. Gall.
Bidston, Liverpool Obs'y			30.50	774.7	45.7	7.6	76	wsw.	12	5.4			9					overcast	John Hartnup.
Bolton, Sharples	29.89	759.2	30.45	773.4	40.3	4.6	89	ssw.					10					gloomy	Thomas Mackereth (A.S.
Bradford, Yorkshire	30.04	763.0	30.44	773.2	43.3	6.3	76	w.			1		8			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.98	761.5	30.00	762 0	80.0	26.7	70	ne			1		2					d. clouds	Corpl. J. Surgenor.
Cardington			30.53	775.4	42.0	5.6	71	w.			0.2		6						John McLaren
Chatham, School M. E.	30.43	772.9	30.57	776.5	37.9	3.3	90	sw.			1		9					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.35	770.9	30.59	777.0	40.7	4.8	69	n.			1		10					foggy	The Staff.
Fort Napier, Natal	27.62	701.5	29.83	757.7	78.2	25.7	61	ne.			2		5						Pvt. E. K. Annis, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	89.0	31.7	66	nw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.40	772.1	51	10.6	72	s.			2		6			0	0	d. clouds	J. O'Donnghue.
Gibraltar, Mediterranean	30.32	770.1	30.37	771.4	56.6	13.7	91	e.			5		9					gloomy	Cpl. O. Baldwin.
Glasgow, Observatory	30.14	765.5	30.34	770.6	45.6	7.6	90	wsw.			5		10 k					raining	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.39	771.9	30.58	776.7	37.6	3.1	85	sw.			1		10					overcast	The Staff.
Guernsey	30.24	768.1	30.56	776.2	37.5	3.1	85	ene.			1		10					overcast	A. Collenette, F. M. S.
Kew, Observatory	30.54	775.7	30.58	776.7	35.7	2.1	82	sw.	2	0.9			10					misty	The Staff.
Leicester, Museum	30.26	768.6	30.53	775.4	43.0	6.1	68	sw.			1		9					d. clouds	J. C. Smith.
Malta, Mediterranean	30.35	770.9	30.43	772.9	60.0	15.6	66	e.			2		3					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.16	766.1	30.21	767.3	67.5	19.7	100	ne.			3		10					raining	C. S. Duncombe.
Oscott, St. Mary's College	30.00	762.0	30.54	775.7	42.1	5.6	74	ssw.			1		8					d. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.32	770.1	30.55	776.0	41.1	5.1	73	wnw.			1		10					overcast	The Staff.
Plymouth	30.49	774.4	30.57	776.5	41.2	5.1	71	ene.			1		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.21	767.3	41.5	5.3	88	sw.	13	5.8			5					d. clouds	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.48	774.2	30.55	776.0	44.8	7.1	74	ne.			2		10					gloomy	W. H. Lyne
Sheffield	30.22	767.6	30.51	774.9	46.0	7.8	83	sw.			1		6			0	0	d. clouds	W. F. Cooper.
Stilloth Rectory	30.40	772.1	30.42	772.7	44.5	6.9	94	sw.			3		10			0.036	0.9	drizzling	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.54	775.7	43.3	6.3	85	wsw.	8	3.6			10					overcast	Rev. S. J. Perry.
Stratfield Turgiss					36 2	2.3	88	nw.			1		10					foggy	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.50	774 7	30.57	776.5	43	6.1	67	ne.			2		6					d. clouds	W. Newcombe.
Valencia, Observatory	30.49	774.4	30.52	775.2	50.5	10.3	82	sse.	17	7.6			6					d. clouds	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

STATIONS.	Barometer: Corrected for instrumental error and temperature. Inch.	Barometer: Corrected for instrumental error and temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.39	746.5	29.43	747.5	10	—12.2	100	nw.	5	2.2		0	8 s			0.160	4.1	fair	H. J. Cundall, C. E.
Chatham, N. B.*	29.46	748.3	29.53	750.0	6	—14.4	91	w.	13	5.8			10 n		w.	0.49	12.4	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.73	755.1	29.75	755.6	— 1	—18 3	56	n.	18	8.0		2 k	2 n	n.	n.	0.90	22.9	clearing	J. McWilliams.
Fort Garry, Manitoba*	30.00	762.0	31.03	788.1	—35	—37.2	100	calm	0	0			fg.			0	0	hazy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.36	745.7	29.50	749.3	17	— 8.3	83	w.	9	4.0			10 n		w.	0.032	0.8	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.08	764.0	30.48	774.2	—16	—26.7	86	nw.	8	3.6		0	0			0	0	clear	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.98	761.5	30.21	767.3	—12	—24.4	100	w.	20	8.9			10 8			0.07	1.8	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.77	756.1	30.62	777.7	—26	—32.2	76	calm	0	0		0	0			0	0	clear	Rev R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.77	756.1	30.56	776.2	0	—17.8	97	nw.	9	4.0			10 n			0.20	5.1	threatening	H. Morgan.
Port Stanley, Ontario	29.81	757.2	30.54	775.7	3	—16.1	83	w.	14	6.3		5k	0	nw.		inap.	inap.	fair	M. Payne.
Quebec, Quebec*	29.59	751.6	29.96	761.0	— 8	—22.2	100	w.			6		10 n		w.	1.20	30.5	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.96	761.0	30.51	774.9	—27	—32.8	100	nw.	6	2.7		0	0			0	0	clear	W. H. McIntyre.
Sangeen, Ontario*	29.73	755 1	30.54	775.7	0	—17.8	95	n.	30	13.4			10 8			0.40	10.2	light snow	K. Stewart.
St. Andrews, N. B.	29.61	752.1	29.66	753.4	3	—16.1	76	nw.	8	3.6		0	0			0.17	4.3	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	29.27	743 4	29.34	745.2	17	— 8.3	87	w.	13	5.8			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.14	765.5	30.59	777.0	—12	—24.4	100	nw.	10	4.5		0	0			0	0	clear	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	29.58	751.3	29.65	753.1	17	— 8.3	76	nw.	20	8.9			10 8		nw.	inap.	inap.	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.38	746.2	29.64	752.8	31	— 0.6		sw.	3	1.3			10			0.30	7.6		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

STATIONS.	Barometer: Corrected for instrumental error and temperature. Inch.	Barometer: Corrected for instrumental error and temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Cape St. Francis Lt. House	30.04	763 0	30.07	763.8	74.0	23.3	94	e.	10.7	4.8			10 8			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.85	758.2	29.89	759.2	97.5	36.4	39	sse	10	4.5		2	2			0	0		The Staff, for D. Gill,
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

STATIONS.	Barometer: Corrected for instrumental error and temperature. Inch.	Barometer: Corrected for instrumental error and temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Sub-Series.																			
Hankow	29.93	760.2	30.21	767.3	51.4	10.8	74	nne.			2		10			0	0	covered	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	29.98	761.4	30.00	762.1	56.3	13.5	83	s.	4.9	2.2		10 ck	0	w.		0	0	covered	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Clouds. Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

STATIONS.	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	Force	Up'er	Lo'er	Upper	Lower	Inch.	Mill.	Weather.	Observers
Copenhagen	30.35	770.9	30.40	772.1	39.7	4.3	90	sw.	16	7			10						Oversergent Fischer.
Fanöe	30.41	772.5	30.43	773.0	42.3	5.7	88	wsw.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.72	754.8	29.76	755.9	1.8	—16.8		ne.			4		5						S. Kleinschmidt.
Stykkisholm, Iceland	29.27	743.4	29.31	744.5	26.6	—3.0		sw.			7		10					snowing	A. O. Thorlacius.
Thorshavn	29.85	758.3	29.89	759.2	41.7	5.4	80	w.	27	12			7					sleeting	Overloerer Bergh.
Vestervig	30.23	767.8	30.32	770.1	42.4	5.8	96	wsw.			4		9						Loearer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

STATIONS.	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	Force	Up'er	Lo'er	Upper	Lower	Inch.	Mill.	Weather.	Observers
Agen, Normal School	29.81	757.1	30.49	774.4	39.2	4	100	sse.			1		10			0	0	covered	M. Labroue, Director.
Alençon, Normal School	30.02	762.4	30.57	776.4	32.0	0	96	ne.			3		k		n.	0	0		M. Nicot, Director.
Arras, Engineer School	30.28	769.2	30.56	776.2	28.8	—1.8	73	ese.			1		10			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.56	776.1	30.63	778.1	41.7	5.4	73	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.97	761.2	30.56	776.2	29.5	—1.4		se.			1		10			0	c	covered	M. Saillard, Director.
Beauvais, Normal School	30.48	774.1	30.76	781.4	32.2	0.1	93	e.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.43	773.0	34.7	1.5	88	ne.			1		fg		ne.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.20	767.1	30.48	774.1	35.6	2.0	95	e.			1		8		w.	0.004	0.1	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.94	760.5	30.54	775.6	29.3	—1.5	100	nne.			1		fg		nne.	0	0	light fog	M. Postel, Director.
Brest, Naval Observatory	30.27	768.9	30.52	775.1	37.0	2.8	93	e.			1		10		e.	0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.48	774.1	30.56	776.1	30.9	—0.6		se.			1		10			0	0	covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.19	766.7	30.52	775.3	32.2	0.1	96	calm			0		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.06	763.4	30.60	777.3	31.3	—0.4		sse.			2		8			0	0	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.08	738.7	30.52	775.3	33.3	0.7	90	n.			1		0			0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.71	754.6	30.61	777.6	30.2	—1	96	ne.			1		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.62	752.3	30.54	775.6	32.0	0	93	e.			1		10	e.	e.	0	0	covered	Dr. Coulet, Director.
Gap, Normal School	27.86	707.6	30.47	773.9	46.4	8	40	ne.			1					0	0		M. Jeangirard, Director.
Gréasque, du Rhone	29.32	744.6	30.46	773.6	56.3	13.5	42	se.			1		2		s.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.76	755.8	30.58	776.6	31.6	—0.2	100	ese.			1		10			0	0	covered	M. Ablard, Director.
Guéret, Normal School	28.82	732.1	30.43	773.0	46.4	8	67	se.			1	2 c	0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.26	768.6	30.50	776.1	29.1	—1.6	98	ene.			1		10		ene.	0	0	covered	M. Ollitrault, Director.
Lescar, Normal School	29.88	758.9	30.46	773.7	43.9	6.6	76	ne.			1		5	ssw.		0	0	cloudy	M. Chauvin, Director.
Lorient, Naval Observatory	30.46	773.6	30.56	776.2	30.6	—0.8	100	ene.			2		fg			0	0	foggy	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.45	748.0	30.58	776.7	28.8	—1.8	98	n.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.26	768.5	30.59	777.0	30.4	—0.9	96	se.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.20	767.0	30.47	773.9	58.5	14.7	51	wsw.			0.1		3		wsw;se	0	0		M. Stephan, Director.
Montlouis l'instituteur	25.06	636.4	29.90	759.4	39.2	4.0	56	sw.	5.6	2.5			2	e.					M. Cave, for Dr. Fines.
Montpellier, Normal School	30.35	770.9	30.47	773.8	51.1	10.6	65	ne.			2		2		ne.	0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.73	755.1	30.56	776.3	30.9	—0.6	89	n.			1		10 kn			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.36	771.1	30.52	775.2	32.4	0.2	91	ene.			0–1		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.34	770.7	30.46	773.6	49.3	9.6	85	ne.	5.6	2.5			10		ne.	0	0	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.34	542.3			21.7	-5.7		s.			1		1		s.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.43	747.4	30.58	776.7	27.0	—2.8							fg			0	0	foggy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.45	646.5			39.6	4.2	40	sse.			2		5			0	0	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.50	774.7	30.53	775.5	34.2	1.2	85	se.			1		mist			0	0	misty	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.30	769.6	30.53	775.5	32.5	0.3	93	nne.			1		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	28.25	717.5	30.47	773.8	45.3	7.4	67	e.			1		n		e.	0	0		M. Colrat, Director.
Rouen, Normal School	30.55	776.0	30.60	777.2	30.9	—0.6	89	e.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.43	772.8	30.58	776.8	29.3	—1.5	90	ne.			2		10			0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.40	772.1	30.56	776.3	32.0	0.0	88	calm			0		10			0.004	0.1	covered	M. Renou, Director.
Toulouse, Observatory	29.77	756.1	30.50	774.7	40.3	4.6	83	nw.			1		fg	w.		0	0	foggy	M. Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.04	763.0	30.54	775.6	30.9	—0.6	100	s.			1					0	0		Dr. A. Bérigny, Director.
SUB-SERIES.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

STATIONS.	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	Force	Up'er	Lo'er	Upper	Lower	Inch.	Mill.	Weather.	Observers
Bamberg	29.69	754.0	30.55	776.0	31.3	—0.4	84	se.			3		10 s			0	0		Prof. Dr. Hoh.
Berlin	30.35	771.0	30.54	775.7	33.4	0.8	89	nw.			1		10			0.004	0.1		Prof. Dr. Arndt.
Breslau	30.02	762.5	30.56	776.3	34.5	1.4	74	nw.			1		10			0	0		Royal University Obs'y.
Carlsruhe	30.11	764.7	30.58	776.7	32.9	0.5	84	se.			1		10	ne.		0	0		Albert Senz.
Cassel	29.80	757.0	30.52	775.2	30.0	—1.1	88	s.			1		10			0	0	foggy	Dr. H. Möhl.
Frankfort on the Main	30.19	766.8	30.58	776.8	32.4	0.2	85	sse.			1		10			0	0		Physical Society.
Friedrichshafen	29.06	738.2	30.60	777.2	29.8	—1.2	80	ssw.			1		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.47	773.9	30.56	776.3	34.5	1.4	91	sw.			3		10			0	0	foggy	E. Preller.
Kiel	30.48	774.1	30.49	774.5	37.4	3.0	76	sw.			1		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.14	765.5	30.59	776.9	30.7	—0.7	81	ssw.			1		10			0	0		H. Leppig, Asst.
Magdeburg	30.36	771.1	30.56	776.3	33.3	0.7	89	calm			0		10 ks			0	0	foggy	Dr. Assmann.
Memel	30.32	770.1	30.37	771.3	37.6	3.1	91	w.			7		10 s						Issermann.
Munich	28.64	727.4	30.53	775.5	28.4	—2.0	82	calm			0		10			0	0		Central Station.
Neufahrwasser	30.46	773.7	30.48	774.1	30.5	2.5	73	sw.			3		10			0	0		A. Lothes.
Neustadt, Palatinate	30.02	762.6	30.56	776.2	32.0	0.0	96	ese.			1		10			0	0		Dickuether.
Stuttgart	29.56	750.9	30.52	775.1	31.6	—0.2	96	w.			1		10			0	0	foggy	Prof. Dr. Schoder.
Wustrow	30.50	774.6	30.52	775.2	35.4	1.9	100	sw.			4		10			0	0		Profs. Brandes & Reimer.

GREEK SERIES.

Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.

STATIONS.	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	Force	Up'er	Lo'er	Upper	Lower	Inch.	Mill.	Weather.	Observers
Athens	30.16	766.1	30.56	776.3	45.7	7.6		n.			2.0		10			0.020	0.5	covered	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.99	761.7	30.04	763.0	74.5	23.6	74	sw.	19	8.5			7	wnw.		0	0	d. clouds	
Deesa	29.49	749.1	29.97	761.1	82.5	28.1	37	wnw.	7.6	3.4			7	nw.		0	0	d. clouds	
Bombay	29.90	759.4	29.94	760.4	82.3	27.9	73	wnw.	10	4.5			0			0	0	blue sky	
Poona, Yarrowda	28.08	713.2	29.91	759.6	88.0	31.1	22	e.	6	2.7			0			0	0	blue sky	
Belgaum	27.40	695.9	29.91	759.7	82.8	28.2	19	ene.	9	4.0			0			0	0	blue sky	
Lahore	29.25	742.9	30.01	762.3	67.7	19.8	70	nw.	0.8	0.4			8			0	0	d. clouds	
Roorkee	29.08	738.7	30.01	762.2	68.4	20.2	61	nw.	1.7	0.8			5			0	0		
Agra	29.48	748.7	30.05	763.3	75.2	24.0	45	w.	2.0	0.9			5		w.	0	0		
Nagpur	28.91	734.3	29.94	760.6	85.5	29.7	26	calm	2.5	1.1			0			0	0	blue sky	
Jubbulpore	28.65	727.7	30.05	763.2	67.0	19.4	41	calm	0.8	0.4			0			0	0	blue sky	
Lucknow	29.65	753.1	30.04	763.0	71.2	21.8	52	w.	1.7	0.8			5	ese.		0	0	d. clouds	
Allahabad	29.67	753.6	29.99	761.8	69.4	20.8	61	calm	0.6	0.3			1			0	0	d. clouds	
Patna	29.80	756.9	29.99	761.8	69.9	21.1	62	wnw.	1.5	0.7			0			0	0	blue sky	
Hazaribagh	27.93	709.4	29.98	761.5	69.3	20.7	40	nw.	3.4	1.5			0			0	0	blue sky	
Cuttack	29.89	759.1	29.97	761.2	77.8	25.4	57	calm					0			0	0	blue sky	
Calcutta, Alipore	29.94	760.5	29.96	761.1	72.1	22.3	58	wsw.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.83	757.8	29.96	760.9	71.1	21.7	58	calm	2.3	1.0			0			0	0	blue sky	
Chittagong	29.89	759.2	29.98	761.6	70.6	21.4	77	w.	2.1	0.9			0			0	0	blue sky	
Sibsagar	29.65	753.0	30.00	762 0	63.0	17.2	81	ne.	1.1	0.5			0			0	0	blue sky	
Jeypore	28.54	725.0	30.00	762.0	76.7	24.8	36	sw.	3.3	1.5			9	sw.		0	0	d. clouds	
Zanzibar, Africa	29.84	757.9			89.1	31.7	59	nnw.	3.6	1.6			5			0.03	0.8	d. clouds	
Trichinopoly	29.69	754.1			83.2	28.4	49	ene.	1	0.4			5			0	0	d. clouds	
Bellary	28.47	723.1			84.0	28.9	30	e.	4.5	2.0			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.12	765.1	30.55	775.9	45.0	7.2	41	e.	0.7	0.3			0			0	0		Prof. Giovanni Clodig.
Milan	30.02	762.6	30.58	776.6	32.7	0.4	92	sw.	0	0			8			0	0		Prof. Schiaparelli.
Padua	30.43	773.0	30.55	775.9	43.2	6.2	56	nne.	4.9	2.2			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.60	751.7	30.55	776.0	39.4	4.1	85	ne.	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	30.29	769.4	30.49	774.4	55.4	13.0	29	ne.	3.1	1.4			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.54	725 0	30.55	775.9	42.3	5.7	44	nw.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.50	774.6	30.55	776.0	42.3	5.7	71	n.	7.4	3.3			0			0	0		Prof. Luigi Guidi.
Florence	30.22	767.7	30.50	774.6	50.2	10.1	37	e			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.39	771.9	30.48	774.2	51.6	10.9	52	ne.	4.2	1.9			0			0	0		Prof. P. Monte.
Rome	30.30	769 7	30.48	774.3	52.2	11.2	61	n.	1.8	0.8			1			0	0		Prof. P. S. Ferrari.
Lecce	30.26	768.6	30.52	775.3	53.2	11.8	61	nne.	11.2	5.0			4			0	0		Prof. C. de Giorgi.
Cosenza	29.60	751.9	30.52	775.3	51.4	10.8	75	nnw.	2.5	1.1			6	nw.		0	0		Prof. D. Conti.
Cagliari	30.18	766.6	30.38	771.7	57.4	14.1	63	se.			4		5			0	0		Prof. A. Pacinotti.
Palermo	30.21	767.4	30.47	774.0	56.7	13.7	53	ne.	4.9	2.2			0			0	0		Prof. G. Cincciatore.
Syracuse	30.42	772.7	30.47	773.9	56.7	13.7	69	w.	6.3	2.8			6	e.		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.94	760.4	30.48	774.1	54.1	12.3	59	nne.	0	0			1	nnw.		0	0		Prof. T. Brioschi.
Stelvio	22.43	569.6			28.0	— 2.2	33	s.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.46	570.6			29.7	— 1.3	35	e.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.07	763.8	30.11	764.8	32.9	0.5	78	sse.	2.5	1.1		0	8 n			0	0	covered	
Hakodate	30.05	763.3	30.06	763.5	32.3	0.2	83	n.	3.0	1.3			7		n.	0	0	cloudy	
Hiroshima, I. M. Obs'y	30.12	765.0	30.14	765.5	40.9	4.9	95	nne.	3.8	1.7		0	0			0.160	4.1	clear	K. Susaki
Kanazawa	30.15	765.8	30.26	768.6	42.9	6.1	78					ck	10 n					light rain	S. Endo.
Kioto	29.98	761.5	30.17	766.3	42.6	5.9	93	nw.	1.4	0.6			10 n			0.120	3.0	light rain	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.95	760.7	30.15	765.8	61.3	16.3	77	se.	7.6	3.4		ck	8 s			1.010	25.6	cloudy	S. Takehayashi
Niigata	30.05	763.3	30.09	764.3	38.9	3.8	85	sw.	2.1	0.9		10 ck	0			0	0	cloudy	
Nobiru	30.10	764.5	30.12	765.0	36.1	2.3	82	nnw.	8.5	3.8		0	2 s			0	0	fair	H. Midzushina.
Sapporo					26.9	— 2.8	80	calm	0	0			10			0	0	covered	
Tokei Obs'y, Yeddo	30.05	763.3	30.12	765.0	38.3	3.5	83	se.	1.8	0.8		2 ck	0			0	0	clear	The Staff.
Wakayama	30.10	764.5	30.15	765.8	46.9	8.3	74	e.	1.3	0.6		10 ck	0			0	0	cloudy	Y. Kuwamura
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.73	755.1	29.92	760.0	81.9	27.7	63	ese.	13.5	6.0		1 cs	6 k;ks		e;se.	0	0	fair	Oliver & Figot
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.71	602.4	29.93	760.4	49.1	9.5	89	n.	0	0		0	0			0	0		Vicente Fernandez.
Leon	24.49	622.0	30.32	770.0	49.2	9.6	85	ne.			1	2 c	0	sw.		0	0	foggy	Prof. M. Leal.
Mazatlan	29.72	754.9	29.98	761.6	61.5	16.3	94	nw.			2	0	0			0	0	fine	F. Quijano, C. E.
Mexico, Central Obs'y	23.15	587.9	30.34	770.8	44.8	7.1	82	calm	0	0			10 k			0	0	overcast	The Staff.
Morelia	24.35	618.3	30.60	777.4	49.5	9.7	73	se.			2	0	0			0	0	blue sky	M. Tena, M. D.
Pabellon, Aguascalientes	23.99	609.4	30.10	764.6	46.6	8.1	78	calm			0	0	0			0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.50	596.9	30.46	773.6	41.0	5.0	66	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.27	616.4	30.27	768.9	46.6	8.1	57	se.			1		10		e.	0	0	covered	G. Barrosta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.60	777.1	30.60	777.1	34 0	1.1		ese.			3					0	0		
Groningen	30.50	774.8	30.56	776.2	37.4	3.0		sw.			1					0	0		
Helder	30.54	775.7	30.54	775.7	39.2	4.0		ssw.			4					0	0		
Hellevoetsluis	30.58	776.6	30.58	776.6	33.8	1.0	81	ese.			1					0	0		
Utrecht	30.54	775.7	30.59	776.9	34.2	1.2	83	ssw.			1		8			0	0	very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.22	767.5	30.21	767.3	38.5	3.6	93	s.	7	3			6			0.057	1.7		
Brono	29.53	750.0	29.57	751.0	39.6	4.2	85	w.	45	20			10			0.252	6.4	raining	
Christiania	30.01	762.2	30.16	765.1	32.5	0.3	90	sw.	0	0			10			0	0		
Gjesvær	28.91	734.2	28.93	734.8	24.4	— 4.2		sw.			6		10						
Lodingen	29.14	740.1	29.19	741.3	30.9	— 0.6	64	ssw.			6		10			0.189	4.8		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					58.6	14.8	61	sw.	11.2	5.0			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.27	743.5	30.30	769.7	49.1	9.5	66	ene.	1.8	0.8			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.20	767.0	30.28	769.2	60.3	15.7	74	se.	1.8	0.8			10			0.732	18.6	raining	Capt. D. A. de Cunha.
Lisbon, Observatory	29.99	761.7	30.36	771.2	47.3	8.5	77	nne.	9.4	4.2			2			0	0		The Staff.
Ponta Delgada, Azores	30.39	772.0	30.47	773.8	57.9	14.4	74	ene.	3.1	1.4			4			0.020	0.5		
Saint Paul de Loando	29.67	753.5	29.87	758.7	78.1	25.6	97	wsw.	0.7	0.3			9			blank	blank		
Serra da Estrella	25.44	646.2	30.31	770.6	35.6	2.0	69	se.	20.6	9.2			2	se.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.84	732.5	30.00	762.0	12.7	—10.7		sw.	45	20			10 n			0.087	2.2		Major K. Lasarew.
Archangel	29.24	742.7	29.26	743.2	24.1	— 4.4	89	w.	18	8			10			0.094	2.4		Capt. Sseliwerstow.
Astrakhan	30.23	767.8	30.15	765.7	29.3	— 1.5	66	wnw.	25	11			10 ks			blank	blank		Capt. Wisganow.
Barnaul	30.01	762.3	30.60	777.1	—11.9	—24.4	70	calm	0	0			10			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.82	757.5	30.08	763.9	35.4	1.9	100	wsw.	7	3			10 n			0.055	1.4	raining	Observatory.
Ekaterinburg	28.41	721.7	29.41	747.1	16.0	— 8.9	94	se.	4	2			10			0.039	1.0	snowing	Meteorological Obs'y.
Kasan	29.54	750.4	29.84	757.9	6.4	—14.2	74	nnw.	13	6			1			0	0		Observatory.
Kertch	30.50	774.7	30.52	775.2	38.3	3.5	69	nnw.	2	1		0	0			0.020	0.5		Lagorio & Sastyrex.
Kieff	29.78	756.3	30.45	773.3	34.5	1.4	64	wnw.	7	3		0	1 ks			0	0		Observatory.
Lugan	30.16	766.1	30.37	771.5	34.5	1.4	53	wsw.	18	8			1			0	0		Meteorological Obs'y.
Moscow	29.45	748.0	29.95	760.8	28.0	— 2.2	77	sw.	13	6			10 s			0.039	1.0		Meteorological Obs'y
Nikolaiev	30.55	776.0	30.62	777.8	37.0	2.8	66	n.	4	2		0	0			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.08	764.1	30.17	766.3	— 6.9	—21.6	90	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.11	764.9	30.26	768.5	35.8	2.1	62	calm	0	0		0	5 k			0	0		Physical Observatory.
St. Petersburg	29.88	758.9	29.89	759.3	34.2	1.2	89	wnw.	16	7		0	6 ks;n			0.012	0.3	light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.55	725.1	30.22	767.6	27.7	— 2.4	87	calm	0	0			3			0.087	2.2		Teich, A. M.
Tiflis	28.88	733.6	30.37	771.3	37.6	3.1	50	nw.	45	20			0			0	0		Physical Observatory.
Warsaw	30.10	764.6	30.55	776.0	32.5	0.3	76	wsw.	11	5			10 ks						Astronomical Obs'y.
Wilna	29.94	760.4	30.38	771.7	34.5	1.4	78	wsw.	4	2			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.46	773.6	30.81	782.5	—29.2	—34.0	70	w.	4	2			0			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.23	767.8	47	8.3	92	ssw.			4		10			0.1	3.		J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.30	769.6	30.39	772.0	55.0	12.8	80	e.	4.0	1.8			7			0.315	8.0	almost cov'd	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.39	771.9	30.45	773.4	51.8	11.0	68	s	1.8	0.8		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.35	694.7	30.48	774.3	35.6	2.0	94	ne.	3.4	1.5		0	1			0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.09	713.6	30.40	772.1	46.8	8.2	63	ne.	7.2	3.2		0	5			0	0	cloudy	The Staff.
Murcia, Met. Obs'y	30.24	768.1	30.40	772.2	47.7	8.7	87	wsw.	1.3	0.6		5	5			0.051	1.3	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.41	747.0	30.34	770.5	47.8	8.8	73	n.	8.7	3.9		0	0			0	0	clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.07	763.8	30.14	765.4	70.0	21.1	84	ese.	2.5	1.1			9 n		ne.	0.028	0.7	raining	Benito Vines, S. J.
Manilla, Philippine Islands	29.99	761.8	30.05	763.2	77.3	25.2	75	ene.	0	0		0	k			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.26	768.5	30.36	771.1	53.4	11.9	74	se.	2.8	1.3			10		s.	0.522	13.3		Capt. G. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.00	762.1	30.10	764.4	72.0	22.2	94	calm	0	0		3 cs	5 k		sw.	0.098	2.5	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.95	760.7	30.08	764.0	76.8	24.9	76	sse.	0	0		0	0			0	0	clear	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.56	750.8	29.60	751.8	27.0	— 2.8	83	sw.			4		0			0	0		
Umea	29.78	756.3	29.83	757.6	34.2	1.2	59	sw.			2		3			0.047	1.2		
Hernosand	29.92	759.9	29.97	761.2	30.3	2.4	49	calm			0		0			0	0		
Stockholm	29.99	761.7	30.17	766.2	34.5	1.4	96	sse.			1		10			0.020	0.5	raining	
Wisby	30.13	765.4	30.19	766.9	39.6	4.2	93	w.			2		10			0	0		
SUB SERIES.																			
Upsala	30.03	762.8	30.12	765.0	35.6	2.0	93	ssw.	10.3	4.6			8		nnw.	0.031	0.8		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.10	739.0	30.60	777.1	29.5	— 1.4	96	ssw.			2					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.60	777.3	42.3	5.7	80	n.	6	2.5			10		n.	0.071	1.8		The Observatory.
Valona			30.54	775.8	54.7	12.6		nw.			1		5			0	0	cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.33	770.4	54.5	12.5	52	n.			3	0	5 k		n.	0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.23	767.8	30.32	770.1	5	—15.0	76	nw.	7	3.1		0	0			0.05	1.3	clear	
Alpena, Michigan	29.89	759.2	30.60	777.2	— 6	—21.1	65	n.	6	2.7			10 n			0.08	2.0	light snow	
Atlanta, Georgia	29.28	743.7	30.51	774.9	28.0	— 2.2	64	nw.	11	4.9		0	0			0	0	clear	
Atlantic City, New Jersey	30.36	771.1	30.37	771.4	18	— 7.8	36	nw.	15	6.7		0	2 k		n.	0	0	clear	
Augusta, Georgia	30.35	770.9	30.55	776.0	35.0	1.7	89	calm	0	0		0	0			0	0	clear	
Baltimore, Maryland	30.40	772.1	30.45	773.4	20	— 6.7	40	nw.	16	7.2		1 k	0	nw.		inap.	inap.	clear	
Barnegat, New Jersey	30.32	770.1	30.34	770.6	17.0	— 8.3	42	nw.	22	9.8		0	4 k		nw.	0	0	fair	
Bismarck, Dakota	28.74	730.0	30.74	780.8	—16	—26.7	100	e.	6	2.7			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.00	685.8	29.92	760.0	30	— 1.1	85	se.	4	1.8			10 s		calm	0	0	cloudy	
Boston, Massachusetts	29.85	758.2	30.02	762.5	4.5	—15.3	60	w.	20	8.9		0	0			0	0	clear	
Brownsville, Texas																			
Buffalo, New York	29.70	754.4	30.50	774.7	0.2	—17.7	93	nw.	9	4.0			10 ks;s		w.	0.04	1.0	cloudy	
Burlington, Vermont	29.93	760 2	30.24	768.1	—10.9	—23.8	89	nw.	15	6.7			10 s		w.	inap.	inap.	cloudy	
Cairo, Illinois	30.26	768.6	30.68	779.3	30.0	— 1.1	78	ne.	5	2.2		0	0			0	0	clear	
Campo, California	27.43	696.7	30.06	763.5	23.6	— 4.7	88	e.	3	1.3		0	3 s		w.	0	0	clear	
Camp Thomas, Arizona																			
Cape Henry, Virginia	30.43	772.9	30.45	773 4	28	— 2.2	77	sw.	6	2.7		0	0			0	0	clear	
Cape May, New Jersey																			
Castroville, Texas	29.56	750.8	30.41	772.4	45	7.2	60	e.	5	2.2			10 s			0	0	cloudy	
Cedar Keys Florida	30.31	769.9	30.33	770.4	45	7.2	52	n.	20	8.9		5 cs	0			0	0	fair	
Champaign, Illinois	29.81	757 2	30.68	779.3	9.0	—12.8	58	n.	16	7.2		0	4 s		nw.	0	0	fair	
Charleston, S. Carolina	30.44	773 2	30.50	774.7	36	2.2	53	ne.	13	5.8		0	0			0	0	clear	
Charlotte, N. Carolina	29.59	751.6	30.48	774.2	29.0	— 1.7	45	n.	5	2.2		0	sk.			0	0	clear	
Chattanooga, Tennessee	29.74	755 4	30.60	777.2	26.0	— 3.3	64	ne.	5	2.2		0	0			0	0	clear	
Cheyenne, Wyoming	23.96	608.6	30.21	767.3	21.2	— 6.0	64	sw.	1	0.4		0	3 s			0	0	fair	
Chicago, Illinois	29.92	760.0	30.67	779.0	6.3	—14.3	65	nw.	6	2.7		0	0			0	0	clear	
Chincoteague, Virginia	30.41	772.4	30.43	772.9	23	— 5.0	61	nw.	23	10.3		0	2 s		w.	0	0	clear	
Cincinnati, Ohio	29.91	759.7	30.60	777.2	26.2	— 3.2	76	w.	4	1.8		0	0			0	0	clear	
Cleveland, Ohio	29.78	756.4	30.56	776.2	11.8	—11.2	83	nw.	17	7.6			10 s		nw.	inap.	inap.	cloudy	
Coleman City, Texas	28.55	725.2			28	— 2.2	88	calm	0	0		0	0			0	0	clear	
Columbus, Ohio	29.68	753 9	30.58	776.7	18	— 7.8	67	n.	10	4.5		0	0			0	0	clear	
Concho, Texas	28.36	720 3	30.38	771.6	29	— 1.7	88	calm	0	0		0	0			0	0	clear	
Davenport, Iowa	30.03	762.7	30.74	780 8	10	—12.2	58	ne.	8	3.6			10 s		calm	0	0	cloudy	
Dayton, Washington T'y	28.14	714.7	29.94	760.5	32	0.0	88	sw.	1	0.4			10 s		sw.	0	0	threatening	
Deadwood, Dakota	25 38	644.6	30.33	770.4	5.6	—14.7	60	calm	0	0		0	0			0	0	clear	
Decatur, Texas					31	— 0.0	71	se.	8	3.6		0	0			0	0	clear	
Delaware Breakwater, Del.	30.39	771.9	30.41	772.4	22	— 5.6	73	nw.	36	16.1		0	5 ks		nw.	inap.	inap.	fair	
Denison, Texas	29.65	753.1	30.49	774.4	30.0	— 1.1	78	e.	5	2.2		0	0			0	0	clear	
Denver, Colorado	24 71	627.6	30.23	767.8	18.7	— 7.4	86	s.	8	3.6		0	0			0	0	clear	
Des Moines, Iowa	29.73	755.1	30.70	779.8	13	—10.6	80	e.	8	3.6		0	7 s			0	0	fair	
Detroit, Michigan	29.84	757.9	30.60	777.2	13.1	—10.5	80	nw.	7	3.1			10 s		calm	0.03	0.8	cloudy	
Dodge City, Kansas	27.50	698.5	30.25	768.3	25.5	— 3.6	82	s.	14	6.3		0	0			0	0	clear	
Dubuque, Iowa	30.00	762.0	30.77	781.5	3.2	—16.0	60	ne.	7	3.1		1 cs	6 s	n.	nw.	0	0	fair	
Duluth, Minnesota	30.15	765.8	30.91	785.1	—21	—29.4	100	calm	0	0		0	0			0	0	clear	
Eagle Pass, Texas	29.55	750.6	30.39	771.9	46.0	7.8	68	se.	8	3.6			10 s			0	0	cloudy	
Eagle Rock, Idaho	25.22	640.6	30.18	766.6	8	—13.3	80	n.	9	4.0			10 s			0	0	cloudy	
Eastport, Maine	29.58	751 3	29.66	753.4	3.5	—15.8	72	nw.	22	9.8		4 cs	0	nw.		0.15	3.8	fair	
El Paso, Texas	25.38	670.0	30.26	768.6	25.2	— 3.8	42	se.	2	0.9		0	0			0	0	clear	
Erie, Pennsylvania	29.73	755.1	30.50	774.7	10	—12.2	80	nw.	21	9.4			10 s			0.04	1.0	cloudy	
Escanaba, Michigan	29.99	761.7	30.71	780.0	—10	—23.3	74	w.	13	5.8		0	0			0	0	clear	
Florence, Arizona																			
Fort Apache, Arizona	25.06	636.5	30.18	766.6	24	— 4.4	56	ne.	1	0.4			10 s		calm	0	0	cloudy	
Fort Assinnaboine, Montana	27.36	694.9	30.40	772.1	— 3	—19.4	68	n.	2	0.9		0	9 n			0.02	0.5	light snow	
Fort Bennett, Dakota	28.96	735.6	30.70	779.8	— 7	—21.7	100	calm	0	0			10 n			0.07	1.8	light snow	
Fort Benton, Montana	27.39	695.7	30.37	771 4	0	—17.8	68	ne.	3	1.3		0	0			0.15	3.8	clear	
Fort Buford, Dakota	28.43	722.1	30.63	778.0	— 9	—22.8	78	e.	16	7.2			10 n		calm	0.02	0.5	light snow	
Fort Custer, Montana	26.98	685.3	30.36	771.1	7	—13.9	100	s.	1	0.4		0	3 s		calm	0	0	fair	
Fort Davis, Texas	25.23	640.8	30.21	767.3	32	0.0	81	s.	2	0.9		0	0			0	0	clear	
Fort Elliott, Texas	27.50	698.5	30.42	772.7	23	— 5.0	51	s.	12	5.4		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.91	759.7	30.51	774 9	32.0	0.0	68	e.	12	5.4		0	0			0	0	clear	
Fort Grant, Arizona	25.26	641.6	30.16	766.1	32	0.0	65	nw.	4	1.8		5 cs	0			0	0	fair	
Fort Griffin, Texas	29.10	739.1	30.48	774.2	29	— 1.7	77	ne.	2	0.9		0	0			0	0	clear	
Fort Keogh, Montana	27.68	703 1	30.37	771.4	10	—12.2	60	se.	12	5.4		3 cs	0	se.		0	0	clear	
Fort Macon, North Carolina	30.47	773.9	30.48	774 2	31	— 0.6	78	nw.	11	4.9		hz.	0	calm		0	0	clear	
Fort McKavett, Texas	28.05	712 5	30.44	773.2	33.4	0.8	81	calm	0	0			10 s			0	0	cloudy	
Fort Missoula, Montana	26.67	677.4	30.13	765.3	24	— 4.4	88	w.	2	0.9		0	5 s			0	0	fair	
Fort St. Michaels, Alaska	30.30	769 6	30.33	770.4	14	—10.0	82	sw.	11	4.9		0	5 s		sw.	0	0	fair	
Fort Shaw, Montana	26.48	672.6	30.34	770.6	— 3	—19.4	68	calm	0	0		10 cs	0			0.09	2.3	cloudy	
Fort Sill, Indian Territory	29.14	740.1	30.47	773 9	26.5	— 3.1	78	s.	6	2.7		0	0			0	0	clear	
Fort Stevenson, Dakota	28.70	729.0	30.76	781.3	—15	—26.1	46	sw.	8	3.6			10 s		calm	0	0	cloudy	
Fort Verde, Arizona					22	— 5.6	73	w.			1	0	2 s		w.	0	0	clear	
Fredericksburg, Texas	28.59	726 2	30.41	772.4	37	2.8	92	calm	0	0		9 cs	0			0	0	cloudy	
Galveston, Texas	30.37	771.4	30.41	772.4	44	6.7	76	ne.	18	8.0		0	5 ks		ne.	0	0	fair	
Grand Haven, Michigan	29.52	760.0	30.63	778.0	9.0	—12.8	87	n.	12	5.4			10 n		w.	0.40	10.2	light snow	
Hatteras, North Carolina	30.44	773.2	30.46	773.7	32	0.0	78	nw.	16	7.2		0	hz.			0	0	clear	
Helena, Montana	25.76	654.3	30.19	766.8	9	—12.8	80	w.	4	1.8		0	0			inap.	inap.	clear	
Henrietta, Texas	29.44	747.8	30.51	774 9	30	— 1.1	77	e.	8	3.6		0	0			0	0	clear	
Huron, Dakota	29.20	741.7	30.74	780.8	— 7.3	—21.8	61	ne.	14	6.3			10 n			inap.	inap.	light snow	
Indianapolis, Indiana	29.73	755.1	30.57	776.5	18.5	— 7.5	76	n.	6	2.7		3 cs;hz	0	calm		0	0	fair	
Indianola, Texas	30.34	770.6	30.37	771.4	49.5	9.7	71	ne.	24	10.7		5 k	0	sw.		0	0	fair	
Jacksboro, Texas	29.24	742 7	30.48	774.2	30	— 1.1	78	e.	7	3.1		0	0			0	0	clear	
Jacksonville, Florida	30.36	771.1	30.41	772.4	44	6.7	68	n.	10	4 5		2 cs	0			0	0	clear	
Keokuk, Iowa	29.97	761.2	30.67	779.0	15.0	— 9.4	83	ne.	9	4.0		2 ck	0			0	0	clear	
Key West, Florida	30.14	765.5	30.17	766.3	70.0	21.1	87	ne.	16	7.2			10 s		ne.	0	0	cloudy	
Kittyhawk, North Carolina	30.44	773 2	30.46	773.7	29	— 1.7	45	nw.	10	4.5		0	1 s			0	0	clear	
Knoxville, Tennessee	29.55	750.6	30.63	778.0	23.2	— 4.9	85	n.	4	1.8		0	0			0	0	clear	
La Crosse, Wisconsin	29.94	760 5	30.78	781.8	— 9	—22.8	100	n.	9	4.0		0	5 s			0	0	fair	
La Mesilla, New Mexico	26.25	666.7	30.28	769.1	24.5	— 4.2	82	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.61	752.1	30.57	776.5	25	— 3.9	64	calm	0	0		2 cs	0			0	0	clear	
Lewiston, Idaho	29.08	738.6	29.95	760 7	33.8	1.0	65	e.	1	0.4			10 s		calm	0	0	cloudy	
Little Rock, Arkansas	30.24	768.1	30.57	776.5	30	— 1.1	78	ne.	3	1.3		0	0			0	0	clear	
Los Angeles, California	29.74	755.4	30.14	765.5	39.8	4.3	73	e.	4	1.8		0	5 s		calm	0	0	fair	
Louisville, Kentucky	30.01	762.2	30.60	777.2	30.0	— 1.1	78	sw.	4	1.8		5 cs	0	calm		0	0	fair	
Lynchburg, Virginia	29.70	754.4	30.42	772.7	27.5	— 2.5	70	w.	8	3.6		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29 64	752.8	30.74	780.8	— 7	—21.7	58	nw.	8	3.6		1 cs	0	nw.		0	0	clear	
Marquette, Michigan	29.91	759.7	30.69	779.5	— 6	—21.1	91	w.	20	8.9			10 n		calm	0.02	0.5	light snow	
Mason, Texas	28.69	728 7	30.43	772.9	34.6	1.4	77	calm	0	0			10 s		calm	0	0	cloudy	
Memphis, Tennessee	30.26	768.6	30.72	777.7	28	— 2.2	77	e.	12	5.4		0	0			0	0	clear	
Milwaukee, Wisconsin	29.91	759 7	30.71	780.0	— 5	—20.6	100	nw.	11	4.9		0	2 s			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.42	772.7	30.46	773.7	36.0	2.2	53	ne.	14	6.3		0	0			c	0	clear	
Montgomery, Alabama	30.28	769.1	30.52	775.2	31.5	— 0.3	63	ne.	3	1.3		0	0			0	0	clear	
Moorhead, Minnesota	29.79	756.7	30.90	784.8	—35	—37.2	100	ne.	10	4.5		0	0			0	0	clear	
Morgantown, W. Virginia	29.49	749.0	30.55	775.0	21.5	— 5.8	70	nw.	19	8.5			10 s		nw.	0.07	1.8	cloudy	
Mt. Washington, N. H.	23.09	586.5	29.72	754.9	—23.0	—30.6	100	nw.	56	25.1			fg		nw.	0.35	8.9	dense fog	
Nashville, Tennessee	30.03	764.0	30.64	778.2	27.0	— 2.8	79	n.	4	1.8		0	0			0	0	clear	
New Haven, Connecticut	30.09	764.3	30.21	767.3	8	—13.3	62	nw.	7	3.1		1 k	0	w.		0	0	clear	
New London, Connecticut	30.14	765.5	30.19	766.8	8	—13.3	55	nw.	15	6.7		0	0			0	0	clear	
New Orleans, Louisiana	30.37	771.4	30.43	772.9	40.0	4.4	48	n.	12	5.4		1 c	0			0	0	clear	
Newport, Rhode Island	30.06	763.5	30.11	764.8	9.8	—12.3	58	w.	32	14.3		0	0			inap.	inap.	clear	
New River, N. Carolina					31	— 0.6	88	n.			1	0	0			0.15‡	3.8‡	clear	
New Shoreham, Rhode I'd.	30.12	765.0	30.15	765.8	10.0	—12.2	38	nw.	48	21.5		0	4 k		w.	0.02	0.5	fair	
New York, New York	30.14	765.5	30.33	770.4	12	—11.1	80	w.	22	9.8		0	0			inap.	inap.	clear	
Norfolk, Virginia	30.42	772.7	30.46	773.7	29	— 1.7	45	nw.	3	1.3		3 ck	0	nw.		0	0	clear	
North Platte, Nebraska	27.25	692.1	30.37	771.4	16.6	— 8.6	74	e.	12	5.4		hz.	hz			0	0	light haze	
Olympia, Washington T'y	29.80	756.9	29.84	757.9	36.0	2.2	89	s.	1	0.4		0	9 n		calm	0.01	0.3	light rain	
Omaha, Nebraska	29.35	745.5	30.62	777.7	15.3	— 9.3	83	e.	12	5.4			10 s			0	0	cloudy	
Ogdensburg, Pt. Barrow, Alas.	29.80	756.9	29.82	757.4	— 4.3	—20.2	80	wsw.	28	12.5		0	0			inap.	inap.	clear	
Oswego, New York	30.07	763.8	30.42	772.7	— 1	—18.3	100	nw.	20	8.9			10 n		nw.	0.17	4.3	light snow	
Palestine, Texas																			
Pensacola, Florida																			
Philadelphia, Pa.	30.43	772.9	30.46	773.7	36.7	2.6	50	n.	15	6.7		0	1 s			0	0	clear	
Pike's Peak, Colorado	30.33	770.4	30.39	771.9	17	— 8.3	67	nw.	20	8.9		0	3 k		n.	0	0	clear	
Pioche, Nevada	17.58	446.5	30.28	769.1	8	—13.3	69	w.	16	7.2		0	5 s		w.	0	0	fair	
Pittsburg, Pennsylvania	24.00	609.0	30.20	767.1	29	— 1.7	61	s.	7	3.1		0	0			0	0	clear	
Port Eads, Louisiana	29.70	754.4	30.55	776.0	14.0	—10.0	80	w.	8	3.6			10 s		w.	0.07	1.8	cloudy	
Port Huron, Michigan	30.36	771.1	30.37	771.4	50.1	10.1	74	ne.	27	12.1		3 c	3 k	w.	ne.	0	0	fair	
Portland, Maine	29.85	758.2	30.58	776.7	— 1.1	—18.4	87	w.	4	1.8		0	2 ks		w.	0	0	clear	
Portland, Oregon	29.83	757.7	29.88	758.9	6	—14.4	76	nw.	11	4.9			10 s		nw.	0	0	cloudy	
Portsmouth, N. Carolina	29.82	757.4	29.89	759.2	38.5	3.6	88	calm	0	0			10 s		calm	0.45	11.4	cloudy	
Prescott, Arizona					34	1.1	52	nw.	9	4.0		0	0			0	0	clear	
Punta Rassa, Florida	24.75	628.6	30.13	765.3	20	— 6.7	64	s.	2	0.9		2 cs	0	calm		0	0	clear	
Red Bluff, California	30.20	767.1	30.21	767.3	60	15.6	65	ne.	15	6.7			10 n		se.	inap.	inap.	light rain	
Rio Grande City, Texas	29.58	751.3	29.96	761.0	44.1	6.7	93	sw.	11	4.9			10 n			0.25	6.3	light rain	
Rochester, New York	30.09	764.3	30.34	770.6	51	10.6	93	calm	0	0		10 cs	0	e.		0	0	cloudy	
Roseburg, Oregon	29.74	755.4	30.45	773.4	0	—17.8	68	nw.	16	7.2			10 s		nw.	0.05	1.3	cloudy	
Sacramento, California	29.31	744.5	29.88	758.9	40	4.4	89	calm	0	0		0	0			0.24	6.1	clear	
St. Louis, Missouri	29.94	760.5	30.02	762.5	43.9	6.6	83	se.	10	4.5			9 s			0	0	cloudy	
St. Paul, Minnesota	30.00	762.0	30.64	778.2	24.9	— 3.9	73	sw.	3	1.3		6 c	0			0	0	fair	
St. Vincent, Minnesota	29.88	758.9	30.82	782.8	— 7	—21.7	76	n.	7	3.1		0	0			0	0	clear	
Salt Lake City, Utah	29.99	761.7	30.97	786.6	—38	—38.9	100	calm	0	0		0	5 s		calm	0	0	fair	
San Antonio, Texas	25.57	649.5	30.14	765.5	23	— 5.0	51	se.	2	0.9		0	5 s			0	0	fair	
San Diego, California	29.68	753.9	30.40	772.1	39.7	4.3	73	calm	0	0			8 s		ne.	0	0	cloudy	
Sandusky, Ohio	29.97	761.2	30.04	763.0	45.0	7.2	86	nw.	2	0.9		0	4 s			0	0	fair	
Sandy Hook, New Jersey	29.86	758.4	30.58	776.7	13	—10.6	80	nw.	14	6.3			10 s			0.03	0.8	cloudy	
San Francisco, California	30.29	769.4	30.33	770.4	14.0	—10.0	80	n.	30	13.4		3 k	0	nw.		inap.	inap.	clear	
Santa Fé, New Mexico	29.96	761.0	30.03	762.7	48	8.9	86	se.	13	5.8			10 s		sw.	0	0	threatening.	
Savannah, Georgia	23.26	590.8	30.28	769.1	24	— 4.4	73	ne.	4	1.8		0	0			0	0	clear	
Shreveport, Louisiana	30.42	772.7	30.52	775.2	36	2.2	69	n.	6	2.7		0	0			0	0	clear	
Silver City, New Mexico	30.28	769.1	30.53	775.4	31	— 0.6	68	ne.	1	0.4		0	0			0	0	clear	
Sitka, Alaska	24.29	617.0	30.15	765.8	23	— 5.0	76	n.	3	1.3		0	0			0	0	clear	
Smithville, North Carolina	30.16	766.1	30.24	768.1	28.5	— 1.9	62	ne.	4	1.8		0	0			0	0	clear	
Spokane Falls, Wash. Ter.	30.46	773.7	30.50	774.7	28	— 2.2	64	n.	7	3.1		0	0			0	0	clear	
Springfield, Illinois	27.91	708.9	30.05	763.3	29	— 1.7	100	e.	5	2.2			10 n			0.58	14.7	heavy snow	
Springfield, Massachusetts	29.94	760.5	30.67	779.0	19	— 7.2	76	ne.	12	5.4		0	3 s			0	0	clear	
Springfield, Mo.	30.08	764.0	30.22	767.6	4.2	—15.4	52	nw.	18	8.0		0	0			inap.	inap.	clear	
Stockton, Texas	29.04	737.6	30.62	777.7	26.5	— 3.1	82	se.	8	3.6		0	0			0	0	clear	
Thatcher's Island, Mass.	27.16	689.9	30.30	769.6	35.0	1.7	100	calm	0	0		0	0			0	0	clear	
Toledo, Ohio	29.92	760.0	29.98	761.5	4.0	—15.6	72	nw.	32	14.3		0	4 k		nw.	0	0	fair	
Tucson, Arizona	29.83	757.7	30.57	776.5	13	—10.6	80	nw.	8	3.6			10 ks		w.	inap.	inap.	cloudy	
Umatilla, Oregon	27.56	700.0	30.06	763.5	41	5.0	82	se.	4	1.8		0	0			0	0	clear	
Uvalde, Texas	29.60	751.8	29.99	761.7	33.5	0.8	90	sw.	1	0.4			10 n			0.09	2.3	light snow	
Vicksburg, Mississippi																			
Visalia, California	30.28	769.1	30.55	776.0	32	0.0	60	ne.	2	0.9		0	fg		calm	0	0	clear	
Washington, D. C.	29.68	753.9	30.08	764.0	36.5	2.5	52	se.	2	0.9		0	8 ks			0	0	cloudy	
West Los Animas, Colorado	30.35	770.9	30.47	773.9	21	— 6.1	70	nw.	11	4.9		0	0			inap.	inap.	clear	
Wickenburg, Arizona																			
Williamsport, Pa.					33	0.6	80	calm			0	0	2 s			0	0	clear	
Wilmington, N. Carolina	29.75	755.6	30.38	771.6	12	—11.1	80	nw.	16	7.2			10 k		nw.	inap.	inap.	cloudy	
Winnemucca, Nevada	30.45	773.4	30.51	774.9	34	1.1	52	n.	5	2.2		0	0			0	0	clear	
Wood's Holl, Mass.	25.46	646.7	30.00	762.0	24	— 4.4	76	ne.	6	2.7			10 s		calm	0	0	cloudy	
Yankton, Dakota	29.99	761.7	30.03	762.7	10	—12.2	58	nw.	48	21.5		1 k	0	nw.		0	0	clear	
Yuma, Arizona	29.21	741.9	30.63	778.0	5	—15.0	76	ne.	21	9.4			10 s			0	0	cloudy	
Sun-Series.	29.86	758.4	30.01	762.2	46.7	8.2	69	ne.	3	1.3		0	4 s			0	0	fair	
Bogota, U. S. Columbia	22.01	559.0			52.5	11.4	82	ne.	1	0.4		0	3 s			0	0	clear	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.04	763.0	30.05	763.3	77	25.0	82	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.90	759.4	29.92	760.0	78	25.6	86	calm	0	0		0	8 ks		e.	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.03	762.7	30.05	763.3	69	20.6	95	e.				0	2 ks			0	0	clear	B. Bigar.
Havana, Cuba, W. I.	30.14	765.5	30.19	766.8	71	21.7	84	calm	0	0			10 ks		ne.	inap.	inap.	cloudy	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.05	763.3	30.06	763.5	66.8	19.3	89	calm	0	0		0	1 s		e.	0	0	fine	Robert Johnstone.
Navassa, W. I.	29.96	761.0	30.04	763.0	77	25.0	65	ne.	20	8.9		5 k	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	78	25.6	86	e.			2	5 k	7 ks	e.		0.290	7.4		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.96	761.0	82	27.8	76	calm			0	0	3 ks		calm	0	0	clear	Miss Flora A. Nichols.
Rivas, Nicaragua					73.4	23.0	88	ne.			5	0	1 ks		ne.	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.08	764.0	30.10	764.5	72	22.2	71	ne.	2.4	1.1		0	1 s		ne.	0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.60	777.2	30.65	778.5	—26.0	—32.2		sw.	18	8.0		0	0			0	0	clear	J. Fortescue & W. Wood

‡ Total for last 5 days.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 20° 07′, E. 109° 55′	29.96	761.0	68	20.0		ene.			2		7							misty	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India.	29.93	760.2	79.8	26.6	81	n.			1		7							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.54	775.7	57.2	14.0	73	calm			0		4							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 5° 55′, E. 83° 00′	29.88	758.9	80	26.7	91	nne.			1–2		8					4	n.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.86	758.4	80	26.7	66	e.			3		1	calm						blue sky	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.90	759.4	70	21.1	90	s.			1		9	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey.	30.60	777.2	43	6.1		nne.			2		10							showery	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean.	30.35	770.9	63	17.2		ene.			1		2	ene.						d. clouds	Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, N. 32° 13′, E. 119° 27′	29.84	757.9	62.5	16.9	94	calm			0		2	nw.						d. clouds	Capt. S. Long.
H. M. S. Diamond, S. 36° 08′, W. 5° 52′	29.68	753.9	62	16.7	77	wsw.			3		8					2	w.	showery	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	29.95	760.7	62	16.7	71	wnw.			2–3		4	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 21° 32′, W. 76° 24′	30.15	765.8	73.5	23.1	98	e.			5		9					2	e.	showery	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 19′, W. 59° 37′	29.32	744.7	54	12.2	84	wnw.			2		2					1–2	wnw.	blue sky	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.94	760.5	82	27.8		ene.			1		5							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald, S. 42° 53′, E. 147° 22′	29.75	755.6	62	16.7	88	nw.			2		1	nw.						blue sky	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 25′, E. 139° 39′	30.17	766.3	44	6.7		nw.			1		10	nw.						overcast	Capt. G. Robinson.
H. M. S. Espiegle, S. 21° 05′, W. 29° 35′	30.06	763.5	80	26.7	78	ese.			2		1	ese.				1	ese.	blue sky	Capt. C. A. P Bridge.
H. M. S. Euryalus.																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.93	760.2	79	26.1	76	sw.			2		2							d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.14	765.5	48	8.9	85	calm			0		10							showery	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.93	760.2	64	17.8	78	nnw.			2		2							misty	Comm. E. G. Bourke.
H. M. S. Garnet, Port Stephens, Falkland Ids	29.32	744.7	51	10.6	64	wnw.			6		4							squally	Capt. L. Jones.
H. M. S. Iris, Alexandretta, Turkey, Asia	30.26	768.6	54	12.2	55	calm			0		0							blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.02	762.5	65	18.3	94	ne.			1		2	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark, S. 33° 28′, E. 161° 18′	30.00	762.0	75.3	24.1	89	n.			5		3					3	ne.	d. clouds	Lieut. C. F. Oldham
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.04	763.0	67.5	19.7	90	e.			1		3							misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 13° 22′, E. 47° 35′	30.01	762.2	77	25.0	86	e.			1–2		1	ene.				2	e.	blue sky	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, Grenada, West Indies	29.97	762.2	78	25.6	82	ene.			2		8	ne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 9° 30′, E. 69° 48′	29.90	759.4	80	26.7	74	nne.			3		4	n.				2	nne.	d. clouds	Capt. R. Kinahan.
H. M. S. Pelican, S. 7° 41′, W. 14° 19′	29.89	759.2	78	25.6	100	se.			2		6					2	se.	d. clouds	Capt. F. R. Dickens.
H. M. S. Phœnix.																			Capt. H. H. Grenfel.
H. M. S. Ready, N. 29° 08′, E. 50° 28′			61.1	16.2		nw.			3									d. clouds	Capt. W. H Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	29.84	757.9	41	5.0	91	n.			1		9							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Trincomalee, Ceylon, India	30.00	762.0	79.5	26.4	78	ese.			3		8	e.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 15° 40′, E 58° 20′	30.02	762.5	77	25.0	90	e.			2		2	e.				sm'h		d. clouds	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 27′, W. 88° 12′	30.07	763.8	76	24.4	86	nw.			1		3							d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, Off Panama, Panama	29.93	760.2	75	23.9	85	nnw.			2		1	calm						blue sky	Capt. A. H. Markham.
H. M. S. Tyne, N. 9° 50′, E. 62° 53′	29.95	760.7	80	26.7	95	e.			2		1	calm				2	ene.	blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica W I.	30.04	763.0	75	23.9		nnw.			1		3							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, N. 28° 25′, E. 50° 48′	30.10	764.5	65.5	18.6	68	nw.			6		7	nw.				5	nnw.	d. clouds	Capt. T. P. Nesham.
PORTUGESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Brava, Cape Verd Ids	29.99	761.8	76.1	24.5	80	ne.			2		3		sw.			2	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 10° 53′, W. 66° 04′	30.02	762.4	80.8	27.1	84	e.			1		4							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
UNITED STATES NAVAL SERIES.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
By authority of the SECRETARY OF THE NAVY.																			
N. Yard, Pensacola, Fla	30.44	773.2	39	3.9	46	nne.	15	6.7	.....	.....	5	.....	ne.	0	0	.....	.....	fair	.....
N. Yard, Portsmouth, N. H.	29.91	759.7	0	—17.8	.....	wnw.	34	15 2	.....	.....	2	.....	wnw.	0	0	.....	.....	fair	.....
Naval Hospital Yokohama, Japan	30.00	762.0	43.5	6.4	79	calm	.....	.....	0	.....	8	.....	n.	0	0	.....	.....	cloudy	.....
Adams, Callao, Peru	29.71	754.6	70	21.1	100	sse.	.....	.....	1-2	.....	8	.....	.....	.....	.....	gr'd	.....	cloudy	.....
Alaska, Valparaiso, Chili	29.89	759.2	61	16 1	88	calm	.....	.....	0	.....	10	.....	.....	0	0	sm'h	.....	cloudy	.....
Alert. N. 10° 32′, E. 106° 56′*	29.82	757.4	82	27.8	75	ese.	.....	.....	1	.....	2	.....	w.	0	0	sm'h	.....	fair	.....
Alliance, Boston, Mass.*†	29.96	761.0	10	—12.2	.....	nw.	.....	.....	3	.....	2?	.....	.....	0	0	.....	.....	cloudy ?	.....
Ashuelot Tientsin, China	30.23	767.8	34	1.1	100	wsw.	.....	.....	2	.....	10	.....	sw.	.....	.....	.....	.....	overcast	.....
Brooklyn, S. 31° 25′, W. 49° 08′	29.95	760.7	76	24.4	86	ene.	6	2.7	.....	.....	2	.....	ene.	0	0	mod.	ene.	fair	.....
Colorado, New York, N. Y	30.32	770.1	13	—10.6	.....	nw.	18	8.0	.....	.....	0	.....	.....	0	0	.....	.....	clear	.....
Essex, N. 34° 48′, W. 44° 36′	30.18	766.6	65	18.3	78	sse.	.....	.....	4	.....	2	.....	sse.	.....	.....	sm'h	.....	clear	.....
Franklin, Norfolk, Va	30.42	772.7	27	— 2.8	.....	wsw.	4.8	2.1	.....	.....	2	.....	w.	0	0	.....	.....	fair	.....
Galena, N. 24° 55′, W. 19° 02′	30.08	764.0	68	20.0	95	ese.	.....	.....	4	.....	10	.....	se.	.....	.....	mod.	e.	hazy	.....
Independence, N. Yard, Mare I'd, Cal	29.86	758.4	49	9.4	78	se.	16.8	7.5	.....	.....	8	.....	sse.	0	0	.....	.....	cloudy	.....
Kearsarge, New Orleans, La	30.44	773.2	44	6.7	68	ene.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
Lackawanna, Valparaiso, Chili†	30.05	763.3	62	16.7	100	n.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy	.....
Lancaster, Leghorn, Italy	30.43	772.9	57	13.9	39	ene.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	misty	.....
Michigan, Erie, Pa	30.40	772.1	12	—11.1	42	wnw.	.....	.....	8	.....	10	.....	.....	.....	.....	.....	.....	snowing	.....
Minnesota, Newport, R. I	.....	.....	10	—12.2	.....	wnw.	30	13.4	.....	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
Monocacy, Yokohama, Japan	30.15	765.8	48	8.9	85	wnw.	.....	.....	1	.....	10	.....	calm	.....	.....	.....	.....	cloudy	.....
Nipsic, Leghorn, Italy	30.48	774.2	56	13.3	63	n.	.....	.....	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	.....
Onward, Callao, Peru†	30.05	763.3	68	20.0	95	se.	.....	.....	2	.....	5	.....	nnw.	.....	.....	long	w.	fair	.....
Palos, Hong Kong, China	30.06	763.5	66	18.9	100	ese.	.....	.....	1	.....	2	.....	calm	.....	.....	.....	.....	fair	.....
Passaic, Washington, D. C.	30.46	773.7	21	— 6.1	?	nw.	.....	.....	6	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
Pensacola. Valparaiso, Chili	29.93	760.2	61	16.1	88	ne.	3	1.3	.....	.....	10	.....	e.	0	0	.....	.....	cloudy	.....
Powhatan, Boston, Mass	30.01	762.2	6	—14.4	90	wnw.	.....	.....	4	.....	5	.....	.....	.....	.....	.....	.....	squally	.....
Quinnebaug, Villafranca, France	30.47	773.9	59	15.0	65	ese.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	.....
Ranger, N. 19° 06′, W. 104° 23′*	29.86	758.4	72	22.2	90	n.	.....	.....	2	.....	2	.....	calm	0	0	sm'h	.....	clear	.....
Richmond, S. 2° 40′, W. 168° 34′*	29.56	750.8	81	27.2	91	wnw.	.....	.....	6	.....	10	.....	w.	0.10	2.5	long	w.	rainy	.....
Shenandoah, Montevideo, Uruguay*	29.98	761.5	76	24.4	82	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear	.....
St. Louis, League Island, Pa	30.57	776.5	17	— 8.3	100	nw.	24	10.7	.....	.....	5	.....	nw.	.....	.....	.....	.....	snowing	.....
Swatara, Kobe, Japan*	30.01	762.2	53	11.7	67	ne.	.....	.....	1	.....	10	.....	.....	.....	.....	sm'h	.....	sprinkling	.....
Tennessee, New York, N. Y	30.29	769.4	14	—10.0	.....	nw.	14	6.3	.....	.....	2	.....	.....	0	0	.....	.....	squally	.....
Vandalia, N. 10° 48′, W. 65° 57′	30.02	762.5	75	23.9	95	n.	.....	.....	1	.....	2	.....	calm	.....	.....	.....	.....	fair	.....
Wabash, Boston, Mass	30.01	762.2	5	—15.0	.....	wnw.	13	5.8	.....	.....	2	.....	n.	0	0	.....	.....	clear	.....
Wachusetts, N. 43° 58′, W. 124° 38′	29.82	757.4	45	7.2	92	ssw.	.....	.....	2	.....	8	.....	sw.	.....	.....	long	s;w.	cloudy	.....
Wyoming, Port Royal, S. C	30.47	773.9	36	2.2	61	n.	16	7.2	.....	.....	0	.....	.....	0	0	.....	.....	clear	.....
Yantic, N. 10° 18′, W. 79° 15′*	29.92	760.0	76	24.4	95	ene.	.....	.....	5	.....	8	.....	.....	.....	.....	mod.	ne.	squally	.....

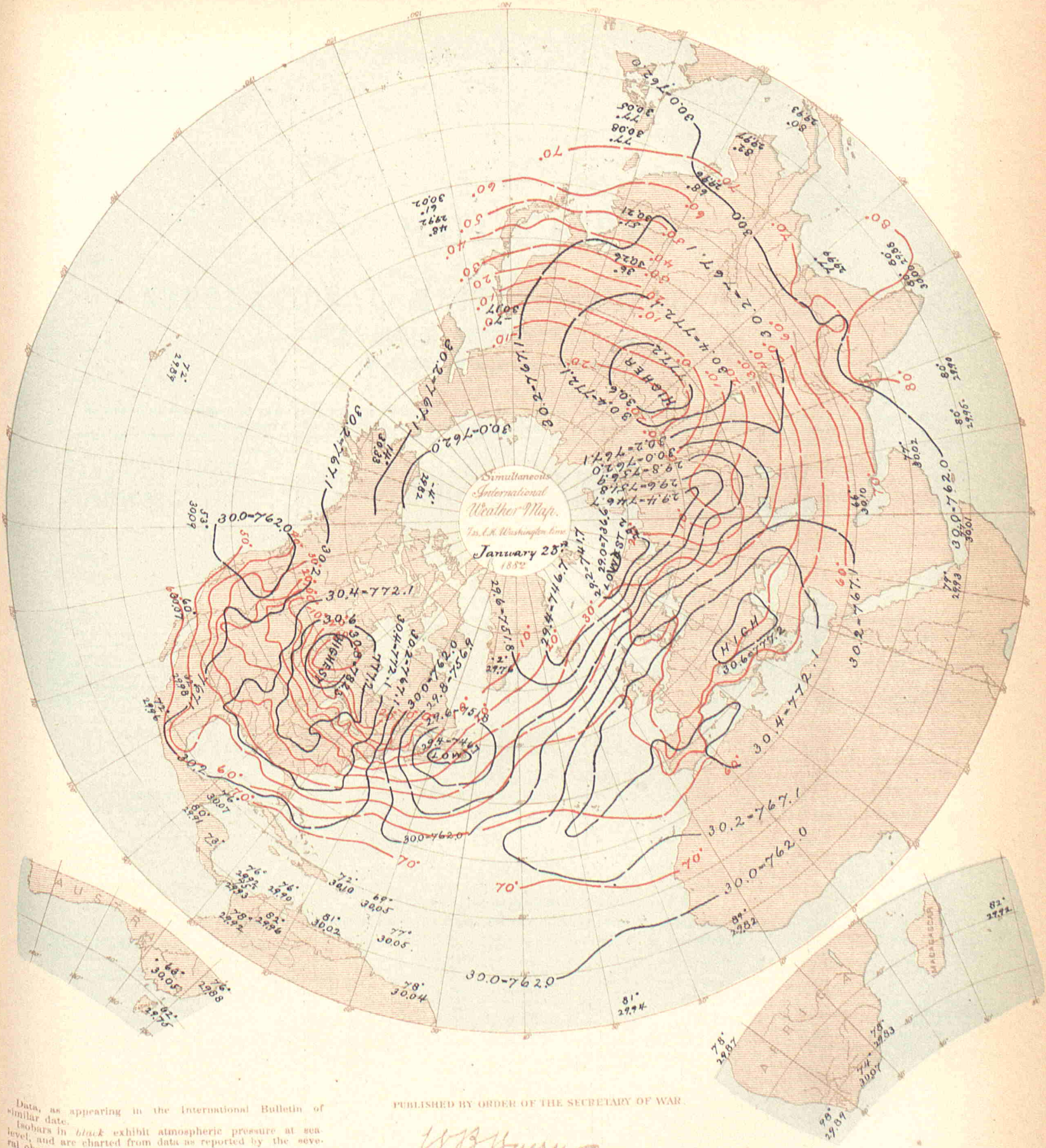
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon.
S. S. Polynesian, Capt. Robt. Brown, N. 46° 04′, W. 51° 46′*..	29.29	744.0	32	0.0		wsw.	3		2		wsw.	4 h'r	4 h'r	mod.	wsw.	clear	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. Portland, Oregon*	29.99	761.7	5	—15.0		nnw.	2		4		n.					fair	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.28	769.1	48	8.9		sw.	3					3 h'r	3 h'r			overcast	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	30.17	766.3	16	—8.9	83	nw.	2		2		w.					fair	Cauffman & Morse.
S. S. Ohio, Capt. Henry Morrison, N. 51° 25′, W. 17° 20*†	30.51	774.9	53	11.7	100	ssw.	4		6		wnw.			cross	w.	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†	30.51	774.9	42	5.6	91	n.										overcast	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Assyria, Capt. J. Brown, N. 48° 36′, W. 39° 39′*†	29.86	758.4	50	10.0		ssw.	6		1?		sw.			mod.	sw.	raining?	J. Brown.
Utopia, Capt. A. McRitchie,																	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 18° 38′, W. 74° 05*†	30.14	765.5	71	21.7	90	sw.	6		8		se.	0	0	short	ne.	cloudy	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Savanilla, U. S. C*	29.90	759.4	76	24.4		nne.	6		0			0	0			very fine	J. Sandberg.
S. S. Arden, Capt. R. de Echevarrieta, N. 33° 00′, W. 69° 00′			58	14.4		n.	2		2?		n.	0	0	high	nnw.	cloudy?	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse,																	Fisher & Welden.
BOSTON & HALIFAX. *E. W Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, Hailfax, N. S.*†	29.75	755.6	29	—1.7		n.			10			snow	sq'lls		w.	cloudy	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
Baroda, Capt. C. J. Russel, N. 33° 18′, W. 19° 34′	30.23	767.8	60.5	15.8	88	nnw.	4		2							d clouds	
British Merchant, Capt. E. J. Molony, N. 17° 47′, E. 88° 14′	29.99	761.7	77.2	25.1	77	ene.	1		0							misty	
Caldew, Capt. W. Peterson, S. 37° 15′, W. 83° 27′	29.59	751.6	62.5	16.9		sw.	9		9							overcast	
S. S. Cipero, Capt. W. N. Lailey, N. 28° 00′, W. 35° 42′	30.18	766.6	69	20.6	84	ese.	4		7					2	ese.	d. clouds	
S. City of Agra, Capt. Thos. Young, N. 10° 48′, W. 33° 14′	30.00	762.0	74.5	23.6		ne.	6		9							gloomy	
Bk. Glaramara, Capt. R. Morton, N. 33° 57′, W. 36° 29′	30.37	771.4	63	17.2	83	ese.	3		6.							d. clouds	
Glencairn, Capt. R. S. Tannock, S 43° 48′, E. 49° 50′	29.92	760.0	48	8.9	71	wsw.	5–6		3							d. clouds	
S. S. Gordon Castle, Capt. W. Waring,																	
Bg. Hermine, Capt. G. G. Jones, S. 42° 03′, W. 84° 31′	29.31	744.5	52.8	11.6	96	ssw.	10		10							raining	
S. S. Humboldt, Capt. A. W. Jeffery,																	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 23° 25′, E. 62° 24′	29.94	760.5	80	26.7	78	se.	4		9							d. clouds	
May Hulse, Capt. H. Youlden, S. 32° 04′, W. 43° 38′	29.98	761.5	74.3	23.5	76	ese.	4		10							drizzling	
Bk. Mertola, Capt. E. W. Turner, N. 36° 40′, W. 8° 19′	30.34	770.6	57.6	14.2	81	wnw.	3		9							d. clouds	
Minho, Capt. J. Lawson, S. 19° 55′, W. 39° 27′	30.00	762.0	80.2	26.8	86	nne.	6		4							d. clouds	
Naiad, Capt. John Smith, N. 2° 45′, W. 28° 42′	29.94	760.5	81.3	27.4	91	ne.	1		5							d. clouds	
Pole Star, Capt. F. Norman,																	
Queen of Cambria, Capt. M. Parry, S. 43° 46′, E. 34° 33′	30.26	768.6	49	9.4	71	sw.	6		4							d. clouds	
S. Superb, Capt. Berridge N. 20° 59′, W. 39° 17′	30.04	763.0	77.9	25.5	82	sw.	1		0							blue sky	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham,																	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent, San Francisco*																	
S. S. Newbern, Capt. E. Y. Rogers, N. 29° 16′, W. 115° 50′†	29.97	761.2	60	15.6	82	nnw.	4		0			0	0	small	nnw.	clear	
CROMWELL LINE. *Clark & Seaman, Agents, New York*																	
S. S. Hudson, Capt. H. R. Freeman, N. 35° 45′, W. 74° 40′†*	30.48	774.2	46	7.8		nnw.	6		0			0	0	r'gh	nnw.	clear	B. J. Henry, 1st Offi.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Behian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, Havre, France	30.53	775.4	35.6	2.0		se.	1		10		ese.	0	0			hazy	
S. S. St. Laurent, Capt. A. Servan, N. 50° 01′, W. 51° 38′*†	30.55	776.0	55.4	13.0		sw.	4					0	0	sm'h	sw.		A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Silesia, Capt. A. Albers, N. 44° 43′, W. 51° 38′*†..	29.49	749.0	30.5	2.5		w.	6		5		wsw.	0	0	5	sw.	fair	
S. S. Wieland, Capt. C. Hebich, Havre, France*	30.54	775.7	33	0.6		ne.	2		fg			0	0			misty	C. Jorgensen.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch																	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 28° —′, W. 46° —′*†	30.09	764.3	77	25.0		s.	2		5		ssw	3 h'r	3 h'r	sm'h		fair	J. Carroll

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 43° 17′, W. 57° 04′	.....	.....	.....	.....	.....	wsw.	6	.....	5	.....	w.	6 h'r	6 h'r	high	sw.	.....	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.62	777.7	.....	.....	.....	se.	1	.....	5	.....	se.	0	0	.....	.....	fine	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, N. 38° 40′, W. 74° 50′*†	30.44	773.2	27	—2.8	.....	nw.	5	.....	0	.....	.....	0	0	chop	nnw.	.....	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips, N. 37° 03′, W. 73′ 45′†	30.44	773.2	40	4.4	.....	nnw.	6	.....	8	.....	nnw.	0	0	very h'vy	nnw.	cloudy	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sanson Kingston, Jamaica, W. I†	30.07	763.8	76	24.4	.....	ene.	0–1	.....	.....	.....	.....	.....	.....	.....	.....	fair	.....
S. S. Bothnia, Capt. W. McMickan, N. 42° 04′, W. 59° 38′* [man	29.54	750.3	36	2.2	.....	w.	10	.....	.....	.....	.....	.....	.....	very high	w.	hailing	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Tanner- Progreso Roads, C. A.*† [nolds	30.20	767.1	74	23.3	.....	ese.	4	.....	.....	.....	.....	.....	.....	.....	n.	showery	.....
S. S. City of Washington, Capt. J. W. Rey- N. 30° 05′, W. 79° 47′*†	30.50	774.7	55	12.8	.....	ne.	4	.....	.....	.....	.....	.....	.....	.....	sw.	fine	.....
S. S. Maas, Capt. T. H. Bonjer, N. 50° 26′ W. 19° 37′*	30.35	770.9	48	8.9	.....	sw.	1	.....	.....	.....	.....	.....	.....	.....	sw.	rainy	.....
S. S. New York, Capt. R. B. Quick, N. 27° 00′, W. 86° 40′*†	30.35	770.9	62	16.7	.....	ene.	6	.....	.....	.....	.....	.....	.....	.....	ne.		.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers, N. 53° 32′, E. 5° 09′	30.51	774.9	.....	.....	.....	wsw.	4	.....	2	.....	wsw.	0	0	sm'h	.....	hazy	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander, N. 48° 38′, W. 15° 08′*	30.57	776.5	48.2	9.0	.....	s.	4	.....	10	.....	s.	0	0	mod.	e.	.....	G. H. Lose, 3d Off.
S. S. Neckar, Capt. R. Busslus. N. 40° 51′, W. 64° 32′*	29.81	757.2	27.5	—2.5	.....	w.	8–9	.....	10	.....	w.	snow	snow	r'gh	w.	snowy	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger, N. 43° 01′, W. 12° 19′*	30.44	773.2	53.6	12.0	.....	ne.	4	.....	10	.....	.....	0	0	4	ne.	cloudy	Montz & Kohlenbeck.
S. S. Oder, Capt. Undeutsch, N. 50° 31′, W. 23° 16′*	30.22	767.6	51.8	11.0	.....	wsw.	5	.....	10	.....	wsw.	rain	rain	cross	wsw.	drizzling	.....
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany	.....	.....	41.9	5.5	.....	sw.	3	.....	6	.....	sw.	0	0	.....	.....	fair	E. Hattensaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, S'n Francisco.*																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal	.....	.....	46	7.8	92	se.	4	.....	10	.....	sw.	0	0	.....	.....	cloudy	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, Yokohama, Japan†*	30.32	770.1	50	10.0	78	wnw.	1	.....	6	.....	w.	.....	.....	.....	.....	cloudy	.....
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.05	763.3	67	19.4	90	ne.	3	.....	4	.....	sw.	.....	.....	.....	.....	fine	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 34° 16′, W. 76° 31′*†	30.10	764.5	.....	.....	.....	nw.	7	.....	0	.....	.....	.....	.....	chop	.....	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Vineyard Sound Mass.†	30.12	765.0	12	—11.1	79	wnw.	0	.....	1	.....	nw.	4 h'r	snow	.....	nw.	clear	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 44° 14′, W. 124° 37′†	29.84	757.9	46	7.8	70	s.	2	.....	8	.....	s.	.....	.....	h'vy	wsw.	rain & snow	E. W. Holmes.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann N. 43° 54′, W. 124° 50′†	29.81	757.2	45	7.2	84	sse.	0	.....	10	.....	s.	rain	rain	high	sw.	raining	A. C. James, 2d officer
S. S. Columbia, Capt. F. Bolles, N. 40° 54′, W. 124° 15′†	29.91	759.7	48.5	9.2	90	s.	3	.....	8	.....	.....	.....	.....	mod.	w.	drizzling	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.81	757.2	40	4.4	91	calm	0	.....	10	.....	.....	.....	.....	.....	.....	light rain	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, San Francisco, Cal†	29.95	760.7	48	8.9	85	se.	1	.....	10	.....	s.	.....	.....	.....	.....	gloomy	.....
S. S. G. W. Elder, Capt. H. G. Morse, Strait of Fuga†	29.78	759.4	43	6.1	.....	ne.	4	.....	4	.....	se.	0	0	sm'h	.....	clear	.....
S. S. Idaho, Capt. E. Alexander, N. 41° 59′, W. 124° 31′†	29.83	757.7	45	7.2	85	sw.	5	.....	10	.....	sw.	.....	.....	h'vy	sw.	raining	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 32° 40′, W. 117° 11′†	30.06	763.5	56	13.3	80	s.	2	.....	.....	.....	ese.	0	0	long	sw.	fair	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal	30.16	766.1	48	8.9	85	s.	2	.....	10	.....	.....	0	0	sm'h	.....	misty	T. Wallace.
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	29.75	755.6	46	7.8	92	se.	4	.....	10	.....	se.	rain	rain	.....	.....	raining	.....
S. S. Victoria, Capt. H. M. Hayward, Nanaimo, Vancouver I'd†	29.97	761.2	40	4.4	82	calm	0	.....	2	.....	.....	.....	.....	.....	.....	clear	.....
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. —— N. 34° 27′, W. 132° 34′	30.09	764.3	53	11.7	60	nw.	2	.....	10	.....	nw.	.....	.....	long	nw.	cloudy	A. Bannerman, 2d Offi.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	29.88	758.9	76	24.4	81	s.	6	.....	0	.....	.....	0	0	.....	.....	clear	W. H. Hawes, 2d Offi
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 34° 38′, E. 154° 22′†	30.12	765.0	48	8.9	62	nnw.	5	.....	5	.....	nw.	0	0	hv'y	nw.	fair	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn, N. 22° 32′, W. 155° 24′†	29.89	759.2	72	22.2	80	ese.	3	.....	10	.....	sw.	.....	.....	h'vy	ese.	drizzling	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 31° 21′, E. 152° 16′†	30.12	765.0	61	16.1	66	sw.	6	.....	0	.....	.....	1 h'r	1 h'r	sm'h	.....	clear	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 13° 32′, W. 89° 47′†	29.91	759.7	80	26.7	91	n.	4	.....	0	.....	.....	0	0	mod.	sse.	clear	.....
S. S. Grenada, Capt. M. Connolly, Panama, Panama†	29.91	759.7	72	22.2	95	nnw.	3	.....	5	.....	nnw.	0	0	.....	.....	hazy	.....
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	29.88	758.9	69	20.6	95	s.	2	.....	8	.....	sw.	.....	.....	.....	.....	fair	.....

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.				Character.	Direction.		
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke Martinique, W. I.						ne.	4		0			0	0	sm'h		clear	G. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 42° 34′, W. 56° 19′*†	29.58	751.3	48	8.9	85	w.	6		8		wnw.	10 h'r	light	h'vy	wsw.	cloudy	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, N. 49° 51′, W. 7° 49′*	30.64	778.2	46	7.8	69	e.	1		10		e.	0	0		w.	cloudy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, Antwerp, Belgium			38	3.3	80	sse.	2		10		ese.	0	0			overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels, New York, N. Y*	30.12	765.0	12	—11.1		w.	6		0			1 h'r	snow			clear	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis N. 51° 20′, E. 2° 00′*	30.86	783.8	54.2	12.3	79	sw.	3		2		se.	0	0				
THINGVALLA LINE *Funch, Edye & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub Copenhagen, Denmark†	30.46	773.7	44.6	7.0		sw.	1		10		sw.	0	0			covered	J. T. Ulberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters																	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent.*																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 41° 34′, W. 59° 12′*†	29.52	749.8	47	8.3		wsw.	6		5		wnw.	hail	hail	mod.	wnw.	hailing	W. Thomas.
S. S. Celtic, Capt. B. Gleadell Off Tuskar, Ireland*†	30.44	773.2	44	6.7	75	w.	3		5		sw.	0	0			fair	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 49° 52′, W. 33° 06′*†	30.20	767.1	54	12.2		wsw.	5		2		w.	0	0	mod.	sw.	misty	H. D. Jay, 4th Officer
S. S. Republic, Capt. P. J. Irving,																	H. Goulden, 4th Officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 48° 41′ W. 13° 54′*	30.49	774.4	52	11.1		var.	1		10		s.	0	0	sm'h		cloudy	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, Pensacola, Florida†	30.53	775.4	48	8.9	62	ne.	3	5 cs	0	w.		0	0			fair	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona,																	
Bk. Alpha, Capt. Ole Grönn,																	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis N. 26° 05′, W. 65° 48′*†	30.18	766.6	75	23.9		calm	0		8		sw.	0	0	h'vy	n.	cloudy	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin S. 15° 16′ W. 33° 37′*†	29.50	749.3				var.	3							light	ne.	fine	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.42	772.7				sw.	3		5		w.					fair	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 8° 43′, W. 34° 22′†	30.00	762.0				sse.	3		2		sse.	0	0	sm'h	se.		
S. Enoch Train, Capt. H. D. Chapman. Off Isle Wight*	30.55	776.0				e.	3		9		e.	0	0	sm'h		overcast	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 48° 01′, W. 16° 44′*	30.56	776.2				ssw.	2		9		ssw.	0	0	sm'h	w.	cloudy	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.42	772.7	24	—4.4		nw.	3		1		nw.			sm'h		clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 57° 29′, W. 29° 48′†	29.42	747.3	49	9.4		calm	0		10		ne.	1 h'r	1 h'r	mod	var.	cloudy	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 49° 37′, W. 19° 59′			52	11.1		ssw.	5		5		ssw.	0	0	mod	sw.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, S. 21° 26′, W. 36° 50′*†	29.06	738.1				nne.	5		5?		nne.	0	0	r'gh.	nne.	clear?	
Bk. Geo. Booth, Capt. D. Williams																	D. Williams.
S. Hedwig, Capt. T. Minssen																	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 29° 28′, W. 28° 12′						ene.	4		2		e.	0	0	long	sse.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 16′, W. 6° 55′*†	30.50	774.7				n.					ne.	0	0	mod.	e.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.40	772.1	55	12.8	62	calm	0		0							clear	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly N. 22° 45′, W. 40° 15′*†	29.98	761.5				baff.			8			0	0			cloudy	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. N. T. Sommer, N. 8° 48′, W. 25° 00′*	29.86	758.4	75.7	24.3	97	ne.	3		0					sm'h			
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.31	769.9	60	15.6	94	ne.	5		2		se.	0	0			fair	J. Green.
Bg. Wanburn, Capt. I. W. Covert, S. 29° 06′, W. 19° 00′*†	30.20	767.1				s.	7		10		s.			h'vy	sw.		I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton. N. 27° 18′, W. 45° 18′*†	30.10	764.5				ene.											N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 24, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.41	772.5	63.0	17.2	78	nw.			2		0			0	0	clear	Moiroud.
Algiers			30.50	774.6	55.8	13.2	68	s.			1		1			0	0	fair	Nicolas.
La Calle			30.54	775.6	59.7	15.4	49	ssw.			2		3			inap.	inap.	pretty fair	Foufréde.
Tunis			30.54	775.8															Jacques.
Sfax																			Gau.
Saida			30.48	774.3	52.9	11.6	23	sw.			6		1			0	0	fair	Perès.
Tebessa			30.53	775.4	47.1	8.4	50	sse.			2		9			0	0	covered	Derché.
Geriville					47.1	8.4	89	s.			2		0			0	0	clear	Lonchamp.
Laghouat			30.62	777.8	50.0	10.0	48	s.			1		0			0	0	clear	Herbin.
Biskra			30.55	775.9	63.0	17.2	31	nw.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.04	763.0	30.13	765.3	60.7	15.9	63	s.	10	4.5			8			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.10	764.4	30.69	779.4	33.1	0.6	79	s.			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.75	755.7	30.57	776.4	32.0	0.0	81	n.	9.8	4.4			10			0	0		Dr. Wierzbiski.
Eperies	29.68	753.8	30.61	777.5	34.7	1.5	63	calm			0		10 s			0	0		Julius Mikolik.
Gratz	29.34	745.3	30.69	779.4	30.2	— 1.0	71	e.			2		10			0	0		Andreas Rospini.
Hermannstadt	29.11	739.5	30.64	778.2	33.6	0.9	79	nw.			3		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.26	743.3	30.71	780.0	29.3	— 1.5	90	se.			1		10			0	0	foggy	The Staff.
Lemberg	29.59	749.4	30.56	776.2	32.5	0.3	83	nw.			2		10			0.024	0.6		Dr. T. Stanecki.
Pola	30.48	774.3	30.60	777.3	46.9	8.3	77	wnw.			1		5			0	0		I. R. Hydrographic Office.
Szathmar	30.13	765.3	30.60	777.1	34.2	1.2	75	w.			2		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.32	770.0	30.61	777.6	35.6	2.0	73	calm			0		10			0	0		Karl Stancel.
Trieste	30.54	775.6	30.64	778.2	46.4	8.0	67	calm			0		0			0	0		Rieder.
Vienna	29.95	760.7	30.72	780.2	32.0	0.0	78	nw.			1		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.27	768.8	30.37	771.4	48.7	9.3	85	s.	13	5.8			4			0	0	blue sky	W. Boswell.
Armagh, Observatory	30.37	771.4	30.61	777.5	48.4	9.1	72	sw.	18	8 0			4					d. clouds	S. Call.
Bidston, Liverpool Obs'y			30.66	778 7	49.3	9.6	75	sw.	10	4.5			1					blue sky	John Hartnup.
Bolton, Sharples	30.11	764.8	30.67	779.0	41.0	5.0	91	sse.					6					foggy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.23	767.8	30.63	778.0	46.1	7.8	82	sw.			1		5			0	0	d clouds	J.McLandsborough, F. R.
Bridgetown, Barbadoes	29.96	761.0	30.00	762.0	80.0	26.7	87	ne.			2		1					d. clouds	Corpl. J. Surgenor.
Cardington			30.70	779.8	41.6	5.3	87	w.			0.4		6					d. clouds	John McLaren.
Chatham, School M. E.	30.59	777.0	30.72	780.3	43.9	6.6	71	sw.			1		5					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.48	774.2	30.72	780.3	42.7	5.9	73	e.			2		8					foggy	The Staff.
Fort Napier, Natal	27.64	702.0	29.86	758.4	85.0	29.4	55	ne.			1		3					blue sky	Pvt. E. K.Anniss.A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	88.0	31.1	66	w.			1		4					d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.56	776.2	50	10.0	71	s.			2		6			0	0	d. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.28	769.1	30.34	770.6	57.6	14.2	67	ne.			4		7					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.31	769.9	30.52	775.2	47.3	8.5	81	wsw.			4		2 k					blue sky	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.55	776.0	30.73	780.5	39.9	4.4	69	wsw.			1		8					d. clouds	The Staff.
Guernsey	30.41	772.4	30.72	780.3	38.0	3.3	95	e.			1		10					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.70	779.8	30.74	780.8	38.6	3.7	80	e.	4	1.8			6					misty	The Staff.
Leicester, Museum	30.40	772.1	30.67	779.0	43.8	6.6	86	sw.			1		0					blue sky	J. C. Smith.
Malta, Mediterranean	30.43	772.9	30.51	774.9	60.4	15.8	68	e.			2		4					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.21	767.3	30.26	768.6	70.2	21.2	77	ne.			4		10					overcast	C. S. Duncombe.
Oscott, St. Mary's College	30.16	766.1	30.70	779.8	45.2	7.3	82	sw.			0—1		3					d. clouds	John Mac Emait.
Oxford, Radcliffe Obs'y	30.49	774.4	30.72	780.3	39.1	3.9	82	sw.			1		6					misty	The Staff.
Plymouth	30.64	778.2	30.72	780.3	40.0	4 4	81	calm			0		0					blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.20	767.1	49.1	9.5	89	sw.	30	13.4			10					misty	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.44	773.2	30.51	774.9	47.4	8.6	60	ne.			1		2			blank	blank	d. clouds	W. H. Lyne
Sheffield	30.36	771.1	30.65	778.5	49.3	9.6	71	sw.			1		1			0	0	blue sky	W. F. Cooper.
Silloth Rectory	30.56	776.2	30.59	777.0	48.5	9.2	79	sw.			3		0			0	0	blue sky	Rev. F. Redford, M. A
Stonyhurst, Observatory			30.66	778.7	45.8	7.7	79	wsw.	6	2.7			10					overcast	Rev. S. J. Perry.
Stratfield Turgiss					39.0	3.9	78	calm			0		4					d. clouds	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.62	777.7	30.71	780.0	45	7.2	76	ne.			2		10					gloomy	W. Newcombe.
Valencia, Observatory	30.62	777.7	30.64	778.2	51.4	10.8	81	sse.	20	8.9			8					d. clouds	The Met'g'l Office
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.11	764 8	30.16	766.1	5	—15.0	100	nw.	15	6.7			10 n			0.080	2.0	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	30.25	768.3	30.31	769.9	— 6	—21.1	100	nw.	13	5.8			10 s		nw.	0.02	0.5	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.51	774.9	30.53	775.4	— 8	—22.2	78	nw.	12	5.4		5 cs	0	calm		0	0	clear	J. McWilliams.
Fort Garry, Manitoba*	29.28	743.7	30.23	767.8	— 9	—22.8	100	s.	5	2.2			10 n			0.023	0.6	light snow	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.06	763.5	30.21	767.3	2	—16.7	100	nw.	11	4.9		2 c	0			0	0	fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.54	775.7	30.94	785.9	—19	—28.3	80	n.	1	0.4		0	0			0	0	clear	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.59	777.0	30.84	783.3	—26	—32.2	100	sw.	12	5.4		0	0			0	0	clear.	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	30.02	762.5	30.87	784.1	—27	—32.8	80	calm	0	0		·5 k	5 ks			0	0	cloudy	Rev R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	30.06	763.5	30.87	784.1	— 9	—22.8	100	n.	8	3.6		0	0			inap.	inap.	clear	H. Morgan.
Port Stanley, Ontario	30.09	764.3	30.85	783.6	— 9	—22.8	91	ne.	6	2.7		0	0			inap.	inap.	clear	M. Payne.
Quebec, Quebec*	30.29	769.4	30.68	779.3	—25	—31.7	76	nw.			5	0	2 s			0.02	0.5	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.32	770.1	30.90	784.8	—40	—40.0	93	calm	0	0		0	0			0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.98	761.5	30.82	782.8	—12	—24.4	83	se.	11	4.9			10 ks			0.10	2.5	cloudy	K. Stewart.
St. Andrews, N .B.	30.33	770.4	30.38	771.6	—14	—25.6	100	nnw.	15	6.7		0	0			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.90	759.4	29.97	761.2	13	—10.6	83	nw.	13	5.8			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.46	773.7	30.93	785.6	—17	—27.2	100	n.	9	4.0		0	2 ks			0	0	clear	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.26	768.6	30.33	770.4	3	—16.1	72	n.	12	5.4			10 k		n.	0.17	4.3	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.66	753.4	29.92	760.0	17	— 8.3	100	sw.	2	0.9			10					snowing	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.77	756.1	29.80	756.9	75.0	23.9	84	e.	26.1	11.7		0	2 s			0.020	0.5	dense haze	John Duthie.
Cape Town, C. G. H. Obs'y	29.82	757.4	29.86	758.4	79.0	26.1	71	nw.	10	4.5		2	2			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.10	764.5	30.38	771.6	46.9	8.3	77	n.			3		10			0	0	covered	N. Tlioushkin.
Zi-Ka-Wei, near Shanghai	30.09	764.2	30.11	764.8	50.7	10.4	95	nw	6.3	2.7			10			0	0	covered	M. Marc Dechevrens, S J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. P'er Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From	Lower. From	Rain-fall or melted snow in the past 24 hours Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.40	772.2	30.45	773.4	41.2	5.1	95	sw.	18	8			10					foggy	Oversergent Fischer.
Fanöe	30.49	774.4	30.51	774.9	43.0	6.1	95	w.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.08	738.7	29.13	739.8	—0.8	—18.2		ene.			3		5						S. Kleinschmidt.
Stykkisholm, Iceland	28.91	734.3	28.95	735.4	38.1	3.4		sw.			7		10					raining	A. O. Thorlacius.
Thorshavn	29.72	754.9	29.76	755.8	48.9	9.4	93	sw.	36	16			10					raining	Overloerer Bergh.
Vestervig	30.30	769.7	30.39	772.0	44.2	6.8	94	wsw.			4		10						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.91	759.8	30.60	777.1	40.3	4.6	93	nne.			1		fg			0	0	light fog	M. Labroue, Director.
Alençon, Normal School	30.19	766.7	30.74	780.7	30.2	—1	96	e.			1		8			0	0		M. Nicot, Director.
Arras, Engineer School	30.47	773.8	30.74	780.9	31.6	—0.2	97	ese.			2		10			0	0	light fog	M. Klein, Commandant.
Avignon, Normal School	30.63	778.1	30.71	780.1	41.0	5	71	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.15	765.7	30.75	781.1	28.8	—1.8		ese.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.50	774.6	30.78	781.8	32.2	0.1	93	e.			1		10			0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.66	778.7	35.6	2	88	ne.			1		fg		ne.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.34	770.6	30.61	777.6	34.5	1.4	100	ene.			1		10			0.008	0.2	foggy	M. Rayet, Director.
Bourges, Normal School	30.12	765.1	30.72	780.3	27.5	—2.5	100	nne.			1		11		nne.	0	0	light fog	M. Postel, Director.
Brest, Naval Observatory	30.45	773.4	30.69	779.6	37.4	3.0	93	e.			1		10		e.	0	0	misty	M. de Kennaree, Dir
Caen, Normal School	30.66	778.7	30.74	780.7	31.6	—0.2	89	s.			1		10			0	0	covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.31	769.8	30.65	778.4	32.5	0.3	96	ne.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.20	767.1	30.75	781.0	29.1	—1.6		ne.			3		8			0	0	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.24	742.8	30.71	780.1	27.1	—2.7	98	nw.			1		10			0	0	foggy	M. Allnard, Director.
Cluny, Normal School	29.84	758.0	30.75	781.0	26.6	—3	98	ne.			1		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.85	758.1	30.78	781.8	28.4	—2	90	e.			1		10	e.	e.	0	0	covered	Dr. Coulet, Director.
Gap, Normal School	27.98	710.7	30.61	777.4	45.1	7.3	53	nw.			1					0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.42	747.3	30.58	776.6	53.1	11.7	56	n.			2		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.86	758.4	30.69	779.6	28.0	—2.2	100	ese.			1		fg			0	0	foggy	M. Ablard, Director.
Guéret, Normal School	28.98	736.2	30.64	778.2	44.2	6.8	60	se.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.42	772.7	30.72	780.2	31.6	—0.2	100	ne.			1		10		ne.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	29.97	761.2	30.55	775.9	48.6	9.2	81	ne.			1	0	2 s			0	0	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	30.61	777.5	30.71	780.1	33.8	1.0	100	ene.			2		fg			0	0	foggy	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.59	751.5	30.72	780.4	27.5	—2.5	100	n.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.43	772.9	30.76	781.4	30.4	—0.9	96	se.			3		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.30	769.6	30.57	776.5	58.1	14.5	49	ene.			0.1		0			0	0		M. Stephan, Director.
Montlouis Pinstituteur	25.17	639.3	30.01	762.3	34.2	1.2	85	e.	7.4	3.3			8		se.				M. Cave, for Dr. Fines.
Montpellier, Normal School	30.48	774.1	30.59	777.0	51.8	11	52	nne.			3		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.91	759.6	30.75	781.1	27.7	—2.4	92	wnw.			1		10 kn			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.57	776.5	30.73	780.6	32.2	0.1	91	e.			0–1		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.49	774.5	30.61	777.5	46.2	7.9	96	ne.	3.8	1.7			10			0.201	5.1	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.44	544.5			23.9	—4.5		se.			1		1		se.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.56	750.8	30.72	780.3	26.6	—3.0							fg			0	0	foggy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.58	649.7			37.9	3.3	52	se.			2		0			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.61	777.6	30.65	778.4	37.0	2.8	86	ene.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.48	774.3	30.71	780.0	37.0	2.8	86	e.			1		5	w.	e.	0	0	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.36	720.3	30.58	776.8	45.7	7.6	23	e.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.73	780.6	30.78	781.8	33.8	1	88	ne.			1		2			0	0	slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	30.55	775.9	30.71	779.9	31.1	—0.5	10	ne.			3		5		ne.	0	0	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.59	776.9	30.75	781.1	29.5	—1.4	92	n.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.85	758.3	30.59	777.0	49.5	9.7	78	ene.			1		1	s		0	0	clear	M Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.23	767.9	30.72	780.4	28.0	—2.2	96	ne.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Hamberg	29.82	757.3	30.69	779.5	28.8	—1.8	88	ese.			3		10			0	0		Prof. Dr. Hoh.
Berlin	30.46	773.7	30.65	778.4	35.2	1.8	78	ne.			1		10			0	0		Prof. Dr. Arndt.
Breslau	30.13	765.2	30.67	779.0	29.8	—1.2	80	wnw.			2		10			0	0		Royal University Obs'y.
Carlsruhe	30.28	769.0	30.75	781.1	30.6	—0.8	85	ne.			2		10			0	0		Albert Senz.
Cassel	29.94	760.4	30.65	778.6	28.0	—2.2	89	s.			1		10			0	0	foggy	Dr. H. Möhl.
Frankfort on the Main	30.35	771.0	30.75	781.0	30.6	—0.8	81	se.			1		10			0	0		Physical Society.
Friedrichshafen	29.17	741.0	30.71	780.1	29.8	—1.2	100	ne.			1		10			0	0	foggy	Wilhelm, Chief Tel.
Hamburg	30.57	776.5	30.67	778.9	35.6	2.0	85	wsw.			4		1			0	0	foggy	E. Preller.
Kiel	30.56	776.2	30.58	776.6	37.2	2.9	85	sw.			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.28	769.1	30.74	780.7	29.1	—1.6	88	wsw.			2		10	wsw.		0	0		H. Leppig, Asst.
Magdeburg	30.51	774.9	30.71	780.1	33.4	0.8	87	sw.			1		10 ks			0	0		Dr. Assmann.
Memel	30.23	767.9	30.28	769.1	39.2	4.0	93	w.			7		10 s					light rain	Issermann.
Munich	28.76	730.5	30.66	778.8	25.0	—3.9	92	calm			0		10			0	0		Central Station.
Neufahrwasser	30.42	772.7	30.44	773.1	41.2	5.1	69	w.			5		10	wnw.		0	0		A. Lothes.
Neustadt, Palatinate	30.17	766.3	30.71	779.9	30.6	—0.8		n.			2		10	n.		0	0		Dickuether.
Stuttgart	29.73	755.1	30.70	779.7	26.1	—3.3	90	n.			1		10			0	0	foggy	Prof. Dr. Schoder.
Wustrow	30.58	776.8	30.61	777.4	35.8	2.1	96	wnw.			4		10			0	0	dense fog	Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.15	765.9	30.56	776.1	47.1	8.4		n.			1.5		10			0	0	covered	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.96	761.0	30.02	762.4	74.2	23.4	80	wsw.	28	12.5			8	w.		0	0	d. clouds	
Deesa	29.47	748.6	29.95	760.8	81.2	27.3	38	wsw.	6.7	3.0			7	wnw.		0	0	d. clouds	
Bombay	29.88	758.9	29.92	759.8	83.0	28.3	67	nw.	15	6.7			0			0	0	blue sky	
Poona, Yarrowda.	28.07	713.0	29.90	759.4	88.0	31.1	20	ene.	6	2.7			0			0	0	blue sky	
Belgaum	27.38	695.5	29.89	759.2	83.4	28.6	20	ene.	9	4.0			0			0	0	blue sky	
Lahore	29.16	740.6	29.92	760.1	64.6	18.1	84	calm	0.5	0.2			10			0	0	d. clouds	
Roorkee	29.02	737.0	29.94	760.4	68.2	20.1	65	nw	1.7	0.8			8			0	0		
Agra	29.36	745.8	29.94	760.4	74.2	23.4	44	sw.	2.1	0.9			3		w.	0	0		
Nagpur	28.89	733.8	29.92	759.9	88.7	31.5	26	calm	2.6	1.2			2	w.		0	0	d. clouds	
Jubbulpore	28.61	726.7	30.00	762.0	69.2	20.7	24	se.	1.9	0.8			5	n.		0	0	d. clouds	
Lucknow	29.55	750.6	29.93	760.2	77.7	25.4	39	calm	4.7	2.1			8	ese.		0	0	d. clouds	
Allahabad	29.62	752.4	29.94	760.6	71.8	22.1	50	calm	1.1	0.5			4			0	0	d. clouds	
Patna	29.78	756.3	29.97	761.2	69.9	21.1	67	calm	2.9	1.3			2			0	0		
Hazaribagh	27.92	709.2	29.96	761.1	71.8	22.1	32	wnw.	6.2	2.8			0			0	0	blue sky	
Cuttack	29.88	758.8	29.96	761.0	76.8	24.9	49	nw.	0.4	0.2			2			0	0	d. clouds	
Calcutta, Alipore	29.92	759.8	29.94	760.4	72.5	22.5	63	wnw.	1.0	0.4			1			0	0	d. clouds	
Dhubri	29.85	758.1	29.97	761.2	71.5	21.9	65	calm	0.9	0.4			6		w.	0	0	gloomy	
Chittagong																0	0		
Sibsagar	29.62	752.3	29.97	761.2	63.6	17.6	79	sw	1.7	0.8			4			0	0	blue sky	
Jeypore	28.49	723.7	29.95	760.8	75.5	24.2	36	w.	3.1	1.4			9	w.		0	0	d. clouds	
Zanzibar, Africa	29.80	756.9			87.2	30.7	67	ne.	3.1	1.4		cs:ck	6 fk		ne.	0	0	d. clouds	
Trichinopoly	29.67	753.6			82.1	27.8	63	calm	0	0			0			0	0	blue sky	
Bellary	28.44	722.4			88.0	31.1	22	e.	2.7	1.2			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.21	767.3	30.63	778.1	43.3	6.3	55	calm	0	0			0			0	0		Prof. Giovanni Clodig.
Milan	30.13	765.2	30.68	779.2	30.7	— 0.7	98	sw.	2.5	1.1			10			0.020	0.5		Prof. Schiaparelli.
Padua	30.54	775.8	30.66	778.7	41.7	5.4	78	wnw.	3.8	1.7			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.79	754.4	30.66	778.7	33.1	0.6	80	n.	0.7	0.3			10			0	0		Prof. P. F. Denza.
Genoa	30.41	772.3	30.60	777.3	55.6	13.1	55	sw.	0.7	0.3			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.63	727.3	30.64	778.2	37.4	3.0	67	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.59	777.0	30.65	778.4	40.1	4.5	87	n.	6.3	2.8			7			0	0		Prof. Luigi Guidi.
Florence	30.35	770.9	30.62	777.7	45.9	7.7	62	ne.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.51	775.0	30.60	777.3	52.0	11.1	63	ne.	4.2	1.9			2			0	0		Prof. P. Monte.
Rome	30.40	772.2	30.58	776.8	53.2	11.8	58	n.	0.7	0.3			0			0	0		Prof. P. S. Ferrari.
Lecce	30.30	769.7	30.56	776.3	53.6	12.0	69	nnw.	11.2	5.0			8	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.66	753.3	30.58	776.7	50.7	10.4	75	sse.	3.1	1.4			0			0	0		Prof. D. Conti.
Cagliari	30.31	769.8	30.51	774.9	61.0	16.1	68	se.			4		5	sw.		0	0		Prof. A. Pacinotti.
Palermo	30.31	769.9	30.57	776.5	57.2	14.0	54	ne.	4.9	2.2			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.48	774.1	30.52	775.3	56.5	13.6	61	e.	7.4	3.3			7	e.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	30.01	762.3	30.55	776.0	54.9	12.7	61	n.	0	0			1	ne.		0	0		Prof. T. Brioschi.
Stelvio	22 50	571.4			28.6	— 1.9	30	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22 53	572.3			30.9	— 0.6	21	se.			2		0			0	0	clear	Prof. P. F. Denza
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.13	765 3	30.16	766.0	34.1	1.2	88	s.	5 5	2.5			10 s			0.040	1.0	covered	
Hakodate	30.13	765.3	30.14	765.5	29.0	— 1.7	67	calm	0	0			1		s.	0	0	clear	
Hiroshima, I. M. Obs'y	30.08	764.0	30.10	764.5	48 8	9.3	98	calm	0	0		ck	10 s			0.096	2.4	covered	K. Susaki
Kanazawa	30.15	765.8	30.25	768.3	44.1	6.7	75					0	0					clear	S. Endo.
Kioto	29.94	760.5	30.12	765.0	45.6	7.6	96	nne.	1.1	0.5		ck	10 s			0.110	2.8	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.88	758.9	30.08	764.0	59.1	15.1	98	sw.	0.8	0.4		ck	9 s			0.020	0.5	cloudy	S. Takehayashi
Niigata	30.15	765.8	30.18	766.6	39.1	3.9	90	sw.	1.2	0.5		0	0			0	0	clear	
Nobiru	30.14	765.5	30.16	766.1	36.4	2.4	92	nnw.	2.6	1.2		0	9 s			0.005	0.1	cloudy	H. Midzushima.
Supporo					32.0	0.0	100	calm	0	0			10					snowing	
Tokei Obs'y, Yeddo	30.07	763 8	30.14	765.5	46.3	7.9	79	e.	6.3	2.8		ck	10 s		wsw.	0	0	cloudy	The Staff.
Wasayama	30.06	763 5	30.12	765.0	49.9	9.9	84	nne.	2.7	1.2		ck	5 ks		n.	0.056	1.7	fair	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.69	754.1	29.87	758.7	82.3	27.9	60	ene.	9.0	4.0		0	4 k;ks		ese.	0.02	0.5	fair	Oliver & Figot.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.64	600.5	29.86	758.5	52.7	11.5	85	calm	0	0			10 k		w.	inap.	inap.	covered	Vicente Fernandez.
Leon	24.41	620.0	30.15	765.9	54.2	12.3	85	nw.			1	2 ck	0			inap.	inap.	clear	Prof. M. Leal.
Mazatlan	29.72	754.9	30.18	766.6	62.5	16.9	85	nnw.			1	0	0			0	0	fine	F. Quijano, C. E.
Mexico, Central Obs'y	23.06	585.8	30.22	767.7	45.7	7.6	73	calm	0	0		0	0			0	0		The Staff.
Morelia	24.36	618.6	30.61	777.5	49.6	9.8	75	se.			4	0	0			0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.89	606.8	29.97	761.3	46.4	8.0	69	calm			0	0	0			0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.42	594.9	30.36	771.0	41.0	5.0	65	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.14	613.2	30.14	765.6	45.6	7.6	67	ne.			1	0	0			0	0	fine	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.57	573.3	30.31	769.9	47.3	8.5	61	wsw.	3 6	1.6		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.75	781.0	30.75	781.0	34.5	1.4		ssw.			3					0	0		
Groningen	30.61	777.4	30.66	778.8	36.3	2.4		sw.			2					0	0		
Helder	30.67	779.0	30.67	779.0	40.6	4.8		ssw.			4					0	0		
Hellevoetsluis	30.72	780.4	30.72	780.4	34.9	1.6	78	s.			1					0	0		
Utrecht	30.69	779.4	30.73	780.6	33.6	0.9	81	ssw.			2		5			0	0	cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Amount and kind. Lo'er 0—10	Direction. Upper. From.	Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.14	765.6	30.21	767.2	44.6	7.0	94	ssw.	11	5			8			1.095	27.8	raining	
Brono	29.87	758.6	29.91	759.6	32.9	0.5	87	wnw.	18	8			10			0.394	10.0		
Christiania	30.00	761.9	30.15	765.8	36.0	2.7	72	nnw.	0	0			9			0	0		
Gjæsvær	29.11	739.5	29.14	740.1	29.3	— 1.5		nw.			4		1						
Lodingen	29.62	751.7	29.64	752.9	23.2	— 4.9	64	nw.			1		8			0.465	11.8		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					58.6	14.8	63	se.	15.4	6.9			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.33	745.0	30.38	771.7	42.1	5.6	91	ne.	4.3	1.9			10			0.177	4.5		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.21	767.3	30.30	769.5	63.0	17.2	68	ese.	0.7	0.3			6			1.122	28.5		Capt. D. A. de Cunha.
Lisbon, Observatory	30.01	762.2	30.38	771.7	47.3	8.5	74	ne.	16.1	7.2			3			0	0		The Staff.
Ponta Delgada, Azores	30.32	770.2	30.39	772.0	61.9	16.6	63	ese.	6.3	2.8			4			0	0		
Saint Paul de Loando	29.63	752.6	29.83	757.6	79.7	26.5	89	wsw.	2.5	1.1			4	s.		0	0		
Serra da Estrella	25.47	646.9	30.43	772.8	31.3	— 0.4	92	s.	14.3	6.4			9	s.		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.68	728.5	29.84	757.9	12.4	—10.9		sw.	45	20			10 n			0	0		Major K. Lasarew.
Archangel	28.88	733.6	28.90	734.1	24.4	— 4.2	93	sw	4	2			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.30	769.5	30.21	767.4	30.0	— 1.1	78	w.	25	11			10 ks			blank	blank		Capt. Wisganow.
Barnaul	29.65	753.1	30.21	767.2	3.2	—16.0	56	calm	0	0			1			0	0		Meteorological Obs'y.
Dorpat	29.50	749.3	29.75	755.6	37.6	3.1	83	w.	16	7			10 s			0	0		Observatory.
Ekaterinburg	28.57	725.7	29.61	752.1	— 0.6	—18.1	79	sw.	7	3			6			0	0	light clouds	Meteorological Obs'y.
Kasan	29.47	748.6	29.76	755.9	19.0	— 7.2	76	wsw.	2	1			8			0.031	0.8		Observatory.
Kertch	30.45	773 5	30.47	774.0	35.1	1.7	80	calm	0	0			10 n			0	0		Lagorio & Sastyrea.
Kieff	29.70	754.4	30.37	771.5	32.9	0.5	75	w.	2	1			10ks;n			0	0		Observatory.
Lugan	30.10	764.5	30.32	770.0	31.1	— 0.5	83	wsw.	13	6			10			0.004	0.1		Meteorological Obs'y.
Moscow	29.41	747.1	29.92	759.9	28.4	— 2.0	70	ssw.	4	2		0	7 ks			0.039	1.0		Meteorological Obs'y
Nikolaiev	30.44	773.2	30.51	775.0	34.9	1.6	71	nw.	4	2			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.11	764.9	30.20	767.1	— 4.0	—20.0	89	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.07	763.7	30.21	767.3	34.3	1.3	52	calm	0	0		3 cs	0			0	0		Physical Observatory.
St. Petersburg	29.40	746.8	29.42	747.2	34.0	1.1	87	w.	31	14			10 n			0.016	0.4	snowing	Central Physical Obs'y.
Tashkend, Laboratory	28.65	727.8	30.33	770.4	28.0	— 2.2	100	calm	0	0			10			0.402	10.2	snowing	Teich, A. M.
Tiflis	29.03	737.4	30.51	775.0	42.1	5.6	43	nnw.	31	14			10 ks			0	0		Physical Observatory.
Warsaw	30.10	764 6	30.56	776.1	31.5	— 0.3	85	wsw.	18	8			10 ks						Astronomical Obs'y.
Wilna	29.82	757.3	30.26	768.6	34.2	1.2	94	sw.	4	2			10			0.016	0.4	h'vy clouds.	Berg, Assistant.
Yeniseisk	29.90	759.4	30.22	767.5	0.5	—17.5	78	e.	4	2			10			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.27	768.8	51	10.6	93	sw.			4		10			0	0	cloudy	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.40	772.1	30.50	774.7	55.4	13	81	e.	4.9	2.2			9			0.220	5.6	raining	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.51	775.0	30.57	776.5	59.9	10.5	80	s.	1.3	0.6		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.47	697.6	30.58	776.7	39.2	4.0	83	ne.	2.5	1.1		0	7			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.17	715.4	30.47	774.0	47.8	8.8	61	se.	14.3	6.4			10			0	0	covered	The Staff.
Murcia, Met. Obs'y	30.55	775.9	30.70	779.8	57.0	13.9	73	w.	2.9	1.3		2	4	wnw.		0.004	0.1	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.47	748.5	30.39	771.9	51.8	11.0	48	e.	12.5	5.6		0	0			0	0	clear	R. Gil Valkanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.06	763.5	30.13	765.2	65.0	18.3	86	ese.	1.8	0.8		0	0			inap.	inap.	clear	Benito Vines, S. J.
Manilla, Philippine Islands	30.00	761.9	30.00	763.4	77.3	25.2	66	ene.	0	0		0	1 k			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.25	768.2	30.35	770.9	48.9	9.4	94	calm	0	0			10		e.	0.974	24.7	raining	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.00	762.0	30.09	764.3	75.6	24.2	74	e.	10.1	4.5		1 c	2 k	e.	e.	0	0		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.94	760.5	30.07	763.8	75.0	23.9	82	nw.	1.8	0.8		0	0			0	0	clear	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.32	744.8	29.36	745.8	24.8	— 4.0	82	nw.			6		0			0.059	1.5		
Umea	29.05	753.1	29.70	754.4	28.8	— 1.8	84	nw.			7		0			0.150	3.8		
Hernosand	29.82	757.3	29.87	758.6	33.6	0.9	53	nw.			7		0			0	0		
Stockholm	29.88	758.9	30.00	763.4	42.8	6.0	52	wnw.			6		7			0.051	1.3		
Wisby	30.10	764.4	30.15	765 9	41.7	5 4	82	w.			4		3			0	0		
Sub Series.																			
Upsala	29.91	759 8	30.00	762.0	41.0	5.0	58	w.	11.6	5.2			5			0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.20	741.7	30.71	780.0	28.8	— 1.8	100	sw.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.57	776.4	44.2	6.8	56	ne.	12	5.5			0			0	0		The Observatory.
Valona			30.52	775.2	56.1	13.4		w.			1		2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.39	771.9	55.9	13.3	52	n.			3	0	1 s			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.77	781.5	30.86	783.8	— 9	—22.8	55	n.	7	3.1		0	0			0	0	clear	
Alpena, Michigan	30.00	762.0	30.71	780.0	—15	—25.1	41	nw.	4	1.8		0	1 s			0.01	0.3	clear	
Atlanta, Georgia	29 27	743.4	30.50	774.7	31.0	— 0.6	62	e.	16	7.2		1 k	0	calm		0	0	clear	
Atlantic City, New Jersey	30.80	782.3	30.81	782.6	3	—16.1	20	nw.	14	6.3		0	1 ks			0	0	clear	
Augusta, Georgia	30.40	772.1	30.60	777.2	34.0	1.1	52	ne.	9	4.0		0	sk.			0	0	clear	
Baltimore, Maryland	30.82	782.8	30.87	784.1	10	—12.2	38	ne.	7	3.1		hz.	0			0	0	clear	
Barnegat, New Jersey	30.75	781.8	30.80	782.3	2.0	—16.7	44	nw.	24	10.7		0	2 k		nw.	0	0	clear	
Bismarck, Dakota	28.07	713.0	30.07	763 8	— 5	—20.6	65	se.	6	2.7			10 s		calm	0.02	0.5	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	26.92	683.8	29.86	758.4	15.2	— 9.3	100	e.	2	0.9			fg.		calm	0.01	0.3	dense fog	
Boston, Massachusetts	30.49	774.4	30.66	778.7	—11.0	—23.9	50	w.	16	7.2		0	0			0	0	clear	
Brownsville, Texas	29.91	759.7	29.95	761.0	59	15.0	100	nw.	8	3.6			10 s			0.51	13.0	cloudy	
Buffalo, New York	30.01	762.2	30.81	782.6	— 2.1	—18.9	85	ne.	6	2.7		0	2 s			0.02	0.5	clear	
Burlington, Vermont	30.52	775.2	30.83	783.1	—22.0	—30.0	100	ne.	7	3.1		0	0			0	0	clear	
Cairo, Illinois	30.04	763.0	30.46	773.7	31.8	— 0.1	64	ne.	13	5.8		4 cs	0	s.		0	0	fair	
Campo, California	27.27	692.6	29.90	759.4	35.5	1.9	89	s.	2	0.9			10 s			0	0	cloudy	
Camp Thomas, Arizona																			
Cape Henry, Virginia	30.77	781.5	30.79	782.1	21	— 6.1	58	ne.	20	8.9		1 c	2 s		ne.	0	0	clear	
Cape May, New Jersey																			
Castroville, Texas	29.28	743.7	30.13	765.3	49	9.4	86	e.	4	1.8			10 s			0	0	cloudy	
Cedar Keys Florida	30.28	769.1	30.30	769.6	55	12.8	74	ne.	13	5.8			10 s		ne.	0	0	cloudy	
Champaign, Illinois	29.65	753.1	30.52	775.2	16.3	— 8.7	76	se.	17	7.6		0	8 s		ne.	0	0	cloudy	
Charleston, S. Carolina	30.51	774.9	30.57	776.5	40	4.4	57	ne.	16	7.2		0	0			0	0	clear	
Charlotte, N. Carolina	29.73	755.1	30.62	777.7	26.8	— 2.9	54	e.	6	2.7		0	sk.			0	0	clear	
Chattanooga, Tennessee	29.67	753.6	30.53	775.4	30.0	— 1.1	67	ne.	11	4.9		2 cs	0	calm		0	0	clear	
Cheyenne, Wyoming	23 70	602.0	29.95	760.7	21.8	— 5.7	61	calm	0	0		0	1 s			0	0	clear	
Chicago, Illinois	29.80	756.9	30.55	776.0	18.1	— 7.7	84	se.	11	4.9		0	1 s			0.01	0.3	clear	
Chincoteague, Virginia	30.77	781.5	30.79	782.1	11	—11.7	80	n.	29	13.0		1 k	0	ne.		0	0	clear	
Cincinnati, Ohio	29.95	760.7	30.64	778.2	22	— 5.6	73	ne.	8	3.6		0	0			0	0	clear	
Cleveland, Ohio	29.96	761.0	30.74	780.8	4.5	—15.3	85	se.	9	4.0		2 c	0			Inap.	Inap.	clear	
Coleman City, Texas	28.23	717.0			44	6.7	86	se.	12	5.4			10 s			0	0	cloudy	
Columbus, Ohio	29.79	756.7	30.69	779.5	14	—10.0	80	se.	10	4.5		0	0			0	0	clear	
Concho, Texas	28.07	713.0	30.09	764.3	46	7.8	93	sw.	6	2.7			10 s			0	0	cloudy	
Davenport, Iowa	29.75	755.9	30.46	773 7	22	— 5.6	73	e.	10	4.5		hz.	4 s	calm	calm	0	0	fair	
Dayton, Washington T'y	28.02	711.7	29.82	757.4	30	— 1.1	88	sw.	1	0.4			10 s		sw.	0.62	15.7	cloudy	
Deadwood, Dakota	24.96	634 0	29.91	759.7	12	—11.1	76	w.	1	0.4		0	0			0	0	clear	
Decatur, Texas					38	3.3	62	se.	12	5.4			10 s		s.	0	0	cloudy	
Delaware Breakwater, Del.	30.78	781.8	30.80	782.3	11	—11.7	80	n.	28	12.5		4 c;k	0	n.		Inap.	Inap.	fair	
Denison, Texas	29.32	744.7	30.16	766.1	39.0	3.9	65	se.	8	3.6			10 s			0	0	cloudy	
Denver, Colorado	24.45	621.0	29.97	761.2	16.5	— 8.6	78	nw.	3	1.3		0	0			0	0	clear	
Des Moines, Iowa	29.36	745.7	30.33	770.4	18	— 7.8	67	se.	8	3.6		0	3 s			0	0	clear	
Detroit, Michigan	29.97	761.2	30.73	780.5	16.0	— 8.9	100	e.	8	3.6		3 cs	0	nw.		0	0	clear	
Dodge City, Kansas	27.23	691.6	29.98	761.5	34.8	1.6	86	s.	18	8.0			10 s			0	0	cloudy	
Dubuque, Iowa	29.68	753.9	30.46	773.7	15.5	— 9.2	73	sw.	7	3.1		1 cs	7 s	w.	s.	0	0	cloudy	
Duluth, Minnesota	29.64	752.8	30.40	772.1	4.5	—15.3	85	sw.	3	1.3			10 n		sw.	0.02	0.5	light snow	
Eagle Pass, Texas	29.30	744.2	30.14	765.5	48.0	8.9	100	se.	2	0.9			10 n			0.03	0.8	light rain	
Eagle Rock, Idaho	24.89	632.2	29.85	758.2	20	— 6.7	76	nw.	15	6.7		10 cs	0			0	0	cloudy	
Eastport, Maine	30.33	770.4	30.40	772.1	—13	—25.0	70	nw.	24	10.7		0	3 s		nw.	0	0	clear	
El Paso, Texas	26.17	664.7	30.05	763.3	32.1	0.1	71	n.	1	0.4		0	8 ks		w.	0	0	cloudy	
Erie, Pennsylvania	30.00	762.0	30.77	781.5	0	—17.8	68	se.	11	4.9		0	4 s			0.08	2.0	fair	
Escanaba, Michigan	29.82	757.4	30.54	775.7	6	—14.4	87	s.	3	1.3			10 s		s.	Inap.	Inap.	cloudy	
Florence, Arizona																			
Fort Apache, Arizona	24.87	631.7	29.99	761.7	29	— 1.7	70	ne.	1	0.4		0	4 s		calm	0	0	fair	
Fort Assinnaboine, Montana	26.85	682.0	29.89	759.2	— 1	—18.3	72	calm	0	0			10 n			0.02	0.5	light snow	
Fort Bennett, Dakota	28.28	718.3	30.02	762.5	13	—10.6	83	se.	15	6.7			10 s			0.64	16.3	cloudy	
Fort Benton, Montana	26.98	685.3	29.96	761.0	— 4	—20.0	100	calm	0	0			10 n		ne.	0.20	5.1	light snow	
Fort Buford, Dakota	27.91	708.9	30.11	764.8	2	—16.7	75	se.	8	3.6		0	0			0.01	0.3	clear	
Fort Custer, Montana	26.48	672.6	29.86	758.4	— 4	—20.0	100	ne.	3	1.3		0	5 s		calm	0	0	fair	
Fort Davis, Texas	25.04	636.0	30.02	762.5	40	4.4	92	s.	4	1.8		0	0			0	0	clear	
Fort Elliott, Texas	27.13	689.1	30.06	763.5	37	2.8	64	se.	16	7.2			10 s		se.	0	0	cloudy	
Fort Gibson, Indian T'y	29.59	751 6	30.19	766.8	37.0	2.8	46	se.	10	4.5			10 s			0	0	cloudy	
Fort Grant, Arizona	25.08	637.0	29.98	761.5	40	4.4	76	ne.	1	0.4		0	8 s			0	0	cloudy	
Fort Griffin, Texas	28.72	729.5	30.10	764.5	44	6.7	68	se.	5	2.2			10 s		s.	0	0	cloudy	
Fort Keogh, Montana	27.14	689.3	29.83	757.7	2	—16.7	48	e.	2	0.9		0	0			0	0	clear	
Fort Macon, North Carolina	30.63	778.0	30.64	778.2	32	0.0	88	n.	22	9.8		hz.	2 ks;hz	calm	calm	0	0	light haze	
Fort McKavett, Texas	27.71	703.8	30.10	764.5	45.1	7.3	86	s.	4	1.8			10 s			Inap.	Inap.	cloudy	
Fort Missoula, Montana	26.34	669.0	29.80	756.9	22	— 5.6	73	ne.	1	0.4			10 n			0.52	8.1	light snow	
Fort St. Michaels, Alaska	30.59	777.0	30.63	778.0	1	—17.2	100	se.	6	2.7		0	5 s			0	0	fair	
Fort Shaw, Montana	25.05	659.1	29.81	757.2	— 5	—20.6	100	calm	0	0		9 cs	0			0.25	6.3	cloudy	
Fort Sill, Indian Territory	28.79	731.3	30.12	765.0	39.7	4.3	66	s.	23	10.3			10 s			0	0	cloudy	
Fort Stevenson, Dakota	28.05	712.5	30.11	764.8	— 3	—19 4	68	se.	4	1.8			10 s			0.05	1.3	cloudy	
Fort Verde, Arizona					32.1	0.1	81	s.			1		10 s		s.	0	0	cloudy	
Fredericksburg, Texas	28.30	718.8	30.12	765.0	45	7.2	93	se.	3	1.3			10 s			0	0	cloudy	
Galveston, Texas	30.10	764.5	30.14	765.5	48	8.9	100	ne.	20	8.9			10 n		ne.	1.07	27.2	heavy rain	
Grand Haven, Michigan	29.92	760 0	30.63	778.0	4.0	—15.6	85	e.	5	2.2		0	0			Inap.	Inap.	clear	
Hatteras, North Carolina	30.65	778.5	30.67	779.0	33	0.6	88	ne.	24	10.7			9 s			0	0	cloudy	
Helena, Montana	25 57	649.5	30.00	762.0	6	—14.4	76	calm	0	0			10 n		calm	0.07	1.8	light snow	
Henrietta, Texas	29.09	738.9	30.16	766.1	42	5.6	65	s.	18	8.0			10 s			0	0	cloudy	
Huron, Dakota	28.59	726.2	30.13	765 3	17.2	— 8.2	73	se.	14	6.3			10 s			0.05	1.3	cloudy	
Indianapolis, Indiana	29.70	754.4	30.54	775 7	19	— 7.2	76	se.	8	3.6		4 c;hz	0	calm		0	0	fair	
Indianola, Texas	30.07	763.8	30.10	764 5	50.0	10.0	100	ne.	21	9.4			10 n			0.10	2.5	light rain	
Jacksboro, Texas	28.91	734.3	30.15	765.8	42	5.6	86	se.	8	3.6			10 s			0	0	cloudy	
Jacksonville, Florida	30.34	770.6	30.39	771.9	57	13.9	69	ne.	12	5.4		4 cs	5 s		ne.	0	0	cloudy	
Keokuk, Iowa	29.70	754.4	30.40	772.1	19.0	— 7.2	70	e.	10	4.5		0	8 s		e.	0	0	cloudy	
Key West, Florida	30.11	764.8	30.14	765.5	69.0	20.6	93	e.	14	6.3			10 s		e.	0.87	22.1	threatening	
Kittyhawk, North Carolina	30.70	779.8	30.72	780.3	28	— 2.2	94	ne.	32	14.3		1 c	8 ks		ne.	0	0	cloudy	
Knoxville, Tennessee	29.47	748.5	30.55	776.0	26.6	— 3.0	79	ne.	10	4.5		4 c	0	w.		0	0	fair	
La Crosse, Wisconsin	29.56	750.8	30.40	772.1	16.5	— 8.6	83	s.	9	4.0			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.07	662 2	30.10	764.5	28.0	— 2.2	80	calm	0	0		0	4 s			0	0	fair	
Leavenworth, Kansas	29.29	744.0	30.25	768.3	32	0.0	78	se	10	4.5			10 s		s.	0	0	cloudy	
Lewiston, Idaho	28.94	735 1	29.81	757.2	32	0.0	71	calm	0	0			10 s		calm	0.47	11.9	cloudy	
Little Rock, Arkansas	29.98	761.5	30.31	769.9	32	0.0	78	e.	7	3.1		6 ck	0			0	0	fair	
Los Angeles, California	29.00	751.8	30.00	762.0	47.1	8.4	86	ne.	5	2.2			10 s		calm	0	0	cloudy	
Louisville, Kentucky	29.96	761.0	30.55	775.0	25.0	— 3.9	73	e.	11	4.9			10 s		calm	0	0	cloudy	
Lynchburg, Virginia	30.02	762.5	30.74	780.8	19.0	— 7.2	61	e.	2	0.9		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29 40	746 7	30.49	774 4	10	—12.2	80	e.	6	2.7			10 s		calm	0.02	0.5	cloudy	
Marquette, Michigan	29.72	754.9	30.50	774.7	6	—14.4	52	sw.	6	2.7		0	9 s		se.	0.07	1.8	cloudy	
Mason, Texas	28.38	720.8	30.12	765.0	47	8.3	77	se.	4	1.8			10 s		se.	0	0	cloudy	
Memphis, Tennessee	30.02	762.5	30.38	771.6	31	— 0.6	78	e.	6	2.7		0	3 s			0	0	clear	
Milwaukee, Wisconsin	29 73	755.1	30.53	775.4	15	— 9.4	83	se.	4	1.8			10 n			0.04	1.0	light snow	

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.25	768.3	30.29	769.4	48.0	8.9	56	e.	7	3.1			10 s			0	0	cloudy	
Montgomery, Alabama	30.16	766.1	30.40	772.1	42.3	5.7	38	se.	10	4.5			10 ks		se.	0	0	cloudy	
Moorhead, Minnesota	29.17	740.9	30.28	769.1	— 5	—20.6	100	se.	24	10.7			10 n		se.	0.05	1.3	light snow	
Morgantown, W. Virginia	29.68	753.9	30.74	780.8	9.8	—12.3	69	e.	4	1.8		3 cs	0			inap.	inap.	clear	
Mt. Washington, N. H.	23.44	595.4	30.07	763.8	—24.0	—31.1	44	nw.	88	39.4		0	0			0	0	clear	
Nashville, Tennessee	29.93	760.2	30.49	774.4	31.5	— 0.3	66	e.	7	3.1		7 ck	0	sw.		0	0	fair	
New Haven, Connecticut	30.64	778.2	30.76	781.3	— 8.5	—22.5	80	n.	10	4.5		0	0			0	0	clear	
New London, Connecticut	30.71	780.0	30.76	781.3	— 8	—22.2	58	nw.	10	4.5		0	0			0	0	clear	
New Orleans, Louisiana	30.13	765.3	30.19	766.8	52.0	11.1	72	se.	14	6.3			10 s			0	0	cloudy	
Newport, Rhode Island	30.62	777.7	30.68	779.3	— 4.7	—20.4	78	nw.	20	8.9		0	0			0	0	clear	
New River, N. Carolina					29	— 1.7	13	n.			1	0	2 ks			0	0	clear	
New Shoreham, Rhode I'd.	30.66	778.7	30.69	779.5	— 4.0	—20.0	65	nw.	34	15.2		0	4 k		nw.	0	0	fair	
New York, New York	30.61	777.5	30.80	782.3	— 1	—18.3	68	nw.	10	4.5		0	0			0	0	clear	
Norfolk, Virginia	30.72	780.3	30.75	781.0	22	— 5.6	58	ne.	3	1.3			10 ks			0	0	cloudy	
North Platte, Nebraska	26.89	683.0	30.01	762.2	21.6	— 5.8	74	ne.	4	1.8			10 s			inap.	inap.	cloudy	
Olympia, Washington T'y	29.77	756.1	29.81	757.2	36.0	2.2	89	n.	1	0.4			10 s		calm	0.03	0.8	cloudy	
Omaha, Nebraska	28.93	734.8	30.20	767.1	26.3	— 3.2	88	se.	12	5.4			10 s			0	0	cloudy	
Ooglanmie, Pt. Barrow, Alas.	30.29	769.4	30.31	769.9	—15.0	—26.1	72	w.	32	14.3		0	0			0	0	clear	
Oswego, New York	30.53	775.4	30.88	784.3	—11.0	—23.9	50	se.	10	4.5			10 s			0.18	4.6	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.27	768.8	30.30	769.6	49.0	9.4	61	ne.	14	6.3			10 s		se.	0	0	cloudy	
Philadelphia, Pa.	30.78	781.8	30.84	783.3	5	—15.0	47	n.	17	7.6		0	0			0	0	clear	
Pike's Peak, Colorado	17.32	439.9	30.02	762.5	4	—15.6	74	sw.	54	24.2		0	0			0	0	clear	
Pioche, Nevada	23.77	603.7	29.97	761.2	26	— 3.3	70	s.	3	1.3		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.92	760.0	30.78	781.8	4.0	—15.6	72	ne.	5	2.2		0	0			0	0	clear	
Port Eads, Louisiana	30.13	765.3	30.14	765.5	58.2	14.6	90	e.	24	10.7			10 s		calm	0	0	cloudy	
Port Huron, Michigan	30.02	762.5	30.75	781.0	— 3.5	—19.7	88	e.	5	2.2		0	0			inap.	inap.	clear	
Portland, Maine	30.55	776.0	30.60	777.2	— 9	—22.8	58	nw.	8	3.6		0	1 s		calm	inap.	inap.	clear	
Portland, Oregon	29.78	756.4	29.85	758.2	38.0	3.3	89	n.	2	0.9			fg		calm	0.11	2.8	dense fog	
Portsmouth, N. Carolina					30	— 1.1	47	ne.	32	14.3		0	0			0	0	clear	
Prescott, Arizona	24.58	624.3	29.96	761.0	39	3.9	67	se.	4	1.8			10 s		s.	0	0	cloudy	
Punta Rassa, Florida	30.19	766.8	30.20	767.1	64.5	18.1	81	e.	16	7.2			10 ks		e.	0.03	c.8	cloudy	
Red Bluff, California	29.38	746.2	29.76	755.9	41.2	5.1	100	w.	2	0.9			10 n			0.59	15.0	light rain	
Rio Grande City, Texas	29.80	756.9	30.05	763.3	52	11.1	93	e.	5	2.2			10 n		calm	0.15	3.8	light rain	
Rochester, New York	30.11	764.8	30.82	782.8	— 4	—20.0	100	w.	1	0.4			10 s		calm	0.09	2.3	cloudy	
Roseburg, Oregon	29.24	742.7	29.81	757.2	35	1.7	92	n.	1	0.4			10 s			0.12	3.0	cloudy	
Sacramento, California	29.73	755.1	29.81	757.2	44.2	6.8	93	se.	10	4.5			8 s		se.	0.13	3.3	cloudy	
St. Louis, Missouri	29.80	756.9	30.44	773.2	24.7	— 4.1	77	se.	11	4.9		2 c	0			0	0	clear	
St. Paul, Minnesota	29.37	746.0	30.32	770.1	9.0	—12.8	76	se.	12	5.4			10 s		se.	0.01	0.3	cloudy	
St. Vincent, Minnesota	29.20	743.2	30.24	768.1	— 6	—21.1	100	s.	4	1.8			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.31	642.9	29.88	758.9	25	— 3.9	53	se.	1	0.4		0	0			0	0	fair	
San Antonio, Texas	29.39	746.5	30.12	765.0	47.6	8.7	93	ne.	4	1.8			10 n		n.	inap.	inap.	light rain	
San Diego, California	29.84	757.9	29.91	759.7	49.8	9.9	83	n.	3	1.3		3 ck	7 s			0	0	cloudy	
Sandusky, Ohio	30.00	762.0	30.72	780.3	9.8	—12.3	80	se.	13	5.8		0	0			0.02	0.5	clear	
Sandy Hook, New Jersey	30.78	781.8	30.82	782.8	1.0	—17.2	72	n.	24	10.7		1 k	0	n.		0	0	clear	
San Francisco, California	29.75	755.6	29.82	757.4	46	7.8	87	s.	9	4.0			10 n		sw.	0.57	14.5	light rain	
Santa Fé, New Mexico	23.06	585.7	30.07	763.8	27.6	— 2.4	68	ne.	1	0.4		5 c	0			0	0	fair	
Savannah, Georgia	30.42	772.7	30.52	775.2	41	5.0	73	ne.	10	4.5		8 ck	0	s.		0	0	cloudy	
Shreveport, Louisiana	29.98	761.5	30.23	767.8	38	3.3	61	n.	1	0.4			10 s			0	0	cloudy	
Silver City, New Mexico	24.12	612.6	29.98	761.5	30	— 1.1	80	n.	1	0.4		0	5 s		calm	0	0	fair	
Sitka, Alaska	29.67	753.6	29.74	755.4	28.5	— 1.9	68	ne.	8	3.6		0	0			0.03	0.8	clear	
Smithville, North Carolina	30.59	777.0	30.63	778.0	33	0.6	68	ne.	7	3.1		0	0			0	0	clear	
Spokane Falls, Wash. Ter.	27.74	704.6	29.88	758.9	27	— 2.8	100	e.	4	1.8			10 n			1.53	38.9	heavy snow	
Springfield, Illinois	29.72	754.9	30.45	773.4	24	— 4.4	77	se.	12	5.4		0	4 s		w.	0	0	fair	
Springfield, Massachusetts	30.63	778.0	30.77	781.5	— 8.6	—22.6	55	nw.	3	1.3		0	0			0	0	clear	
Springfield, Mo.	28.70	730.5	30.34	770.6	32	0.0	78	s.	13	5.8		0	4 s			0	0	fair	
Stockton, Texas	26.89	683.0	30.03	762.7	36.2	2.3	100	s.	4	1.8		0	0			0	0	clear	
Thatcher's Island, Mass.	30.54	775.7	30.60	777.2	— 5.5	—20.8	100	nw.	24	10.7			10 s		nw.	0	0	cloudy	
Toledo, Ohio	29.96	761.0	30.70	779.8	10	—12.2	58	e.	2	0.9		1 c	0			inap.	inap.	clear	
Tucson, Arizona	27.42	696.5	29.92	760.0	44	6.7	76	calm	0	0		7 ck	0			0	0	fair	
Umatilla, Oregon	29.48	748.8	29.88	758.9	28.1	— 2.2	88	w.	4	1.8		0	5 s		w.	0.20	5.1	fair	
Uvalde, Texas																			
Vicksburg, Mississippi	30.01	762.2	30.28	769.1	40	4.4	48	e.	4	1.8		0	8 s		calm	0	0	cloudy	
Visalia, California	29.43	747.5	29.82	757.4	45.5	7.5	93	ne.	6	2.7			10 n			0.15	3.8	light rain	
Washington, D. C.	30.73	780.5	30.85	783.6	10	—12.2	89	n.	4	1.8		2 cs	0			0	0	clear	
West Los Animas, Colorado																			
Wickenburg, Arizona					39	3.9	95	calm			0	0	0			0	0	clear	
Williamsport, Pa.	30.19	766.8	30.82	782.8	— 1	—18.3	87	nw.	4	1.8		0	0			0	0	clear	
Wilmington, N. Carolina	30.58	776.7	30.64	778.2	30	— 1.1	67	ne.	9	4.0		hz	sk	calm	calm	0	0	clear	
Winnemucca, Nevada	25.28	642.1	29.82	757.4	30	— 1.1	81	sw.	2	0.9			10 n		calm	0.02	0.5	light snow	
Wood's Holl, Mass.	30.59	777.0	30.63	778.0	— 7	—21.7	76	nw.	32	14.3		1 k	0	nw.		0	0	clear	
Yankton, Dakota	28.66	728.0	30.08	764.0	25	— 3.9	73	se.	12	5.4			10 ks			0	0	cloudy	
Yuma, Arizona	29.69	754.1	29.84	757.9	47.2	8.4	85	sw.	2	0.9		0	7 s			0	0	fair	
Sub-Series.																			
Bogota, U. S. Columbia	21.98	558.3			49.5	9.7	72	calm	0	0		0	1 s			0	0	clear	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.03	762.7	30.04	763.0	76	24.4	86	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.89	759.2	29.91	759.7	78	25.6	86	calm	0	0			10 ks		calm	1.40	35.6	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.97	761.2	29.99	761.7	72	22.2	95	e.				0	5 ks			0	0		B. Bigar.
Havana, Cuba, W. I.	30.11	764.8	30.16	766.1	68	20.0	84	calm	0	0		0	2 ks		calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.02	762.5	30.03	762.7	68.3	20.2	86	calm	0	0		0	6 s		e.	0	0	fair	Robert Johnstone.
Navassa, W. I.	29.96	761.0	30.04	763.0	76.5	24.7	69	ne.	15.5	6.9		8 ck	5 s	e.	ne.	0	0	cloudy	F. M. Everett.
Paramaribo, S. A.	30.03	762.7	30.03	762.7	78	25.6	86	e.			2	7 c	5 k	e.		0.800	20.3	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.30	745.7	29.91	759.7	80	26.7	95	n.			1	0	1 ks		calm	0	0	clear	Miss Flora A. Nichols.
Rivas, Nicaragua					72	22.2	88	ne.			2	0	1 ks		ne.	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.06	763.5	30.09	764.3	73	22.8	71	n.	4.8	2.1		2 c	3 s			0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.64	778.2	30.70	779.8	— 2.0	—18.9	84	nw.	16	7.2		4 k	6 s	w.	nw.	inap.	inap.	snowing	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 20° 46′, E. 109° 08′	30.00	762.0	72	22.2		ne.			2		4	e.						d. clouds	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India	29.91	759.7	80	26.7	76	n.			2		3							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.54	775.7	57.5	14.2	72	calm			0		2							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 5° 42′, E. 80° 35′	29.88	758.9	77	25.0	100	nne.			1–2		9					2	nne.	raining	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.84	757.9	78	25.6	73	w.			2		2	w.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, S. 11° 10′, W. 78° 10′	29.86	758.4	72	22.2	90	se.			3		4	se.				4	sse.	d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, Constantinople, Turkey	30.57	776.5	44.5	6.9	71	n.			2–3		9							d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.42	772.7	65	18.3		ene.			3		4	ene.				1	wsw.	squally	Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, N. 32° 07′, E. 118° 45′	29.85	758.2	56.5	13.6	93	nw.			1–2		10							misty	Capt. S. Long.
H. M. S. Diamond, S. 35° 49′, W. 1° 54′	29.92	760.0	60	15.6	65	wsw.			5		5					6	ssw.	d. clouds.	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.29	769.4	57	13.9	72	wnw.			2–3		7	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 20° 56′, W. 75° 27′	30.11	764.8	76	24.4	88	ene.			3–4		4	e.				3	ene.	d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 19′, W. 59° 37′	29.43	747.5	53	11.7	66	nw.			1		6					1	wnw.	d. clouds.	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.88	758.9	83	28.3		nne.			1		5	nnw.						d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald, S. 42° 53′, E. 147° 22′	29.73	755.1	60	15.6	88	nnw.			1		3	nw.						d. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.36	771.1	50	10.0		ne.			2		10	ne.						d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, S. 22° 40′, W. 29° 35′	30.08	764.0	76	24.4	100	ene.			3		7	sse.				3	ese.	d. clouds	Capt C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.93	760.2	79	26.1	80	ssw.			1		7	nnw.				1		d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.11	764.8	50	10.0	93	calm			0		10							misty	Capt. R. F. Roskyn.
H. M. S. Gannet, Coquimbo, Chili	29.94	760.5	63	17.2	83	n.			1		2							misty	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. Jones.
H. M. S. Iris, Alexandretta, Turkey, Asia	30.42	772.7	55	12.8	50	ne.			1		0							blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.06	763.5	66	18.9	94	calm			0		3	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark, S. 33° 43′, E. 164° 26′	29.94	760.5	75.3	24.1	89	wnw.			3		10					2	nw.	overcast.	Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.04	763.0	68.5	20.3	90	calm			0		8							misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 12° 24′, E. 43° 40′	30.00	762.0	79	26.1	90	e.			1		6	nw.				1	nnw.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, Off Grenada, West Indies	29.95	760.7	78	25.6	86	ne.			4		2	ne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 13° 32′, E. 71° 20′	29.92	760.0	82	27.8	78	nne.			3		1	n.				1	nne.	blue sky	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 6° 21′, W. 15° 55′	29.88	758.9	78	25.6	?	se.			4		4					2	se.	misty	Capt. F. R. Dicken
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, N. 30° 03′, E. 49° 20′	30.35	770.9	56.1	13.4		nw.			4									d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	29.82	757.4	34	1.1	90	nnw.			1		2							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, N. 5° 58′, E. 81° 01′	29.96	761.0	78.5	25.8	73	nnw.			2		6	n.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 16° 40′, E. 63° 00′	30.00	762.0	78	25.6	95	ene.			3		1	ene.				sm'h		blue sky	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 16° 00′, W. 87° 50′	29.92	760.0	77	25.0	82	ssw.			2		4					sm'h		d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, Off Panama, Panama	29.89	759.2	75	23.9	85	nnw.			2		2	calm						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 9° 18′, E. 66° 54′	29.91	760.5	80.5	26.9	93	ne.			3		0					1	ene.	blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.02	762.5	74	23.3		n.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, N. 25° 18′, E. 50° 57′	30.23	767.8	59.5	15.3	70	nw.			6		6	nw.				7	nnw.	misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Brava, Cape Verd Ids.	29.98	761.6	75.2	24.0	83	ne.			2		10					2	ne.	overcast	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 10° 37′, W. 66° 57′	29.96	761.0	75.2	24.0	86	ene.			3		7							overcast	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
UNITED STATES NAVAL SERIES.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
By authority of the Secretary of the Navy.																			
N. Yard, Pensacola, Fla	30.28	769.1	52	11.1	73	nne.	12	5.4	.....	.....	10	.....	.....	0	0	.....	.....	cloudy	
N. Yard, Portsmouth, N. H.	30.63	778.0	—12	—24.4	.....	nw.	21	9.4	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Naval Hospital Yokohama, Japan	29.97	761.2	49.5	9.7	71	calm	.....	.....	0	.....	10	.....	w.	0	0	.....	.....	covered	
Adams, Callao, Peru	29.76	755.9	70	21.1	95	sse.	.....	.....	1-2	.....	10	.....	.....	.....	.....	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	29.90	759.4	62	16.7	83	calm	.....	.....	0	.....	8	.....	.....	0	0	sm'h	.....	cloudy	
Alert, N. 10° 32′, E. 106° 56′*	29.81	757.2	80	26.7	78	se	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alliance, Boston, Mass.*†	30.55	776.0	— 8	—22.2	.....	nw.	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	clear	
Ashuelot, Tientsin, China	30.22	767.6	32	0.0	100	nnw.	.....	.....	2	.....	8	.....	calm	.....	.....	.....	.....	cloudy	
Brooklyn, S. 33° 35′, W. 51° 26′	29.94	760.5	74	23.3	86	nne.	15	6.7	.....	.....	2	.....	ne.	0	0	mod.	ne.	fair	
Colorado, New York, N. Y.	30.78	781.8	0	—17.8	.....	nw.	8	3.6	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Essex, N. 35° 40′, W. 40° 39′	30.21	767.3	65	18.3	84	s.	.....	.....	4	.....	10	.....	s.	.....	.....	sm'h	.....	overcast	
Franklin, Norfolk, Va.	30.73	780.5	23	— 5.0	.....	ne.	7	3.1	.....	.....	8	.....	calm	0	0	.....	.....	cloudy	
Galena, N. 27° 50′, W. 17° 17′	30.15	765.8	66	18.9	79	ese.	.....	.....	6	.....	10	.....	se.	.....	.....	r'gh	e.	cloudy	
Independence, N. Yard, Mare I'd, Cal.	29.89	759.2	47	8.3	85	s.	4.8	2.1	.....	.....	10	.....	s.	0.56	14.2	.....	.....	overcast	
Kearsarge, New Orleans, La.	30.19	766.8	52	11.1	73	ene.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	drizzling	
Lackawanna, Valparaiso, Chili†	30.03	762.7	63	17.2	94	se.	.....	.....	0-1	.....	8	.....	se.	.....	.....	.....	.....	cloudy	
Lancaster, Leghorn, Italy	30.53	775.4	55	12.8	68	ene.	.....	.....	2	.....	2	.....	calm	0	0	.....	.....	fair	
Michigan, Erie, Pa.	29.77	756.1	0	—17.8	?	s.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Minnesota, Newport, R. I.	30.65	778.5	— 6	—21.1	.....	nw.	20	8.9	.....	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Monocacy, Yokohama, Japan	30.14	765.5	57	13.9	52	nw.	.....	.....	3	.....	10	.....	calm	.....	.....	.....	.....	cloudy	
Nipsic, Leghorn, Italy	30.61	777.5	57	13.9	69	ne.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.01	762.2	69	20.6	95	sse.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	misty	
Palos, Hong Kong, China	30.06	763.5	66	18.9	100	calm	.....	.....	0	.....	10	.....	calm	.....	.....	.....	.....	foggy	
Passaic, Washington, D. C.	30.79	782.1	10	—12.2	?	w.	.....	.....	5	.....	0	.....	.....	.....	.....	.....	.....	clear	
Pensacola, Valparaiso, Chili	29.94	760.5	62	16.7	77	e.	2	0.9	.....	.....	10	.....	e.	0	0	sm'h	.....	cloudy	
Powhatan, Boston, Mass.	30.64	778.2	—10	—23.3	100	nw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	squally	
Quinnebaug, Villafranca, France	30.56	776.2	58	14.4	64	ese.	.....	.....	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Ranger, N. 19° 06′, W. 104° 23′*	29.85	758.2	70	21.1	100	n.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, S. 0° 54′, W. 168° 32′*	29.65	753.1	80	26.7	87	ne.	.....	.....	5	.....	8	.....	ne.	0.21	5.3	mod.	ne.	fair	
Shenandoah, Montevideo, Uruguay*	29.87	758.7	78	25.6	73	nne.	.....	.....	4	.....	8	.....	.....	.....	.....	sm'h	.....	fair	
St. Louis, Lengue Island, Pa.	30.05	763.3	2	—16.7	100	nnw.	12	5.4	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Swatara, Kobe, Japan*	29.95	760.7	53	11.7	80	calm	.....	.....	0	.....	10	.....	.....	.....	.....	sm'h	.....	misty	
Tennessee, New York, N. Y.	30.77	781.5	1	—17.2	.....	nw.	20	8.9	.....	.....	0	.....	.....	0	0	.....	.....	fair	
Vandalia, La Guayra, Venezuela, S.A.	29.97	761.2	76	24.4	82	ene.	.....	.....	2	.....	5	.....	e.	.....	.....	mod.	nne.	fair	
Wabash, Boston, Mass.	30.61	777.5	—12	—24.4	.....	nw.	14	6.3	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Wachusetts, N. 41° 22′, W. 124° 40′	29.78	756.4	44	6.7	84	sse.	.....	.....	1	.....	2	.....	sw.	.....	.....	sm'h	w.	fair	
Wyoming, Port Royal, S. C.	30.53	775.4	41	5.0	65	nne.	14	6.3	.....	.....	8	.....	w.	0	0	.....	.....	cloudy	
Yantic, Aspinwall, Panama*	29.87	758.7	76	24.4	86	nnw.	.....	.....	4	.....	8	.....	.....	.....	.....	mod.	n.	squally	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon.
S. S. Polynesian, Capt. Robt. Brown, N. 48° 05′, W. 45° 14′*	29.66	753.4	32	0.0		w.	6		7		w.	3 h'r	snow	mod.	wnw.	fair	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, Portland, Oregon*	30.59	777.0	—15	—26.1		nnw.	3		3		nnw.					fair	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.49	774.4	46	7.8		wsw.	6				w.	1 h'r	1 h'r			cloudy	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn.	30.61	777.5	7	—13.9	78	nw.	2		0							clear	Cauffman & Morse.
S. S. Ohio, Capt. Henry Morrison, N. 51° 14′, W. 24° 20′*†	30.34	770.6	53	11.7	100	ssw.	7		10		w.			h'vy	sw.	misty	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†	30.61	777.5	44	6.7	92	n.											W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
S. S. Assyria, Capt. James Brown, N. 52° 10′ W. 35° 45′*†	29.72	754.9	46	7.8		wsw.	8		2		wsw.			h'vy	wsw.	clearing	J. Brown.
Utopia, Capt. A. McRitchie,																	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 18° 38′, W. 74° 05′†*	30.12	765.0	68	20.0	84	sw.	7		7		calm	0	0	long	ne.	cloudy	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Cartagena, U. S. C*	29.88	758.9	75	23.9		nne.	4		0			0	0			very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 38° 48′, W. 73° 45′*†.	30.49	774.4	37	2.8		se.	4		8		ese.	0	0	mod.	se.	cloudy	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 29° 38′, W. 68° 30′			63	17.2		ne.	2		5?		ne.	0	0	mod.	nne.	cloudy?	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse,																	Fisher & Welden.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S.*†	30.53	775.4	14	—10.0		nnw.	9				nnw.	light	light			clear	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell, N. 32° 14′, W. 21° 15′	30.21	767 3	64.5	18.1	73	se.	5		7							d. clouds	
British Merchant, Capt. E. J. Molony, N. 18° 04′, E. 86° 25′	29.96	761.0	77.2	25.1	82	se.	2		0							blue sky	
Bk Caldew, Capt. W. Peterson S. 38° 35′, W. 83° 11′	29.90	759.4	59	15.0		wsw.	4		8							misty	
S. S. Cipero, Capt. W. N. Lailey N. 25° 35′, W. 38° 19′	30.13	765.3	72	22.2	80	e.	4		5					2	e.	d. clouds	
S. City of Agra, Capt. Thos. Young. N. 13° 43′, W. 35° 00′	29.98	761.5	75.7	24.3		ne.	4		8							misty	
Bk. Glaramara, Capt. R. Morton, N. 35° 35′, W. 35° 17′	30.35	770.9	63	17.2	78	se.	3		4							d. clouds	
Glencairn, Capt. R. S. Tannock, S. 44° 18′, E. 55° 24′	29.91	759.7	45	7.2	76	ssw.	6		7							showery	
S. S. Gordon Castle, Capt. W. Waring,																	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 24° 20′, E. 59° 35′	29.90	759.4	82	27.8	70	e.	3		7							d. clouds	
May Hulse, Capt. H. Youlden, R. N. R., S. 34° 37′, W. 45° 50′	30.01	762.2	74	23.3	76	ene.	2		10							drizzling	
Bk. Mertola, Capt. E. W. Turner, N. 36° 13′, W. 9° 10′	30.35	770.9	56.2	13.4	87	ne.	1		6							d. clouds	
Minho, Capt. J. Lawson, S. 23° 04′, W. 42° 30′	29.96	761.0	76.2	24.6	90	calm	0		7							foggy	
Naiad, Capt. J. Smith, N. 3° 16′, W. 29° 14′	29.97	761.2	80.0	26.7	91	nne.	4		10							showery	
Pole Star, Capt. F. Norman,																	
Queen of Cambria, Capt. M. Parry. S. 43° 35′, E. 38° 11′	30.44	773.2	48	8.9	62	sse.	3		5							d. clouds	
S. Superb, Capt. Berridge. N. 21° 14′, W. 38° 59′						nne.	3		5							d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham																	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent San Francisco.*																	
S. S. Newbern, Capt. E. Y. Rogers, N. 32° 37′. W. 117° 32′†	29.90	759.4	57	13.9	81	nw.	2		10			0	0	gentle	w.	cloudy	
CROMWELL LINE. *Clark & Seaman, Agents, New York.*																	
S. S. Hudson, Capt. H. R. Freeman, N. 39° 50′. W. 74° 00′*†	30.85	783.6	7	—13.9		nw.	6		5		nw.	0	0	r'gh	nw.		H. R. Freeman.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, Havre, France	30.50	774.6	33.8	1.0		ne.	1		10		e.	0	0			hazy	
S. S. St. Laurent, Capt. A. Servan, N. 50° 07′, W. 25° 40′*†	30.35	771.0	51.8	11.0		s.	6					0	0	large	s.		A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein.																	P. Froehlich, 3d Off.
S. S. Silesia, Capt. A. Albers, N. 46° 28′, W. 46° 04′*†	29.90	759.4	36.5	2.5		w.	5		2		wsw.	0	0	5	w.	fair	
S. S. Wieland, Capt. C. Hebich, N. 49° 54′, W. 8° 24′*	30.60	777.2	47.5	8.6		e.	1		10		e.	1 h'r	1 h'r	2	nw.	cloudy	C. Jorgensen.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch.																	Patterson & Thompson.
LAMPERT & HOLT S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 31° —′, W. 49° —′*†	30.14	765.5	76	24.4		sse.	1		2		se.	0	0	sm'h			J. Carroll.

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Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind. Up'er	Amount and kind. Lo'er	Direction. Upper.	Direction. Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 43° 07′, W. 60° 30′						wnw.	3		10		wnw.	8 h'r	8h'r	high	w.		E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.74	780 8				ssw.	1		2		se.	0	0			fine	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Santiago, Capt. S. F. Phillips, N. 40° 00′, W. 73° 55′†	30.86	783.8	12	—11.1		nnw.	5		8		nnw.	0	0	sm'h		cloudy	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 14° 53′, W. 76° 16′†	29.95	760.7	80	26.7		ene.	5								e.	clear	
S. S. Bothnia, Capt. MacMackan, N. 41° 10′, W. 63° 25′*	30.13	765.3	27	—2.8		nw.	7							high	wnw.	snowy	E.F.Steinbridge,3d offi
S. S. City of Alexandria, Capt. L. F. Timmerman	30.30	769.6	75	23.9		ene.	4								n.	clear	
N 22° 05′, W. 86° 58′†*																	
S. S. City of Washington, Capt. J. W. Revnolds	30.75	781.0	43	6.1		n	3								sw.	fine	
N. 34° 45′, W. 75° 20′*†																	
S. S. Maas, Capt. T. N. Bonjer, N. 50° 26, W. 25° 02′*	30.09	764.3	47	8.3		s. to w.	1							high	ssw.		
S. S. New York, Capt. R. B. Quick, N. 25° 01′, W. 83° 55′†*	30.20	767.1	72	22.2		e.	6								e.		
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers, N. 50° 39′, W. 0° 41′	30.75	781.0				ne.	2		2?			0	0	sm'h		covered?	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander, N. 49° 25′, W. 8° 54′*	30.70	779.8	44.6	7.0		ene.	4		10		s.	0	0	mod.	e.		G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer, N. 49° 52′, W. 10° 32′	30.87	784.1	53.0	11.7	73	s.	4		8		sw.	0	0	mod.	wnw.	fair	Sander & Waller.
S. S. Neckar, Capt. R. Bussius, N. 41° 21′, W. 57° 10′	29.92	760.0	33.8	1.0		nw.	9		10		nw.	8 h'r and	snow hail	r'gh	wnw; nw.	snow & hail	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A, Jaeger, N. 38° 47′, W. 13° 00′*	30.37	771.4	59.0	15.0	70	e.	4		4		se.	0	0	4	e.	fair	
S. S. Oder, Capt. C. Undeutsch, N. 50° 00′, W. 30° 30′*	29.93	760.2	52.7	11.5		wsw.	7		10		wsw.	rain	rain	cross	wsw.	misty	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany			46.4	8.0		nw.	4		9		nw.	5 h'r	5 h'r				E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal			44	6.7	84	se.	3		10		sw.					light rain	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 35° 26′, E. 140° 56′†*	30.35	770.9	55	12.8	55	ne.	5		10		ne.			mod.	ne.	cloudy	
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.03	762.7	67	19.4	90	ne.	3		5		sw.					fine	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 38° 50′, W. 74° 32′†*	30.42	772.7				n.	6		2		n.			sm'h		hazy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Vineyard Sound†	30.62	777.7	— 2	—18.9		nw.	6		mist		nw.	0	0			clear	H. K. Hallett.
OREGON IMROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 40° 46′. W. 124° 37 †	29.78	756.4	45	7.2	84	sse.	2		5		s.			mod.	wnw.	fair	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann Columbia River, Oregon†	29.83	757.7	43	6.1	83	n.	1		7		calm	rain&	snow	sm'h	wsw.	misty	A. C. James, 2d Off.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.75	755.6	38	3.3	90	nne.	1		10		n.					hazy	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Calf	29.74	755.4	45	7.2	92	sw.	2		10		sw.					rainy	
S. S. Geo. W. Elder, Capt. H. G. Morse, Puget Sound†	29.78	756.4	30	—1.1		ne.	1		4		ne.	0	0	sm'h		clear.	
S. S. Idaho, Capt. E. Alexander, N. 38° 40′, W. 123° 32′†	29.75	755.6	46	7.8	85	e.	2		4		sw.			mod.	sw.	fair	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 42′, W. 118° 14′†	29.92	760.0	55	12.8	80	se.	3		8		sw.	0	0	mod.	se.	cloudy	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace. San Francisco, Cal †	29.94	760 5	46	7.8	84	sw.	1		10							heavy rain	T. Wallace.
S. S. State of California, Capt. G. Debney, San Francisco, Calf	29.80	756.9	43	6.1	100	ssw.	2		10		sw.					raining	
S. S. Victoria, H. M. Hayward, Nanaimo, Vancouvers Id†	29.88	759.0	27	—2.8	88	calm	0		0							clear	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J Bulley, Supt. New York.*																	
S. S. Australia, Capt. ——, N. 36° 02′, W. 126° 36′	29.80	756.9	47	8.3	69	wnw.	2		8		w.			long	nw.	cloudy	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb. Sydney, N. S. W†	30.03	762.7	71	21.7	75	se.	1		8			rain	rain			overcast	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly. N. 34° 39′, E. 160° 26′†	30.15	765.8	53	11.7	60	nw.	3		2		nw.	0	0	mod. cross		fair	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn, N. 20° 25′, W. 158° 11′†	29.96	761.0	74	23.3	95	se.	3		10		se.			mod.	se.	drizzling	E. Le Saik.
S. S. City of Tokio, Com. J. Maury N. 32° 53′, E. 147° 05′†	30.27	768.8	60	15.6	76	ese.	2		5		se.	1 h'r	1 h'r	light	w.	threatening	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 15° 21′, W. 93° 20′†	29.88	758.9	78	25.6	77	n.	3		1		calm	0	0	mod.	wnw	clear	
S. S. Granada, Capt M. Connolly, Panama, Panama†	29.84	757.9	74	23.3	85	n.	2		5		n.	0	0			light haze	
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	29.91	759.7	69	20.6	100	s.	2		5?		sw.					clear?	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.																	
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QUEBEC S. S. CO.																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke, Martinique, W. I.						ene.	4		2			light	light	sm'h		squally	G. S. Locke
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes N. 41° 40′, W. 59° 59′*†	30.16	766.1	34	1.1	?	wnw.	7		8		wnw.	10 h'r	snow	very hv'y	w.	cloudy	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, N. 49° 54′, W. 15° 00′*	30.68	779.3	52	11.1	72	wsw.	2		10		wsw.	0	0		w.	cloudy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A Beynon, Antwerp, Belgium			33	0.6	89	ese.	1		8		se.	0	0			overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels. New York, N. Y*	30.63	778.0	—2.0	—18.9		wnw.	4		0		nne.	0	0			clear	
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis. N. 50° —′, W. 4° —′	30.89	784.6	58.7	14.8	53	e.	3		1		e.	0	0				
THINGVALLA LINE.																	
Funch, Edye, & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub, Copenhagen, Denmark†	30.42	772 7	41.9	5.5		sw.	1		10		sw.	0	0			covered	J. T. Ulberling.
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters.																	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent, New York.																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 42° 30′, W. 51° 24′*†	29.75	755.6	41	5.0		sse.	2		8		s.	12 h'r	sh'rs	hv'y	wnw.	d. clouds	W. Thomas.
S. S. Celtic, Capt. B. Gleadell Mersey River, Eng*†	30.48	774.2	44	6.7	84	wsw.	4		5		sw.	0	0			fair	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. N. 48° 21′, W. 39° 10′*†	29.90	759.4	46	7.8		w.	6		5		wsw.	0	0	r'gh	wsw.	d. clouds	H. D. Jay, 4th Officer, H. Goulden, 4th Officer
S. S. Republic, Capt. P. J. Irving,																	
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell, N. 49° 25′, W. 7° 40′*	30.64	778.2	48	8.9		var.	1		10		ese.	0	0	sm'h		cloudy	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.37	771.4	55	12.8	62	ne.	3		10 8		s.	0	0			overcast	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona																	
Bk. Alpha, Capt. Ole Grönn,																	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis. N. 25° 36′, W. 65° 21′*†	30.21	767.3	73	22.8		n.	1		5?		ne.	0	0	hv'y	n; e.	cloudy?	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin, S. 13° 00′, W. 33° 32′						var.								light	e.	clear	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.47	773.9				s.	1		0			0	0			clear	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 11° 23′, W. 35° 26′†	30.00	762.0				se.	3		2		se.	0	0	sm'h	se.		
S. Enoch Train, Capt. H. D. Chapman. Off Beachy Head, Eng*	30.65	778.5				e.	1		1		ne.	0	0	sm'h		fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 48° 27′, W. 15° 22′*	30.67	779.0				e.	2		10		n.	0	0	mod.	nw.	cloudy	J. C. Andersen.
U. S. F. C. S. FishHawk, Lt. Tanner, U.S.N., Washington, D. C†	30.73	780.5	17	—8.3		n.	2		1		calm			sm'h		clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 56° 47′, W. 72° 29′†	29.42	747.3	47	8.3		e.	3		10		n.	1 h'r	1 h'r	sm'h		misty	G. D. Morrison.
Bk. Freya, Capt. Blaauw, N. 49° 21′, W. 20° 45′			52	11.1		s.	6		2		s.	0	0	high	w.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, S. 20° 42′, W. 36° 38′*†	29.06	738.1				ene.	5		5?		ene.	0	0	sm'h	ene.	clear.?	
Bk. Geo. Booth, Capt D. Williams,																	D. Williams.
S. Hedwig, Capt. T. Minssen																	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 31° 33′, W. 26° 40′*	30.11	764.8				ene	3		0			0	0	very long	ssw.	clear	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 15′, W. 7° 27′*†	30.45	773.4				w.	1				w.	4 h'r	4 h'r	sm'h	e.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.44	773.2	56	13.3	62	calm	0		0							clear	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 21° 45′, W. 40° 10′*†	30.00	762.0				ene.			1		ene.	0	0			fair	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen,																	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 7° 02′, W. 21° 55′*.	29.81	757.2	76.6	24.8	97	ne.	2		0								
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.31	769.9	52	11.1	86	ne.	6		5		e.	0	0			fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 28° 37′, W. 16° 12′*†	30.30	769.6				sse.	6		8		sse.			h vy	sw.		I. W. Covert.
Bk. Winifred, Capt. N P. Dutton, N. 25° 40′, W. 44° 10′*†	30.10	764.5				ene.											N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 25, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.46	773.7	64.4	18.0	75	nw.			1		0			0	0	clear	Moiroud.
Algiers			30.50	776.9	57.2	14.0	71	ssw.			1		0			0	0	clear	Nicolas.
La Calle			30.63	777.9	59.4	15.2	78	ene.			3		2			0	0	fair	Fonfrède.
Tunis			30.62	777.8															Jacques.
Sfax																			Gau.
Saida			30.55	776.0	53.6	12.0	45	sw.			5		1			0	0	fair	Perès.
Tebessa			30.60	777.1	47.1	8.4	76	nw.			2		7			0.039	1.0	very cloudy	Derché.
Geriville					46.8	8.2	73	e.			2		0			0	0	clear	Lonchamp.
Laghouat			30.67	779.1	49.6	9.8	54	s.			1		1			0	0	fair	Herbin.
Biskra			30.60	777.3	60.8	16.0	41	nw.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.92	759.9	30.01	762.2	58.5	14.7	78	s.	3	1.3			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.24	768.0	30.83	783.1	31.3	— 0.4	78	se.			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.92	760.0	30.74	780.8	33.8	1.0	79	w.	8.1	3.6			10			0	0		Dr. Wierzbiski.
Eperies	29.78	756.3	30.71	780.1	34.5	1.4	71	calm			0		10		s.	0	0		Julius Mikolik.
Gratz	29.44	747.8	30.79	782.1	30.2	— 1.0	78	e.			2		7			0	0		Andreas Rospini.
Hermannstadt	29.22	742.2	30.76	781.2	32.7	0.4	89	nw.			2		5			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.31	745.3	30.80	782.4	25.5	— 3.6	98	e.			1		10			0	0	foggy	The Staff.
Lemberg	29.51	749.5	30.56	776.1	33.4	0.8	90	nw.			3		10			0	0		Dr. T. Stanecki.
Pola	30.51	774.9	30.03	777.9	47.8	8.8	71	sw.			1		3			0	0		I. R. Hydrographic Office.
Szathmar	30.24	768.2	30.71	780.0	32.4	0.2	69	nw.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.47	773.9	30.77	781.6	33.1	0.6	89	calm			0		10			0	0		Karl Stancel.
Trieste	30.56	776.3	30.67	778.9	52.2	11.2	24	e.			1		0			0	0		Rieder.
Vienna	30.03	762.8	30.80	782.4	30.6	— 0.8	77	ne.			1		0			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.37	771.4	30.47	773.9	48.0	8.9	74	s.	11	4.9			0			0.010	0.3	blue sky	W. Boswell.
Armagh, Observatory	30.40	772.1	30.64	778.2	43.4	6.3	71	ssw.	13	5.8			2					d. clouds	S. Call.
Bidston, Liverpool Obs'y			30.70	779.8	43.6	6.4	75	sw.	4	1.8			9					overcast	John Hartnup.
Bolton, Sharples	30.12	765.0	30.67	779.0	38.9	3.8	91	ssw.					10					foggy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.26	768.6	30.65	778.5	43.1	6.2	86	sw.			1		7			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	80.0	26.7	61	ne.			1		6					gloomy	Corpl. J. Surgenor.
Cardington			30.72	780.3	37.0	2.8	58	w.			0.2		2					blue sky	John McLaren.
Chatham, School M. E.	30.58	776.7	30.72	780.3	39.9	4.4	77	calm			0		0					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.40	772.1	30.64	778.2	42.1	5.6	83	s.			2		10					overcast	The Staff.
Fort Napier, Natal	27.65	702.3	29.87	758.7	78.4	25.8	53	e.			2		5						Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	87.0	30.6	72	nw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.55	776.0	44	6.7	75	s.			2		4			0	0	blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.26	768.6	30.32	770.1	58.3	14.6	87	ne.			3		7					gloomy	Cpl. O. Baldwin.
Glasgow, Observatory	30.36	771.1	30.57	776.5	45.0	7.2	84	ssw.			3		9					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.55	776.0	30.74	780.8	31.5	— 0.3	95	wsw.			1		10					foggy	The Staff.
Guernsey	30.38	771.6	30.70	779.8	34.0	1.1	100	ese.			1		10					foggy	A. Collenette, F. M. S.
Kew, Observatory	30.70	779.8	30.74	780.8	30.7	— 0.7	95	sw.	2	0.9			8					foggy	The Staff.
Leicester, Museum	30.35	770.9	30.62	777.7	42.0	5.6	90	sw.			1		0					blue sky	J. C. Smith.
Malta, Mediterranean	30.47	773.9	30.55	776.0	59.2	15.1	69	ne.			2		6					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.20	767.1	30.25	768.3	72.0	22.2	85	e.			3		5					d. clouds	C. S. Duncombe.
Oscott. St. Mary's College	30.17	766.3	30.73	780.5	38.0	3.3	80	s.			0—1		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.49	774.4	30.72	780.3	32.9	0.5	90	calm			0		10					foggy	The Staff.
Plymouth	30.59	777.0	30.67	779.0	40.0	4.4	89	se.			2		10					overcast	John Merrifield.
Sandwick Manse, Orkneys.			30.31	769.9	48.8	9.3	75	sw.	26	11.6			8					d. clouds	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.51	774.9	30.58	776.7	39.8	4.3	64	ne.			2		10					overcast	W. H. Lyne
Sheffield	30.40	772.1	30.70	779.8	43.7	6.5	71	sw.			1		10			0	0	overcast	W. F. Cooper.
Silloth Rectory	30.62	777.7	30.65	778.5	44.5	6.9	81	sw.			2		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.69	779.5	42.9	6.1	75	wsw.	6	2.7			10					overcast	Rev. S. J. Perry.
Straifield Turgiss					31.7	— 0.2	95	calm			0		9					foggy	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.54	775.7	30.61	777.5	45	7.2	76	se.			4		10					gloomy	W. Newcombe.
Valencia, Observatory	30.56	776.2	30.59	777.0	45.1	7.3	79	se.	6	2.7			10					misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.46	773.7	30.51	774.9	— 2	—18.9	87	w.	6	2.7		0	2 s			0	0	fair	H. J. Cundall, C. E.
Chatham, N. B*	30.50	774.7	30.57	776.5	— 7	—21.7	100	sw.	5	2.2		5 c	2 ks	sw.	sw.	0	0	fair	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.46	773.7	30.48	774.2	— 1	—18.3	83	s.	15	6.7		5 k	5 s	w.	w.	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	28.54	724.9	29.40	746.7	17	— 8.3	96	se.	6	2.7			10 n			0.173	4.4	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.47	773.9	30.62	777.7	3	—16.1	100	w.	3	1.3		0	0			0	0	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.11	764.8	30.49	774.4	0	—17.8	79	ne.	5	2.2			10 s		calm	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.37	771.4	30.61	777.5	—14	—25.6	100	se.	5	2.2		5 cs	0			0	0	fair	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.56	750.8	30.32	770.1	10	—12.2	80	se.	18	8.0			10 n		sw.	0	0	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.59	751.6	30.33	770.4	25	— 3.9	87	s.	8	3.6			10 n			0	0	threatening	H. Morgan.
Port Stanley, Ontario	29.61	752.1	30.30	769.6	26	— 3.3	80	se.	20	8.9			10 n		se.	0	0	cloudy	M. Payne.
Quebec, Quebec*	30.29	769.4	30.68	779.3	—20	—28.9	100	w.			1	0	2 s		w.	0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.92	760.0	30.45	773.4	— 8	—22.2	55	e.	6	2.7			hz.			0	0	threatening	W. H. McIntyre.
Saugeen, Ontario*	29.42	747.3	30.19	766.8	16	— 8.9	87	se.	28	12.5			10 s			0	0	cloudy	K. Stewart.
St. Andrews, N. B.	30.59	777.0	30.64	778.2	— 5	—20.6	89	calm	0	0		0	0			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.40	772.1	30.47	773.9	2	—16.7	87	sw.	8	3.6		2 c	0			0.01	0.3	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.96	761.0	30.38	771.6	20	— 6.7	80	se.	7	3.1		8 ck	2 s	w.		0.01	0.3	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.57	776.5	30.64	778.2	18	— 7.8	73	w.	6	2.7		0	8 k		nw.	0.14	3.6	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.08	764.0	30.36	771.1	3	—16.1		sw.	2	0.9		0	0			0.30	7.6		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.94	760.5	29.97	761.2	76.0	24.4	84	w.	10.2	4.6		0	5 k			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.98	761.5	30.02	762.5	78.2	25.7	71	sse.	22	9.8		9	9			0	0		The Staff, for D. Gill
Worcester*†																			O. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.26	768.6	30.55	776.0	42.3	5.7	83	n.			1		10 n					raining	N. Titoushkin.
Zi-Ka-Wei, near Shanghai.	30.24	768.0	30.26	768.6	41.0	5.0	90	n.	3.8	1.7			10 k		ne.	0.138	3.5	covered	M. Marc Dechevrens, S. J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.46	773.6	30.50	774.8	43.0	6.1	93	w.	20	9			10						Oversergent Fischer.
Fanöe	30.58	776.6	30.60	777.1	42.4	5.8	94	w.			4		1						Overloerer Lauridsen.
Godthaab, Greenland	29.52	749.7	29.56	750.8	2.3	—16.5	100	nw.			4		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.21	742.0	29.26	743.1	34.9	1.6		w.			8		10					raining	A. O. Thorlacius.
Thorshavn	29.79	756.6	29.82	757.5	46.8	8.2	66	w.	34	15			7					raining	Overloerer Bergh.
Vestervig	30.39	771.9	30.48	774.2	44.2	6.8	94	wsw.			6		9						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.93	760.3	30.60	777.3	45.3	7.4	71	se.			1	0	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	30.18	766.5	30.73	780.5	28.4	—2	96	e.			3		8			0	0		M. Nicot, Director.
Arras, Engineer School	30.47	773.9	30.75	781.1	27.3	—2.6	74	se.			2		10			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.59	776.9	30.67	778.9	44.6	7	71	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.97	761.2	30.57	776.4	28.8	—1.8	95	sse.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.48	774.3	30.77	781.6	29.3	—1.5	88	e.			1		10			0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.72	780.3	36.0	2.2	96	ne.			1		fg		ne.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.32	770.1	30.59	777.0	48.0	8.9	65	ese.			1		0			0.012	0.3	clear	M. Rayet, Director.
Bourges, Normal School	30.11	764.8	30.71	780.0	28.4	—2	100	ne.			1		fg		ne.	0	0	light fog	M. Postel, Director.
Brest, Naval Observatory	30.39	772.0	30.64	778.2	41.4	5.2	84	ssw.			1		10		ssw.	0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.63	778.1	30.71	780.1	31.6	—0.2	100	ese.			1		10			0	0	covered	M. Bièvrix, Director.
Châlons-sur-Marne, N.Sch'l	30.39	771.8	30.73	780.5	29.5	—1.4		se.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.22	767.5	30.77	781.5	27.3	—2.6		se.			4		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.25	742.9	30.70	779.8	32.0	0.0	93	nw.			1		0			0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.86	758.5	30.77	781.5	28.4	—2	96	ne.			1		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.87	758.6	30.80	782.4	28.4	—2	90	e.			1		10	e.	e.	0	0	light fog	Dr. Coulet, Director.
Gap, Normal School	28.08	713.2	30.72	780.4	42.4	5.8	58	nw.			1					0	0		M. Jeangirard, Director.
Grénsque, du. Rhone	29.50	749.4	30.65	778.6	54.9	12.7	50	ne.			1		2		e.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.94	760.5	30.77	781.5	28.4	—2	100	ese.			1		fg			0	0	foggy	M. Ablard, Director.
Guéret, Normal School	28.99	736.3	30.61	777.5	48.9	9.4	44	se.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.39	771.8	30.68	779.3	30.2	—1	100	ne.			1		10		ne.	0	0	foggy	M. Olitrault, Director.
Lescar, Normal School	29.99	761.8	30.57	776.4	56.1	13.4	64	ne.			1	0	2s			0	0	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	30.56	776.2	30.66	778.8	32.4	0.2	100	ene.			2		fg			0	0	foggy	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.65	753.2	30.80	782.2	27.1	—2.7	100	sse.			1		mist			0	0	misty	M. André, Director.
Mans, Normal School	30.42	772.7	30.76	781.2	27.9	—2.3	98	ese.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.39	771.8	30.66	778.7	59.7	15.4	56	wsw.			0.1		1		se.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.22	640.7	30.07	763.7	37.8	3.2	72	w.	11.2	5.0			7	sw.					M. Cave, for Dr. Fines.
Montpellier, Normal School	30.60	777.3	30.72	780.2	46.0	7.8	59	nne.			3		5			0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	29.94	760.4	30.78	781.9	25.9	—3.4	95	w.			1		10 ku			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.55	776.0	30.71	780.1	30.7	—0.7	96	e.			1–2		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.56	776.1	30.67	779.0	47.1	8.4	86	ne.	7.4	3.3			10			0.350	8.9	covered	Dr. Flues, Director.
Pic-du-Midi, Summit	21.47	545.4			22.8	—5.1		sw.			1		1		sw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.62	752.3	30.78	781.7	28.8	—1.8							fg			0	0	foggy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.60	650.3			35.8	2.1	64	se.			1		0			0	0	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.61	777.6	30.65	778.4	37.4	3.0	54	e.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.46	773.6	30.69	779.4	36.3	2.4	58	ne.			1		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.39	721.0	30.60	777.3	47.1	8.4	65	se.			1		k		nw.	0	0		M. Colrat, Director.
Rouen, Normal School	30.71	780.0	30.76	781.2	28.0	—2.2	96	e.			2		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.56	776.3	30.72	780.3	28.0	—2.2	76	ne.			2		10			0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.58	776.8	30.75	781.0	28.0	—2.2	88	se.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.88	758.9	30.61	777.6	52.9	11.6	71	se.			3		2	s.		0	0	slightly cl'dy	M Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.21	767.4	30.71	780.0	27.3	—2.6	92	se.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.91	759.7	30.79	782.0	25.5	—3.6	77	ese.			3	0	9s			0	0	light fog	Prof. Dr. Hoh.
Berlin	30.53	775.5	30.72	780.3	35.2	1.8	85	w.			2		10			0	0		Prof. Dr. Arndt.
Breslau	30.19	766.9	30.74	780.7	34.0	1.1	87	w.			3		10			0	0		Royal University Obs'y.
Carlsruhe	30.33	770.4	30.82	782.7	26.6	—3.0	87	e.			1		10			0	0		Albert Senz.
Cassel	29.98	761.5	30.70	779.7	25.7	—3.5	89	sw.			1		10			0	0		Dr. H. Möhl.
Frankfort on the Main	30.42	772.7	30.82	782.8	27.9	—2.3	77	sse.			1		10			0	0		Physical Society.
Friedrichshafen	29.26	743.3	30.81	782.6	28.0	—2.2	87	e.			1		10			0	c	hazy	Wilhelm, Chief Tel.
Hamburg	30.64	778.3	30.74	780.7	32.4	0.2	100	wsw.			3		10			0	0	dense fog	E. Preller.
Kiel	30.61	777.5	30.64	778.3	36.1	2.3	92	sw.			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.35	770.8	30.80	782.4	28.2	—2.1	96	w.			1		10			0	0		H. Leppig, Asst.
Magdeburg	30.56	776.3	30.77	781.6	33.4	0.8	94	sw.			1		10 ks			0	0	dense fog	Dr. Assmann.
Memel	30.28	769.0	30.32	770.2	39.9	4.4	96	w.			6		10					hazy	Issermann.
Munich	28.84	732.6	30.75	781.1	23.2	—4.9	97	n.			1		10			0	0	foggy	Central Station.
Neufahrwasser	30.45	773.4	30.47	773.8	40.5	4.7	89	wnw.			6		10			0	0		A. Lothes.
Neustadt, Palatinate	30.24	768.0	30.78	781.7	27.3	—2.6		e.			2		10			0	0		Dickuether.
Stuttgart	29.78	756.5	30.75	781.1	25.7	—3.5	89	sw.			1		10			0	0	foggy	Prof. Dr. Schoder.
Wustrow	30.60	777.3	30.63	777.9	34.9	1.6	100	wsw.			5		10			0	0	dense fog	Profs. Brandes & Reimer.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.14	765.6	30.55	775.9	46.4	8.0		n.			4.0		7 k			0	0		Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.95	760.8	30.00	762.1	76.9	24.9	57	wsw.	22	9.8			6			0	0	misty	
Deesa	29.47	748.5	29.94	760.6	82.1	27.8	44	wsw.	5.8	2.6			6	ssw.		0	0	d. clouds	
Bombay	29.87	758.6	29.90	759.6	82.2	27.9	67	nnw.	13	5.8			0			0	0	blue sky	
Poona, Yarrowda.	28.06	712.6	29.88	759.0	89.1	31.7	23	ene.	10	4.5			0			0	0	blue sky	
Belgaum	27.37	695.2	29.87	758.7	84.8	29.3	12	ene.	7	3.1			0			0	0	blue sky	
Lahore	29.14	740.0	29.90	759.4	67.5	19.7	67	ne.	0.6	0.3			3			0	0	blue sky	
Roorkee	29.01	736.8	29.93	760.3	68.0	20.0	75	calm	1.9	0.8			9			0	0		
Agra	29.33	745.1	29.90	759.6	77.2	25.1	43	n.	1.9	0.8			3		ne.	0	0		
Nagpur	28.87	733.3	29.90	759.5	86.7	30.4	24	sse.	2.2	1.0			2			0	0	d. clouds	
Jubbulpore	28.61	726.7	30.00	761.9	69.5	20.8	27	calm	1.8	0.8			3			0	0	d. clouds	
Lucknow	29.55	750.4	29.93	760.2	72.2	22.3	52	calm	1.5	0.7			9			0	0	d. clouds	
Allahabad	29.61	752.1	29.93	760.2	71.0	21.7	53	calm	0.9	0.4			5	w.		0	0	d. clouds	
Patna	29.75	755.6	29.94	760.5	72.5	22.5	60	w.	2.4	1.1			4	w.	w.	0	0	d. clouds	
Hazaribagh	27.90	708.6	29.92	759.9	76.3	24.6	14	wnw.	5.8	2.6			5			0	0		
Cuttack	29.85	758.1	29.93	760.2	80.0	26.7	49	calm					0			0	0	blue sky	
Calcutta, Alipore	29.89	759.3	29.92	759.8	72.5	22.5	58	w.	2.0	0.9			4			0	0	d. clouds	
Dhubri	29.79	756.8	29.92	759.9	71.4	21.9	62	calm	1.8	0.8			0			0	0	blue sky	
Chittagong	29.85	758.3	29.95	760.6	71.6	22.0	85	w.	2.1	0.9			5			0	0	blue sky	
Sibsagar	29.61	752.0	29.96	760.8	63.9	17.7	85	nne.	2.0	0.9			7	w.	w.	0	0	d. clouds	
Jeypore	28.44	722.5	29.90	759.4	77.4	25.2	30	wnw.	3.3	1.5			6	nw.		0	0	d. clouds	
Zanzibar, Africa	29.81	757.5			81.7	27.6	80	nne.	5.3	2.4		c;ck	8 fk		ne.	0	0	d. clouds	
Trichinopoly	29.67	753.6			83.5	28.6	59	calm	0	0			0			0	0	blue sky	
Bellary	28.42	721.9			89.0	31.7	20	ene.	3.2	1.4			0			0	0	blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.25	768.3	30.67	779.1	47.7	8.7	41	calm	0	0			0			0	0		Prof. Giovanni Clodig.
Milan	30.20	767.0	30.75	781.0	29.1	— 1.6	100	wnw.	2.5	1.1			10			0	0		Prof. Schiaparelli.
Padua	30.58	776.7	30.69	779.6	33.1	0.6	88	wnw.	2.5	1.1			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.78	756.5	30.74	780.8	31.1	— 0.5	85	nne.	0	0			0			0	0		Prof. P. F. Denza.
Genoa	30.45	773.3	30.64	778.3	54.1	12.3	39	n.	1.3	0.6			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.71	729.3	30.72	780.2	40.8	4.9	53	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.61	777.6	30.67	779.0	40.6	4.8	79	n.	16.8	7.5			0			0	0		Prof. Luigi Guidi.
Florence	30.38	771.7	30.65	778.5	41.5	5.3	75	ne.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.55	775.9	30.64	778.2	51.6	10.9	64	ne.	3.8	1.7			1			0	0		Prof. P. Monte.
Rome	30.41	772.4	30.59	777.0	50.4	10.2	55	n.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	30.29	769.4	30.56	776.1	53.2	11.8	62	nnw.	16.1	7.2			6	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.66	753.4	30.58	776.8	50.0	10.0	74	ese.	3.1	1.4			3	se.		0	0		Prof. D. Conti.
Cagliari	30.39	772.0	30.60	777.1	56.1	13.4	65	ssw.			2		0			0	0		Prof. A. Pacinotti.
Palermo	30.35	770.8	30.61	777.4	58.1	14.5	48	nne.	4.2	1.9			3	nne		0	0		Prof. G. Ciacciatore.
Syracuse	30.50	774.8	30.55	776.0	55.6	13.1	62	e.	4.9	2.2			3	w.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	30.02	762.6	30.57	776.4	53.2	11.8	52	ne.	1.8	0.8			1	nnw.		0	0		Prof. T. Brioschi.
Stelvio	22.59	573.8			27.5	— 2.5	26	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.62	574.6			27.0	— 2.8	30	se.			2		0			0	0	clear	Prof. P. F. Denza
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.06	763.5	30.10	764.5	35.0	1.7	88	w.	2.7	1.2			10 s		w.	0.127	3.2	overcast	
Hakodate	30.08	764.0	30.09	764.3	35.5	1.9	82	e.	12.0	5.4			10		e.	0	0	covered	
Hiroshima, I. M. Obs'y	29.97	761.2	29.99	761.7	50.8	10.4	98	calm	0	0			10 n			0.246	6.2	light rain	K. Sasaki.
Kanazawa	30.14	765.5	30.25	768.3	44.7	7.1	78	se.	4.9	2.2		6ck;cs	0	wnw.				cloudy	S. Endo.
Kioto	29.88	758.9	30.05	763.3	48.6	9.2	89		4.3	1.9		0	0			0.100	2.5	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.77	756.1	29.97	761.2	63.2	17.3	91	se.	4.2	1.9			10 n			0.090	2.3	raining	S. Takehayashi.
Niigata	29.99	761.7	30.03	762.7	41.4	5.2	85	n.	1.9	0.8		10 ck	0			0	0	covered	
Nobiru	30.10	764.5	30.12	765.0	44.6	7.0	81	se.	8.5	3.8			10 s			0	0	overcast	H. Midzushina.
Supporo					24.5	— 4.2	74	e.	1.2	0.5			10			0.095	2.4	covered	
Tokei Obs'y, Yeddo	30.07	763.8	30.14	765.5	42.1	5.6	98	nnw.	1.8	0.8			10 n;s			0.045	1.1	covered	The Staff.
Wakayama	29.97	761.2	30.02	762.5	49.3	9.6	91	e.	2.2	1.0		0	0			0.067	1.7	clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.67	753.6	29.85	758.2	83.1	28.4	64	nne.	11.5	5.1		4 cs	3 k;ks		n.	0	0	fair	Oliver & Figot.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.63	600.2	29.85	758.2	50.9	10.5	70	calm	0	0		0	0			0	0	clear	Vicente Fernandez.
Leon	24.41	620.0	30.20	767.0	51.0	10.6	82	nw.			1	1 c	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.72	754.8	29.98	761.5	63.5	17.5	94	calm			0	0	0			0	0		F. Quijano, C. E.
Mexico, Central Obs'y	23.05	585.6	30.17	766.5	50.4	10.2	71	calm	0	0		2 c	3 k			0	0	½ cloudy	The Staff.
Morelia	24.34	618.3	30.59	777.2	49.8	9.9	78	sse.			4	0	0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	23.88	606.5	29.96	761.0	46.4	8.0	69	calm			0	0	1 s			0	0	fair	M. V de Leon, M. E.
Puebla, Catholic Institute	23.39	594.1	30.27	768.8	45.1	7.3	66	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.17	613.8	30.19	766.7	50.9	10.5	61	ssw.			1		0			0	0	fine	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	24.47	570.9	30.14	765.6	46.0	7.8	55	wsw.				0	0					fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.78	781.8	30.78	781.8	32.7	0.4		se.			3					0	0		
Groningen	30.68	779.3	30.74	780.7	35.4	1.9		sw.			1					0	0		
Helder	30.74	780.9	30.74	780.9	40.3	4.6		ssw.			2					0	0		
Hellevoetsluis	30.77	781.5	30.77	781.5	30.6	— 0.8	?	ese.			1					0	0		
Utrecht	30.75	781.0	30.80	782.2	30.4	— 0.9	98	ssw.			1		hz.			0	0	hazy	H. van der Brink.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.24	768.1	30.30	769.7	46.0	7.8	94	s.	18	8			10			0.394	10.0	raining	
Brono	29.52	749.9	29.56	750.9	46.0	7.8	78	wsw.	27	12			10			0.150	3.8		
Christiania	30.00	761.9	30.15	765.7	46.6	8.1	71	sw.	7	3			7			0	0		
Gjessvær	28.57	725.7	28.60	726.3	34.3	1.3		w.			7		5						
Lodingen	28.97	735.8	29.02	737.0	37.9	3.3	83	wsw.			4		10			0.394	10.0	raining	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.0	15.0	72	se.	13.6	6.1			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.41	747.0	30.44	773.1	52.7	11.5	71	ese.	6.3	2.8			5			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.17	766.3	30.26	768.5	62.4	16.9	68	ese.	1.8	0.8			10			0.004	0.1		Capt. D. A. de Cunha.
Lisbon, Observatory	30.08	764.1	30.46	773.7	42.6	5.9	98	nne.	8.1	3.6			9			0	0		The Staff.
Ponta Delgada, Azores	30.19	766.8	30.26	768.6	60.1	15.6	62	ese.	11.9	5.3			4	nne.		0	0		
Saint Paul de Loando	29.64	752.9	29.84	758.0	78.8	26.0	95	w.	2.5	1.1			1	sse.		0	0		
Serra da Estrella	25.52	648.1	30.50	774.6	30.2	—1.0	100	s.	15.0	6.7			10			blank	blank	foggy	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.83	732.2	30.02	762.5	0.9	—17.3		sw.	16	7		0	1 ks			0.004	0.1		Major K. Lasarew.
Archangel	29.70	754.3	29.72	754.8	— 8.0	—22.2	84	nnw.	2	1			8 ks			0	0		Capt. Ssellwerstow.
Astrakhan	30.01	762.2	29.93	760.1	29.7	— 1.3	98	wsw.	18	8			10 n			0.126	3.2	heavy cl'ds.	Capt. Wisganow.
Barnaul	29.69	754.2	30.23	767.9	18.5	— 7.5	86	sw.	9	4			10			0.004	0.1	light clouds	Meteorological Obs'y.
Dorpat	29.72	754.8	29.97	761.2	35.1	1.7	100	wsw.	9	4			10 n			0.031	0.8	light fog	Observatory.
Ekaterinburg	28.60	726.4	29.61	752.1	11.7	—11.3	76	sse.	4	2			10			0	0		Meteorological Obs'y.
Kasan	29.00	736.7	29.28	743.7	24.6	— 4.1	88	wsw.	7	3			10			0.024	0.6		Observatory.
Kertch	30.24	768.2	30.26	768.7	34.0	1.1	83	w.	11	5			10 n			0	0		Lagorio & Sastyrez.
Kieff	29.61	752.0	30.28	769.0	34.0	1.1	87	wnw.	4	2			10ks;n			0	0		Observatory.
Lugan	29.76	755.8	29.97	761.2	30.2	— 1.0	69	nw.	18	8			8			0	0		Meteorological Obs'y.
Moscow	29.28	743.7	29.77	756.2	24.8	— 4.0	62	n.	13	6		0	8 ks			0	0		Meteorological Obs'y
Nikolaiev	30.36	771.1	30.43	772.9	37.6	3.1	78	nw.	9	4			9 cn			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.10	764.6	30.19	766.8	— 4.4	—20.2	92	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.38	771.6	30.52	775.2	28.9	— 1.7	30	nw.	13	6		0	0			0	0		Physical Observatory.
St. Petersburg	29.87	758.7	29.89	759.1	28.4	— 2.0	74	sw.	7	3			10 n			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.88	733.6	30.59	777.0	23.4	— 4.8	90	calm	0	0			2			0	0		Teich, A. M.
Tiflis	28.81	731.7	30.29	769.3	38.5	3.6	53	nw.	22	10			10 k			0	0		Physical Observatory.
Warsaw	30.10	764.6	30.55	776.0	33.1	0.6	96	w.	25	11			10 ks					light fog	Astronomical Obs'y.
Wilna	29.82	757.4	30.26	768.6	38.8	3.8	95	wsw.	4	2			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.93	760.2	30.24	768.1	13.1	—10.5	74	e.	7	3			8			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.32	770.1	50	10.0	93	sw.			6		10			0	0	cloudy	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.49	774.4	30.59	776.9	56.3	13.5	78	e.	3.1	1.4			3			0.539	13.7		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.46	773.6	30.52	775.1	58.8	14.9	51	se.	1.6	0.7		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.48	698.0	30.55	776.0	46.8	8.2	55	sw.	6.3	2.8		0	1			0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.26	717.8	30.45	773.4	51.3	10.7	61	ne.	9.4	4.2		0	8			0	0	cloudy	The Staff.
Murcia, Met. Obs'y	30.44	773.2	30.60	777.1	56.8	13.8	79	nnw.	3.4	1.5		3	4	ene.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.45	748.1	30.37	771.5	52.3	11.3	58	se.	10.5	4.7		0	1			0	0	almost clear	R. Gil Valkanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.05	763.3	30.12	765.0	68.2	20.1	83	se.	1.8	0.8		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.97	761.2	30.03	762.7	77.3	25.2	67	ese.	6.6	3.0		0	k			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.34	770.6	30.44	773.1	60.3	15.7	62	ese.	18.0	8.1		4	1	sw.	e.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I.	30.00	762.0	30.09	764.3	75.0	24.2	83	e.	12.5	5.6			10 kn		e.	0.031	0.8	overcast	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.92	760.0	30.05	763.3	74.1	23.4	80	nw.	2.7	1.2		0	0			0	0	clear	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.27	743.4	29.31	744.4	31.6	— 0.2	81	sw.			4		8			0.220	5.6		
Umea	29.53	750.0	29.58	751.3	21.6	— 5.8	85	sw.			2		8			0.012	0.3		
Hernosand	29.71	754.7	29.76	756.0	46.4	8.1	68	sw.			2		5			0.118	3.0		
Stockholm	29.89	759.1	30.06	763.6	47.1	8.4	70	w.			2		7			0	0		
Wisby	30.11	764.9	30.17	766.4	43.2	6.2	85	wsw.			4		0			0.012	0.3		
Sub-Series.																			
Upsala	29.91	759.7	30.00	761.9	47.5	8.6	68	w.	8.9	4.0			7	nw.		0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.29	743.9	30.79	782.0	29.7	— 1.3	94	e.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.63	778.0	40.1	4.5	67	ne.	9	4.0			10		n.	0	0		The Observatory.
Valona			30.53	775.5	54.0	12.2		nw.			1		2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.30	769.6	56.5	13.6	52	ne.			1	0	0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.62	777.7	30.71	780.0	3	—16.1	72	s.	1	0.4			10 s			0	0	cloudy	
Alpena, Michigan	29.41	747.0	30.12	765.0	21	— 6.1	83	s.	14	6.3			10 s			0	0	cloudy	
Atlanta, Georgia	29.16	740.7	30.30	771.9	30.5	— 0.8	87	e.	16	7.2			10 s		calm	inap.	inap.	cloudy	
Atlantic City, New Jersey	30.66	778.7	30.67	779.0	17.8	— 7.9	64	n.	6	2.7		6cs;ck	0			0	0	fair	
Augusta, Georgia	30.30	769.6	30.50	774.7	36.0	2.2	69	ne.	9	4.0			10 s		ne.	0	0	cloudy	
Baltimore, Maryland	30.64	778.2	30.60	779.5	19	— 7.2	70	se.	3	1.3			10 s			0	0	cloudy	
Barnegat, New Jersey	30.66	778.7	30.68	779.3	15.0	— 9.4	91	nw.	10	4.5		4 k	2 k	n.		0	0	fair	
Bismarck, Dakota	27.63	701.8	29.63	752.6	15	— 9.4	64	calm	0	0		0	1 s		calm	0.01	0.3	clear	
Block Island, Rhode Island																			
Boise City, Idaho	26.83	681.5	29.76	755.9	19	— 7.2	91	calm	0	0			10 s		calm	0	0	cloudy	
Boston, Massachusetts	30.55	776.0	30.72	780.3	5.5	—14.7	63	sw.	8	3.6			10s;hz			0	0	cloudy	
Brownsville, Texas	29.88	758.9	29.93	760.2	58	14.4	100	calm	0	0			fg.			inap.	inap.	dense fog	
Buffalo, New York	29.58	751.3	30.38	771.6	18.5	— 7.5	73	se.	5	2.2		2 ck	5 s	sw.	s.	0	0	fair	
Burlington, Vermont	30.29	769.4	30.60	777.2	— 1.0	—18.3	87	s.	9	4.0		7 cs	0	w.		0	0	fair	
Cairo, Illinois	29.67	753.6	30.09	764.3	44.3	6.8	89	e.	9	4.0			10 n		calm	0.18	4.6	light rain	
Campo, California	27.23	691.6	29.86	758.4	37.4	3.0	92	w.	12	5.4			10 n		w.	0.99	25.1	heavy rain	
Camp Thomas, Arizona	26.95	684.5	29.78	756.4	47.5	8.6	76	calm			0		10 ks			0	0	cloudy	
Cape Henry, Virginia	30.60	777.2	30.62	777.7	58	14.4	82	e.	13	5.8		2 ck	8 k	sw.	sw.	0	0	cloudy	
Cape May, New Jersey	30.73	780.5	30.76	781.3	17	— 8.3	55	ne.			1	0	3 ks			0	0	clear	
Castroville, Texas	29.09	738.9	29.94	760.5	53	11.7	100	calm	0	0			fg.			0.03	0.8	dense fog	
Cedar Keys Florida	30.19	766.8	30.21	767.3	60	15.6	93	e.	12	5.4			10 s		se.	2.16	54.9	cloudy	
Champaign, Illinois	29.15	740.4	30.02	762.5	35.3	1.8	79	s.	18	8.0			10 s		s.	0.03	0.8	cloudy	
Charleston, S. Carolina	30.36	771.1	30.42	772.7	38	3.3	89	ne.	13	5.8			10 n		ne.	0.03	0.8	threatening	
Charlotte, N. Carolina	29.63	752.6	30.52	775.2	26.0	— 3.3	88	ne.	10	4.5			10 s		ne.	0.06	1.5	cloudy	
Chattanooga, Tennessee	29.50	749.3	30.36	771.1	38.0	3.3	82	s.	9	4.0			10 n		s.	0.02	0.5	light rain	
Cheyenne, Wyoming	23.52	597.4	29.77	756.1	28.3	— 2.1	50	sw.	5	2.2		0	5 s			0	0	fair	
Chicago, Illinois	29.22	742.2	29.97	761.2	40.8	4.9	80	s.	14	6.3			fg.			inap.	inap.	dense fog	
Chincoteague, Virginia	30.64	778.2	30.66	778.7	25	— 3.9	64	ne.	8	3.6		0	9 s		w.	0	0	clo dy	
Cincinnati, Ohio	29.56	750.8	30.25	768.3	38.1	3.4	82	e.	4	1.8			10 n			0.05	1.3	light rain	
Cleveland, Ohio	29.49	749.0	30.27	768.8	25.2	— 3.8	95	se.	17	7.6			10 s			0.02	0.5	cloudy	
Coleman City, Texas	28.05	712.5			52	11.1	93	se.	8	3.6			10 s			0.01	0.3	threatening.	
Columbus, Ohio	29.37	746.0	30.27	768.8	34	1.1	78	se.	6	2.7			10 n			0.02	0.5	light snow	
Concho, Texas	27.89	708.4	29.91	759.7	50	10.0	93	sw.	12	5.4			10 s			0	0	cloudy	
Davenport, Iowa	29.15	740.4	29.86	758.4	41	5.0	73	s.	8	3.6			10 s		calm	0	0	cloudy	
Dayton, Washington T'y	27.73	704.3	29.53	750.0	33.7	0.9	72	sw.	14	6.3		0	4 s		sw.	0.02	0.5	fair	
Deadwood, Dakota	24.81	630.2	29.76	755.9	28.8	— 1.8	80	sw.	5	2.2		0	0			0	0	clear	
Decatur, Texas					50	10.0	100	s.	12	5.4			fg.			0	0	dense fog	
Delaware Breakwater, Del.	30.62	777.7	30.64	778.2	26	— 3.3	100	ne.	15	6.7		1 cs	6 s	w.	ne.	0	0	fair	
Denison, Texas	29.08	738.9	29.92	760.0	49.0	9.4	100	se.	6	2.7			10 n			0.04	1.0	light rain	
Denver, Colorado	24.27	616.4	29.79	756.7	34.4	1.3	65	s.	9	4.0		0	0			0	0	clear	
Des Moines, Iowa	28.76	730.5	29.73	755.1	40	4.4	82	s.	10	4.5			10 s		se.	0.01	0.3	cloudy	
Detroit, Michigan	29.44	747.8	30.20	767.1	35.0	1.7	79	se.	8	3.6			10 s		w.	0	0	cloudy	
Dodge City, Kansas	26.98	685.3	29.73	755.1	40.5	4.7	69	s.	14	6.3			10 s		calm	0	0	cloudy	
Dubuque, Iowa	29.06	738.1	29.83	757.7	34.2	1.2	71	se.	8	3.6			10 s		calm	0	0	cloudy	
Duluth, Minnesota	28.91	734.3	29.67	753.6	27	— 2.8	88	ne.	2	0.9			10 s		calm	0.13	3.3	cloudy	
Eagle Pass, Texas	29.13	739.9	29.97	761.2	54.0	12.2	100	se.	5	2.2			10 n			0.01	0.3	light rain	
Eagle Rock, Idaho	24.84	630.9	29.80	756.9	10	—12.2	76	s.	8	3.6		10 cs	0	sw.		0	0	cloudy	
Eastport, Maine	30.59	777.0	30.66	778.7	0.0	—17.8	52	nw.	5	2.2		0	0			0	0	clear	
El Paso, Texas	26.02	660.9	29.90	759.4	51	10.6	55	sw.	5	2.2			10 s		calm	0	0	cloudy	
Erie, Pennsylvania	29.53	750.0	30.30	769.6	21	— 6.1	84	se.	25	11.2			10 s		s.	0	0	cloudy	
Escanaba, Michigan	29.20	741.7	29.92	760.0	28	— 2.2	100	se.	16	7.2			10 n			0.07	1.8	light snow	
Florence, Arizona																			
Fort Apache, Arizona	24.74	628.4	29.86	758.4	42	5.6	70	s.	12	5.4			10 s		calm	0.05	1.3	cloudy	
Fort Assinnaboine, Montana	26.63	676.4	29.67	753.6	11	—11.7	64	w.	5	2.2			10 s		inap.	inap.		cloudy	
Fort Bennett, Dakota	27.87	707.9	29.61	752.1	9	—12.8	80	w.	4	1.8		0	0			0	0	clear	
Fort Benton, Montana	26.62	676.1	29.60	751.8	14	—10.0	66	sw.	2	0.9			10 s		calm	0.05	1.3	cloudy	
Fort Buford, Dakota	27.40	695.9	29.60	751.8	11	—11.7	64	s.	4	1.8		0	0			0	0	clear	
Fort Custer, Montana	26.31	668.3	29.69	754.1	8	—13.3	22	se.	5	2.2		0	0			0	0	clear	
Fort Davis, Texas	24.94	633.5	29.92	760.0	49	9.4	80	nw.	2	0.9		0	0			0	0	clear	
Fort Elliott, Texas	26.96	684.8	29.89	759.2	40	4.4	59	calm	0	0			10 s			0	0	cloudy	
Fort Gibson, Indian T'y	29.28	743.7	29.88	758.9	47.0	8.3	93	se.	16	7.2			10 s			0	0	cloudy	
Fort Grant, Arizona	24.99	634.7	29.89	759.2	39	3.9	76	sw.	4	1.8			10 s			0	0	cloudy	
Fort Griffin, Texas	28.54	724.9	29.92	760.0	54	12.2	86	s.	8	3.6			10 s		s.	0	0	cloudy	
Fort Keogh, Montana	26.95	684.5	29.64	752.8	3	—16.1	48	sw.	7	3.1		1 cs	0			0	0	clear	
Fort Macon, North Carolina	30.51	774.9	30.52	775.2	40	4.4	89	ne.	15	6.7			10 ks		s.	0	0	cloudy	
Fort McKavett, Texas	27.63	701.8	30.02	762.5	50.6	10.3	86	se.	13	5.8			10 s			inap.	inap.	cloudy	
Fort Missoula, Montana	26.16	664.5	29.62	752.3	19	— 7.2	87	e.	2	0.9		6 k	0			0.01	0.3	fair	
Fort St. Michaels, Alaska	30.18	766.6	30.21	767.3	9	—12.8	100	se.	5	2.2		0	8 ks		se.	0	0	fair	
Fort Shaw, Montana	25.75	654.0	29.61	752.1	24	— 4.4	64	sw.	23	10.3		4 cs	0			0	0	fair	
Fort Sill, Indian Territory	28.56	725.4	29.89	759.2	49.8	9.9	97	s.	16	7.2			10 s		sw.	0	0	cloudy	
Fort Stevenson, Dakota	27.52	699.0	29.58	751.3	2	—16.7	76	calm	0	0		0	0			0.03	0.8	clear	
Fort Verde, Arizona					42	5.6	76	s.			1		10 s		s.	0	0	cloudy	
Fredericksburg, Texas	28.13	714.5	29.95	760.7	52	11.1	100	sw.	3	1.3			fg.			0.02	0.5	dense fog	
Galveston, Texas	29.90	759.4	29.94	760.5	61	16.1	94	s.	11	4.9		10 k	0	s.		2.06	52.3	cloudy	
Grand Haven, Michigan	29.31	744.5	30.02	762.5	33.0	0.6	78	se.	8	3.6			10 s			0	0	cloudy	
Hatteras, North Carolina	30.53	775.4	30.55	776.0	44	6.7	65	ne.	11	4.9			10 k		ne.	0	0	cloudy	
Helena, Montana	25.23	640.8	29.66	753.4	16	— 8.9	70	nw.	4	1.8			10 s			0.10	2.5	cloudy	
Henrietta, Texas	28.86	733.0	29.93	760.2	52	11.1	93	s.	14	6.3			10 s			0	0	cloudy	
Huron, Dakota	28.10	713.7	29.64	752.8	19	— 7.2	58	s.	7	3.1		0	0			0	0	clear	
Indianapolis, Indiana	29.26	743.2	30.10	764.5	39	3.9	86	s.	9	4.0			10s;fg		s;calm	0	0	threatening.	
Indianola, Texas	29.92	760.0	29.94	760.5	57.5	14.2	100	sw.	28	12.5			10 n			0.07	1.8	light rain	
Jacksboro, Texas	28.68	728.5	29.92	760.0	50	10.0	86	se.	9	4.0			10 s			0	0	cloudy	
Jacksonville, Florida	30.23	767.8	30.28	769.1	63	17.2	93	ne.	6	2.7			10 s			0.38	9.7	cloudy	
Keokuk, Iowa	29.14	740.1	29.84	757.9	39.0	3.9	82	se.	7	3.1			10 s		se.	0	0	cloudy	
Key West, Florida	30.12	765.0	30.15	765.8	72.0	22.2	84	se.	5	2.2		0	5 ks		se.	0.35	8.9	fair	
Kittyhawk, North Carolina	30.57	776.5	30.59	777.0	42	5.6	83	e.	13	5.8		hz.	4 s		se.	0	0	dense haze	
Knoxville, Tennessee	29.28	743.7	30.36	771.1	36.3	2.4	70	ne.	4	1.8			10 s		sw.	inap.	inap.	threatening.	
La Crosse, Wisconsin	28.91	734.3	29.75	755.6	37	2.8	61	s.	12	5.4			10 s			inap.	inap.	cloudy	
La Mesilla, New Mexico	25.91	658.1	29.94	760.5	47.2	8.4	45	calm	0	0		0	8 s			0	0	cloudy	
Leavenworth, Kansas	28.82	732.0	29.78	756.4	46	7.8	83	s.	18	8.0			10 s		sw.	inap.	inap.	cloudy	
Lewiston, Idaho	28.68	728.5	29.55	750.6	30	— 1.1	71	s.	2	0.9			10 s		s.	0.03	0.8	cloudy	
Little Rock, Arkansas	29.68	753.9	30.10	764.5	45	7.2	100	se.	3	1.3			10 n			0.13	3.3	light rain	
Los Angeles, California	29.51	749.5	29.91	759.7	41.2	5.1	73	n.	5	2.2		0	4 s		ne.	0.53	13.5	fair	
Louisville, Kentucky	29.58	751.3	30.17	766.3	42.0	5.6	83	se.	6	2.7			10 n		calm	0.08	2.0	light rain	
Lynchburg, Virginia	29.88	758.9	30.60	777.2	24.2	— 4.3	80	nw.	2	0.9			10 s			0	0	threatening.	
Mackinac City, Michigan																			
Madison, Wisconsin	28.78	731.0	29.87	758.7	33	0.6	88	s.	11	4.9			10 s		calm	0	0	cloudy	
Marquette, Michigan	29.08	738.6	29.86	758.4	29	— 1.7	88	s.	18	8.0			10 s		calm	0.01	0.3	cloudy	
Mason, Texas	28.21	716.5	29.95	760.7	53	11.7	83	se.	1	0.4			10 s		se.	0	0	cloudy	
Memphis, Tennessee	29.75	755.6	30.11	764.8	48	8.9	86	se.	8	3.6			10 s		se.	0.08	2.0	cloudy	
Milwaukee, Wisconsin	29.12	739.6	29.92	760.0	34	1.1	79	s.	10	4.5			10 s			0.05	1.3	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.08	764.0	30.12	765.0	57.0	13.9	93	se.	6	2.7			10 n		se.	0.08	2.0	light rain	
Montgomery, Alabama	30.04	763.0	30.28	769.1	46	7.8	68	e.	9	4.0			10 s			inap.	inap.	cloudy	
Moorhead, Minnesota	28.49	723.6	29.60	751.8	23	— 5.0	100	w.	6	2.7			10 s			0.23	5.8	cloudy	
Morgantown, W. Virginia	29.32	744.7	30.38	771.6	30.5	— 0.8	76	calm	0	0			10 n			0.01	0.3	light hail	
Mt. Washington, N. H	23.77	603.7	30.40	772.1	— 3.0	—19.4	71	nw.	46	20.6		8 cs	0	nw.		0	0	cloudy	
Nashville, Tennessee	29.65	753.1	30.21	767.3	44.9	7.2	70	se.	4	1.8		10 cs	0	se.		0.02	0.5	cloudy	
New Haven, Connecticut	30.59	777.0	30.71	780.0	1	—17.2	85	calm	0	0		9 c	0	w.		0	0	cloudy	
New London, Connecticut	30.70	779 8	30.75	781.0	7	—13.9	52	n.	2	0.9		7 c	0	calm		0	0	fair	
New Orleans, Louisiana	29.99	761.7	30.05	783.3	62.7	17.1	88	se.	10	4.5			10 s			0.16	4.1	cloudy	
Newport, Rhode Island	30.68	779.3	30.73	780.5	15.1	— 9.4	64	n.	3	1.3		5 cs	4 s; sk	sw.	calm	0	0	cloudy	
New River, N. Carolina					36	2.2	69	ne.			4	2 c	4 ks	nw.	e.	0	0	fair	
New Shoreham, Rhode I'd	30.69	779.5	30.72	780.3	17.5	— 8.1	67	n.	4	1.8		0	8 s		w.	inap.	inap.	cloudy	
New York, New York	30.54	775.7	30.73	780.5	13	—10.6	80	nw.	3	1.3			10 s			0	0	cloudy	
Norfolk, Virginia	30.58	776.7	30.61	777.5	33	0.6	78	ne.	4	1.8		3 ck	6 ks	w.	w.	inap.	inap.	cloudy	
North Platte, Nebraska	26.58	675.1	29.70	754.4	17.6	— 8.0	89	s.	6	2.7			10 s			0	0	cloudy	
Olympia, Washington T'y	29.39	746.5	29.43	747.5	35.0	1.7	89	s.	10	4.5			10 n		calm	0.37	9.4	light snow	
Omaha, Nebraska	28.39	721.1	29.66	753.4	43.3	6.3	74	se.	8	3.6			10 s			0.01	0.3	cloudy	
Ooglanmie, Pt. Barrow, Alas.	30.15	765.8	30.17	766.3	—11.6	—24.2	85	se.	14	6.3		hz	hz			0	0	hazy	
Oswego, New York	30.11	764.8	30.46	773.7	11.2	—11.6	75	s.	12	5.4		3 c	3 s	w.	sw.	0	0	fair	
Palestine, Texas																			
Pensacola, Florida	30.13	765.3	30.16	766.1	57.0	13.9	100	ne.	10	4.5			10 n			0.26	6.6	light rain	
Philadelphia, Pa	30.64	778.2	30.70	779.8	12	—11.1	80	e.	4	1.8		0	7 s		se.	0	0	fair	
Pike's Peak, Colorado	17.15	435.6	29.85	758.2	3	—16.1	100	sw.	12	5.4			fg		sw.	0.24	6.1	dense fog	
Pioche, Nevada	23.59	599.2	29.99	761.7	24	— 4.4	88	nw.	5	2.2			10 n		s.	0.11	2.8	light snow	
Pittsburg, Pennsylvania	29.54	750.3	30.40	772.1	25.8	— 3.4	84	ne.	4	1.8			10 s			inap.	inap	cloudy	
Port Eads, Louisiana	30.05	763.3	30.06	763.5	62.2	16.8	100	se.	16	7.2		0	3 k		se.	1.81	46.0	clearing	
Port Huron, Michigan	29.50	749.3	30.23	767.8	25.5	— 3.6	67	s.	12	5.4		10 cs	0	w.		inap.	inap.	cloudy	
Portland, Maine	30.02	777.7	30.67	779.0	0	—17.8	68	nw.	4	1.8		3 cs	0	calm		0	0	clear	
Portland, Oregon	29.53	750.0	29.60	751.8	37.6	3.1	89	s.	8	3.6		2 cs	7 s	w.	sw.	0.04	1.0	cloudy	
Portsmouth, N. Carolina					44	6.7	60	ne.	24	10.7		1 c	2 ks	calm	ne.	0	0	clear	
Prescott, Arizona	24.45	621.0	29.83	757.7	35	1.7	100	se.	6	2.7			10 n		se.	0.04	1.0	light snow	
Punta Rassa, Florida	30.15	765.8	30.16	766.1	67	19.4	92	e.	6	2.7			10 s		se.	0.15	3.8	threatening	
Red Bluff, California	29.59	749 3	29.88	758.9	33.0	0.6	96	n.	3	1.3		0	2 s		calm	0.04	1.0	clear	
Rio Grande City, Texas	29.68	753.9	29.93	760.2	56	13.3	93	calm	0	0			10 s		calm	0.03	0.8	cloudy	
Rochester, New York	29.68	753.9	30.39	771.9	15	— 9.4	67	se.	10	4.5		10 cs	0	w.		0	0	cloudy	
Roseburg, Oregon	29.18	741.2	29.75	755.6	35.5	1.9	94	sw.	1	0.4			10 n		sw.	inap.	inap.	light rain	
Sacramento, California	29.81	757.2	29.89	759.2	35.2	1.8	89	e.	5	2.2		0	0			0.15	3.8	clear	
St. Louis, Missouri	29.34	745.2	29.98	761.5	42.0	5.6	93	s.	11	4.9			10 s			0	0	cloudy	
St. Paul, Minnesota	28.73	729.7	29.68	753.9	32.0	0.0	88	se.	18	8.0			10 s		se.	0.02	0.5	cloudy	
St. Vincent, Minnesota	28.56	725.4	29.54	750.3	14	—10.0	100	sw.	9	4.0		0	5 s		calm	0.04	1.0	fair	
Salt Lake City, Utah	25.18	639.6	29.75	755.6	28	— 2.2	59	nw.	3	1.3			10 s			0.04	1.0	cloudy	
San Antonio, Texas	29.17	740 9	29.90	759.4	52.6	11.4	100	calm	0	0			fg			0.04	1.0	dense fog	
San Diego, California	29.74	755.4	29.81	757.2	50.5	10.3	76	nw.	10	4.5		0	6 s		nw.	0.31	7.9	fair	
Sandusky, Ohio	29.50	749.3	30.22	767.6	30	— 1.1	78	s.	18	8.0			10 s			0	0	cloudy	
Sandy Hook, New Jersey	30.69	779.5	30.73	780.5	15.0	— 9.4	83	ne.	3	1.3		8 k	0	ne.		0	0	cloudy	
San Francisco, California	29.84	757.9	29.91	759.7	43	6.1	78	nw.	2	0.9		0	0			0.05	1.3	clear	
Santa Fé, New Mexico	22.94	582.7	29.96	761.0	33	0.6	81	sw.	2	0.9			10 s			0.06	1.5	cloudy	
Savannah, Georgia	30.28	769.1	30.38	771.6	41	5.0	92	ne.	12	5.4			10 s		ne.	0.05	1.3	threatening	
Shreveport, Louisiana	29.71	754.6	29.96	761.0	50	10.0	100	calm	0	0			fg			0.04	1.0	dense fog	
Silver City, New Mexico	24.01	609.8	29.87	758.7	38	3.3	75	n.	5	2.2		0	0			0	0	clear	
Sitka, Alaska	29.83	757.7	29.90	759 4	15	— 9.4	48	ne.	20	8.9		0	0			0	0	clear	
Smithville, North Carolina	30.44	773.2	30.48	774.2	35	1.7	100	ne.	14	6.3			10 n		ne.	0.03	0.8	light rain	
Spokane Falls, Wash. Ter.	27.40	695.9	29.54	750.3	28	— 2.2	77	s.	9	4.0		0	0			0.34	8.6	clear	
Springfield, Illinois	29.22	742.2	29.96	761.0	41	5.0	91	s.	17	7.6			10 n			0.03	0.8	light rain	
Springfield, Massachusetts	30.61	777.5	30.75	781.0	1.0	—17.2	83	n.	1	0.4		9 ck	0	w.		0	0	cloudy	
Springfield, Mo	28.40	721.3	29.98	761.5	45	7.2	89	s.	12	5.4			10 n			0.01	0.3	light rain	
Stockton, Texas	26.76	679.7	29.90	759.4	40.5	4.7	100	calm	0	0		0	0			0	0	clear	
Thatcher's Island, Mass	30 64	778.2	30.70	779.8	13.0	—10.0	61	w.	18	8.0		2 cs	0			0	0	clear	
Toledo, Ohio	29.45	748.0	30.19	766.8	32	0.0	68	s.	8	3.6			10 s		s.	0	0	cloudy	
Tucson, Arizona	27.31	693.7	29.81	757.2	54	12.2	69	se.	7	3.1			10 s			0	0	threatening	
Umatilla, Oregon	29.17	740.9	29.56	750.8	32.7	0.4	85	nw.	4	1.8		0	8 s		w.	0	0	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.81	757.2	30.08	764.0	54	12.2	93	se.	3	1.3			10 s		se.	0.17	4.3	cloudy	
Visalia, California	29.49	749.0	29.88	758.9	38	3.3	89	nw.	1	0.4		0	8 s			0.20	6.6	cloudy	
Washington, D. C	30.57	776.5	30.69	779.5	17	— 8.3	83	ne.	2	0.9			10 s		sw.	0	0	cloudy	
West Los Animas, Colorado																			
Wickenburg, Arizona					45	7.2	93	calm			0		10 n			0.08	2.0	light rain	
Williamsport, Pa	29.98	761.5	30.61	777.5	13	—10.6	87	e.	4	1.8			10 ks		nw.	0	0	cloudy	
Wilmington, N. Carolina	30.42	772.7	30.48	774.2	36	2.2	79	ne.	7	3.1			10 s		calm	0	0	cloudy	
Winnemucca, Nevada	25.26	641 6	29.86	759.0	19	— 7.2	73	sw.	6	2.7		0	0			0.06	1.5	clear	
Wood's Holl, Mass	30.66	778.7	30.70	779.8	22	— 5.6	73	calm	0	0		0	9 s		w.	0	0	cloudy	
Yankton, Dakota	28.18	715.8	29.60	751 8	36	2.2	79	se.	5	2.2			10 s			0	0	cloudy	
Yuma, Arizona	29.59	751.6	29.74	755.4	52.8	11.6	94	nw.	8	3.6			10 s			0	0	cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.01	559.0			50.0	10.0	75	calm	0	0		1 k	2 s			0	0	clear	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.04	763 0	30.05	763.3	77	25.0	72	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racket.
Buenaventura, U. S. C.	29.89	759 2	29.91	759 7	77	25.0	90	calm	0	0		0	3 ks		calm	0.15	3 8	fair	J. I. Plume.
Guadeloupe, W. I	29.95	761.0	29.98	761.5	74	23.3	90	se.				3 c	2 ks			0.3	8.	fair	B. Bigar.
Havana, Cuba, W. I	30.10	764.5	30.15	765.8	70	21.1	84	calm	0	0		0	2 ks		calm	0	0	fair	A. Van Cuneghem, Ass't
Kingston, Jamaica, W. I	30.05	763.3	30.09	763 5	72.7	22.6	81	n.	1	0.4		0	7 s		e.	0.01	0.3		Robert Johnstone
Nassau, W. I	29.97	761.2	30.05	763.3	76	24.4	72	ne.	15	6.7		5 ck	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A	30.04	763.0	30.04	763.0	76	24.4	95	ne.			4		10 n	ne.		3.450	87.6	raining	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mba	29.30	745.7	29.92	760.0	78	25.6	84	ne			1	0	1 s		calm	0	0	clear	Miss Flora A. Nichols.
Rivas, Nicaragua					73.4	23.0	92	ne.			3	0	2 ks		ne.	0	0		Earl Flint.
Santiago de Cuba, W. I	30.07	763.8	30.10	764.5	74	23.3	72	n.	6	2.7		0	0			inap.	inap	clear	Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	30.62	777.7	30.68	779.3	— 8.0	—22.2	79	sw.	8	3.6		5 k	5 s	sw.	sw.	0.01	0.3	cloudy	J. Fortescue & W. Wood

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 21° 29′, E. 109° 05′	29.99	761.7	73	22.8		sw.			1		0							blue sky	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India.	29.89	759.2	81.2	27.3	73	ne.			1		4							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.52	775.2	56	13.3	80	ene.			1		0							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.99	761.7	72.5	22.5	65	se.			2		5	e.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, S. 10° 10′, W. 78° 30′	29.85	758.2	68	20.0	90	e.			3		6	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, N. 40° 05′, E. 26° 05′	30.60	777.2	44	6.7	67	nne.			3–5		5					5	nne.	d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean.	30.48	774.2	66	18.9		ene.			3–6		6	ene.				1	wsw.	squally	Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, N. 32° 07′, E. 118° 45′	30.09	764.3	46.5	8.1	92	n.			2–3		10							overcast	Capt. S. Long.
H. M. S. Diamond, S. 35° 53′, E. 1° 25′	30.09	764.3	62.5	16.9	69	nw.			4		10					3	w.	overcast	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.47	773.9	54	12.2	79	n.			2–3		6	n.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 20° 45′, W. 75° 43′	30.14	765.5	75.5	24.2	90	ne.			3		2					1		d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 37′, W. 59° 32′	29.40	746.7	51	10.6	83	nne.			1		10					1	nne.	showery	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.89	759.2	81	27.2		ene.			1–2		5	wnw.						d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald, S. 42° 53′, E. 147° 22′	29.81	757.2	62	16.7	94	nw.			2–4		5	w.						squally	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.41	772.4	38	3.3		n.			1		9	n.						d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, S. 24° 40′, W. 29° 10′	30.12	765.0	75	23.9	95	ene.			4		7	wsw.				3	ese.	d. clouds	Capt. C. A. P Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.92	760.0	78.5	25.8	78	s.			4		1					4	s.	d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.03	762.7	52.5	11.4	90	calm			0		6							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.88	758.9	63	17.2	91	n.			1		10							misty	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. Jones.
H. M. S. Iris, N. 36° 25′, E. 35° 43′	30.30	769.6	63	17.2	52	ne.			1		0							blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.03	762.7	67	19.4	94	nne.			1		6	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark, S. 33° 47′, E. 167° 01′	29.90	759.4	69.3	20.7	98	s.			3		6					2	s.	d. clouds	Lieut. C. F. Oldham
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.01	762.2	69.4	20.8	90	calm			0		3							misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 16° 00′, E. 41° 30′	29.98	761.5	79	26.1	90	s.			1		4	nnw.				2	nnw.	d. clouds	Capt. H. Hand.
H. M. S. Mutine, Callao, Peru	29.97	761.2	68	20.0	94	calm			0		0							misty	Comm. F. Edwards.
H. M. S. Northampton, N. 12° 43′, W. 61° 27′	29.97	761.2	78	25.6	84	ne.			5		2	ne.				1	ne.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 17° 24′, E. 72° 19′	29.93	760.2	82	27.8	83	n.			2		0					1	nne.	blue sky	Capt. R. Kinahan.
H. M. S. Pelican, S. 4° 53′, W. 17° 42	29.85	758.2	80.5	26.9	97	se.			3		4					3	se.	misty	Capt. F. R. Dickens.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.23	767.8	56.1	13.4		nw.			2									blue sky	Capt. W. H Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	29.34	745.2	36	2.2	90	wnw.			2		4							snowing	Lieut. V. B. Orlebar.
H. M. S. Ruby, Colombo, Ceylon, India	29.86	758.4	80.5	26.9	87	s.			1		4	s.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 17° 34′, E 67° 40′	29.98	761.5	78	25.6	95	ene.			3		1	ene.				sm'l		blue sky	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 15° 50′, W. 88° 00′	29.95	760.7	76	24.4	86	s.			1		3					sm'l		d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, Off Panama, Panama	29.88	758.9	76	24.4	86	nnw.			2–3		2	calm						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamacia W. I.	30.05	763.3	75	23.9		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, N. 26° 18′, E. 50° 45′	30.20	767.1	63.5	17.5	54	nw.			5–6		2	nw.				8	nw.	misty	Capt. T. P. Nesham.
H. M. S. Zephyr, Nagasaki, Japan	29.94	760.5	59	15.0	?	e.			4		10	s.				2	s.	raining	Capt. G. N. A. Pollard.
PORTUGESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Brava, Cape Verd Ids.	29.98	761.6	76.1	24.5	88	ne.			3		0					3	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 10° 37′, W. 66° 57′	29.98	761.4	75.2	24.0	82	ene.			3		4							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
UNITED STATES NAVAL SERIES.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
By authority of the Secretary of the Navy.																			
N. Yard, Pensacola, Fla	30.12	765.0	62	16.7	83	e.	19	8.5	.....	.....	10	.....	.....	0.26	6.6	.....	.....	rainy	
N. Yard, Portsmouth, N. H.	30.67	779.0	— 5	—20.6	.....	wnw.	12	5.4	.....	.....	3	.....	wnw.	0	0	.....	.....	fair	
Naval Hospital Yokohama, Japan	30.01	762.2	43	6.1	92	n.	.....	.....	1	.....	10	.....	n.	sli't	sli't	.....	.....	misty	
Adams, Callao, Peru	29.76	755.9	69	20.6	95	sse.	.....	.....	0-1	.....	8	.....	.....	.....	.....	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	29.89	759.2	63	17.2	78	nnw.	.....	.....	1	.....	8	.....	.....	0	0	sm'h	.....	cloudy	
Alert, N. 10° 32′, E. 106° 56′*	29.81	757.2	80	26.7	82	se.	.....	.....	2	.....	2	.....	calm	0	0	sm'h	.....	clear	
Alliance, Boston, Mass.*†	30.68	779.3	9	—12.8	94	w.	.....	.....	1	.....	2	.....	.....	0	0	.....	.....	clear	
Ashuelot, Tientsin, China	30.42	772.7	32	0.0	100	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, S. 34° 56′, W. 54° 24′	29.73	755.1	73	22.8	95	ne.	18	8.0	.....	.....	10	.....	n;e.	0	0	mod.	ne.	cloudy	
Colorado, New York, N. Y.	30.72	780.3	12	—11.1	.....	calm	0	0	.....	.....	10	.....	nw.	0	0	.....	.....	foggy	
Essex, N. 35° 09′, W. 38° 07′	30.06	763.5	64	17.8	94	ssw.	.....	.....	4	.....	8	.....	s.	.....	.....	mod.	sw.	cloudy	
Franklin, Norfolk, Va.	30.67	779.0	33	0.6	.....	ne.	5	2.2	.....	.....	8	.....	ne.	0	0	.....	.....	fair	
Galena, N. 28° 16′, W. 15° 45′	30.19	766.8	66	18.9	74	se.	.....	.....	5	.....	10	.....	.....	.....	.....	r'gh	se.	cloudy	
Independence, N. Yard, Mare I'd, Cal.	29.74	755.4	39	3.9	82	w.	1.2	0.5	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La.	30.03	762.7	62	16.7	100	ese.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	misty	
Lackawanna, Valparaiso, Chili†	30.04	763.0	63	17.2	100	nw.	.....	.....	1	.....	10	.....	nw.	.....	.....	.....	.....	cloudy	
Lancaster, Leghorn, Italy	30.57	776.5	49	9.4	71	ene.	.....	.....	2	.....	2	.....	ene.	0	0	.....	.....	misty	
Michigan, Erie, Pa.	30.03	762.7	21	— 6.1	100	s.	.....	.....	7	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I.	30.71	780.0	12	—11.1	.....	nw.	2	0.9	.....	.....	10	.....	n.	.....	.....	sm'h	.....	overcast	
Monocacy, Yokohama, Japan	30.18	766.6	45	7.2	84	nnw.	.....	.....	1	.....	10	.....	calm	.....	.....	.....	.....	cloudy	
Nipsic, Leghorn, Italy	30.67	779.0	57	13.9	63	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	29.99	761.7	68	20.0	100	s.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	misty	
Palos, Hong Kong, China	30.03	762.7	69	20.6	95	ene.	.....	.....	1	.....	8	.....	n;e.	.....	.....	.....	.....	fair	
Passaic, Washington, D. C.	30.69	779.5	17	— 8.3	?	ne.	.....	.....	1	.....	8	.....	ne.	.....	.....	.....	.....	fair	
Pensacola, Valparaiso, Chili	29.96	761.0	65	18.3	73	w.	1	0.4	.....	.....	8	.....	w.	0	0	sm'h	.....	cloudy	
Powhatan, N. 40°51′, W. 69° 38′	30.74	780.8	23	— 5.0	100	wsw.	.....	.....	2	.....	8	.....	sw.	.....	.....	sm'h	n.	cloudy	
Quinnebaug, Villafranca, France	30.62	777.7	58	14.4	64	s.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Ranger, N. 19° 06′, W. 104° 23′*	29.84	757.9	68	20.0	74	ne.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, N. 1° 00′, W. 169° 46′*	29.76	755.9	80	26.7	96	n.	.....	.....	4	.....	5	.....	ne.	1.50	38.1	mod.	ne.	fair	
Shenandoah, Montevideo, Uruguay*.	29.79	756.7	72	22.2	90	se.	.....	.....	4	.....	10	.....	.....	.....	.....	mod.	se.	drizzling	
St. Louis, League Island, Pa.	30.94	765.9	13	—10.6	100	ne.	2	0.9	.....	.....	8	.....	nne.	0	0	.....	.....	cloudy	
Swatara, Kobe, Japan*	29.88	758.9	57	13.9	75	calm	.....	.....	0	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Tennessee, New York, N. Y.	30.76	781.3	12	—11.1	.....	e.	2	0.9	.....	.....	8	.....	.....	0	0	.....	.....	cloudy	
Vandalia, La Guayra, Venezuela, S. A.	29.98	761.5	78	25.6	73	calm	.....	.....	0	.....	5	.....	n;e.	.....	.....	mod.	nw.	fair	
Wabash, Boston, Mass.	30.73	780.5	6	—14.4	.....	wsw.	5	2.2	.....	.....	2	.....	wsw.	0	0	.....	.....	fair	
Wachusetts, N. 38° 56′, W. 123° 06′	29.90	759.4	46	7.8	84	nne.	.....	.....	2	.....	2	.....	ne.	0	0	long	nw.	clear	
Wyoming, Port Royal, S. C.	30.38	771.6	39	3.9	100	nne.	16	7.2	.....	.....	10	.....	.....	0.02	0.5	.....	.....	overcast	
Yantic, Aspinwall, Panama*	29.89	759.2	77	25.0	86	nne.	.....	.....	3	.....	5	.....	.....	.....	.....	mod.	n.	fair	

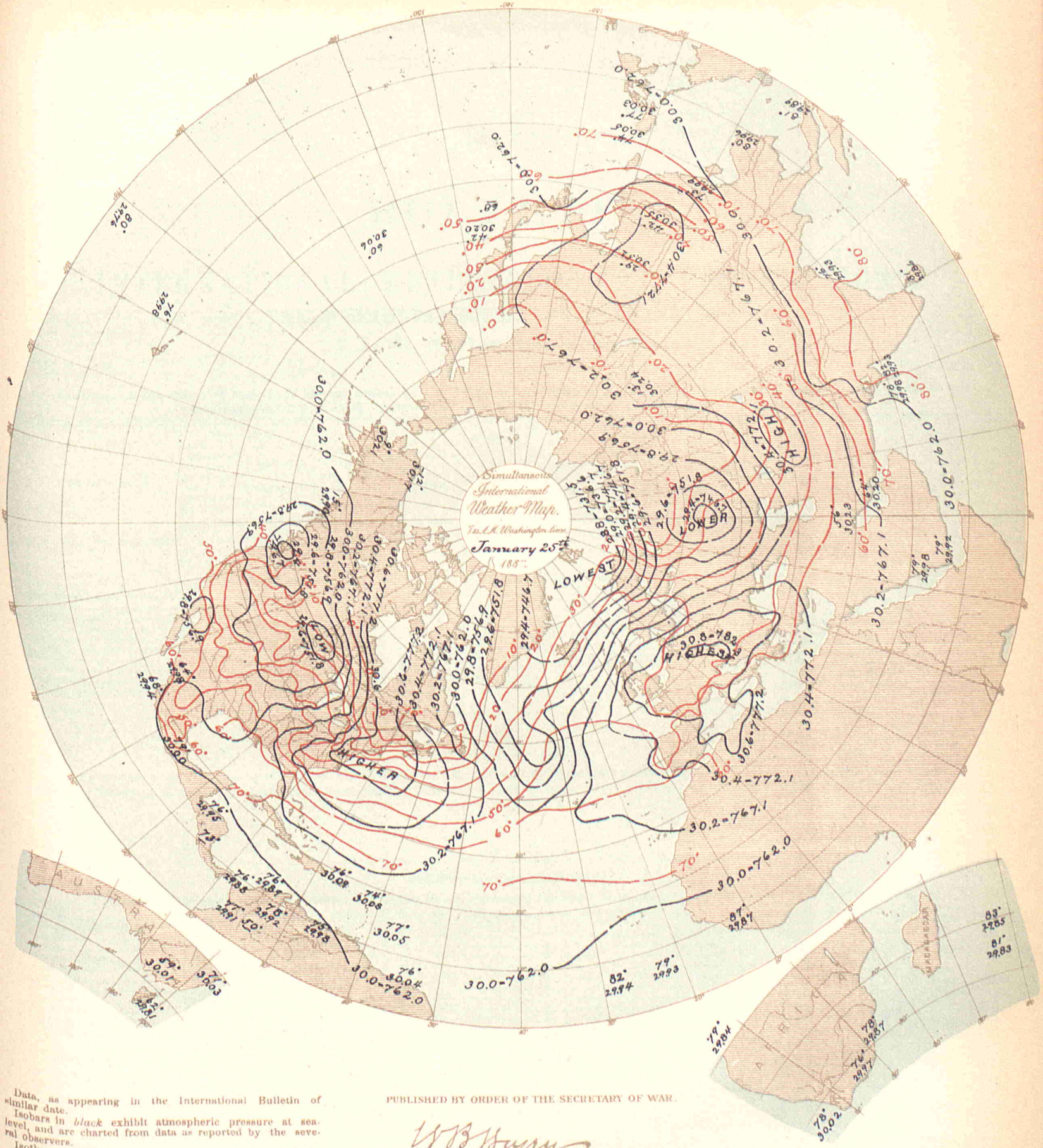
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon.
S. S. Polynesian, Capt. Robt. Brown, N. 50° 26′, W. 38° 10′*	29.24	742.7	38	3.3		nw.	5		10		wnw.	11 h'r and	rain snow	r'gh	se;w	cloudy	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. Portland, Oregon*	30.63	778.0	—10	—23.3		nw.	2		2		nw.					fair	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.50	774.7	46	7.8		wsw.	6				w.	2 h'r	2 h'r			cloudy	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	30.09	764.3	16	—8.9	83	nw.	2		2		w.					fair	Cauffman & Morse.
S. S. Ohio, Capt. Henry Morrison, N. 51° 08′, W. 31° 02*†	29.70	754.4	53	11.7	93	sse.	7		10		sw.			r'gh	w.	stormy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, Liverpool, England†	30.69	779.5	43	6.1	75	wsw.										foggy	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Assyria, Capt. J. Brown, N. 55° 04′, W. 31° 01′*†	29.86	758.4	44	6.7		se.	6		10		se.			long	wsw.	overcast	J. Brown.
Utopia, Capt. A. McRitchie,																	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 18° 26′, W. 72° 51*†	30.16	766.1	73	22.8	85	calm	0		0			0	0	sm'h		clear	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Cartagena, U. S. C*	29.89	759.2	76	24.4		n.	5		0			0	0			very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladiom, N. 36° 27′, W. 73° 45′*†	30.15?	765.8?	57	13.9		s.	5		8		s.	1 h'r	light	h'vy	ssw.		W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 26° 05′, W. 68° 15′			67	19.4		ene.	3		8		ne.	0	0	h'vy	ene.	squally	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse,																	Fisher & Welden.
BOSTON & HALIFAX. *E. W Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S *†	30.60	777.2	5	—15.0		nnw.	8		0			0	0				S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russel, N. 29° 26′, W. 73° 02′	30.05	763.3	65.5	18.6	78	e.	4		9							misty	
British Merchant, Capt. E. J. Molony, N. 18° 53′, E. 86° 40′	29.93	760.2	75.6	24.2	81	w.	1		0							blue sky	
Caldew, Capt. W. Peterson, S. 40° 50′, W. 83° 40′	29.96	761.0	59	15.0		w.	6		0							blue sky	
S. S. Cipero, Capt. W. N. Lailey, N. 23° 10′, W. 40° 38′	30.16	766.1	74.5	23.6	76	e.	3		3					1	e.	d. clouds	
S. City of Agra, Capt. Thos. Young, N. 14° 51′, W. 36° 15′	30.03	762.7	76.5	24.7		nne.	3		5							d. clouds	
Bk. Glaramara, Capt. R. Morton, N. 37° 09′, W. 33° 18′	30.13	765.3	62	16.7	83	s.	5		5							d. clouds	
Glencairn, Capt. R. S. Tannock, S. 44° 05′, E. 61° 30′	29.97	761.2	47	8.3	77	s.	5–6		8							showery	
Bg. Hermine, Capt. G. G. Jones, S. 45° 04′, W. 83° 20′	29.61	752.1	52.0	11.1	86	w.	6		10							misty	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 25° 16′, E. 57° 16′	29.83	757.7	81	27.2	82	sw.	6		7							d. clouds	
May Hulse, Capt. H. Youlden, S. 35° 57′, W. 46° 51′	29.91	759.7	73.2	22.9	71	nne.	2		10							overcast	
Bk. Mertola, Capt. E. W. Turner, N. 36° 42′, W. 9° 42′	30.41	772.4	59.7	15.4	76	ssw.	3		2							d. clouds	
Minho, Capt. J. Lawson, Rio de Janeiro, Brazil, S. A	29.96	761.0	77	25.0	95	calm	0		10							misty	
Naiad, Capt. John Smith. N. 3° 29′, W. 30° 32′	29.94	760.5	81.5	27.5	83	nne.	2		2							misty	
Pole Star, Capt. F. Norman, S. 55° 25′, W. 77° 17′	29.32	744.7	58.4	14.7	53	nne.	3		8							blue sky	
Queen of Cambria, Capt. M. Parry. S. 43° 39′, E. 39° 46′	30.43	772.9	49	9.4	64	n.	5		4							d. clouds	
S. Superb, Capt. Berridge N. 23° 29′, W. 40° 19′	30.15	765.8	71.2	21.8	90	nne.	4		6							d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham,																	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent, San Francisco.*																	
S. S. Newbern, Capt. E. Y. Rogers, N. 35° 04′, W. 121° 02′†	29.90	759.4	52	11.1	60	nw.	5		3		nw.	light	light	mod.	wnw.	clear	
CROMWELL LINE. *Clark & Seaman, Agents, New York*																	
S. S. Hudson, Capt. H. R. Freeman,																	B. J. Henry, 1st Offi.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Behtan, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, Havre, France	30.65	778.6	33.8	1.0		e.	1		10		e.	0	0			hazy	
S. S. St. Laurent, Capt. A. Servan, N. 49° 31′, W. 31° 08′*†	29.61	752.0	51.8	11.0		s.	7					0	0	very large	s.		A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Silesia, Capt. A. Albers, N. 47° 52′, W. 39° 11′*†	29.67	753.6	38.8	3.8		wnw.	7		10		wnw.	snow	snow	6–7	wnw.	snowing	
S. S. Wieland, Capt. C. Hebich, N. 50° 12′, W. 16° 22′*	30.38	771.6	50	10.0		sse.	4		8		sse.	rain	rain	3	nw.	drizzling	C. Jorgensen.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch																	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 34° —′, W. 53° —′*†	30.02	762.5	74	23.3		nne.	3		5		nnw.	0	0	light	nne.	fair	J. Carroll

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.				Character.	Direction.		
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 42° 29′, W. 65° 30′	.....	.....	.....	.....	.....	w.	1	.....	5	.....	w.	8 h'r	8 h'r	.....	.....	.....	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.76	781 3	.....	.....	.....	s.	1	.....	5	.....	ssw.	0	0	.....	.....	fine	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom N. 10° 48′, W. 75′ 40′†	29.83	757.7	76	24.4	.....	ene.	6	.....	.....	.....	.....	.....	.....	h'vy	ene.	.....	.....
S. S. Bothnia, Capt. W. McMickan, N. 40° 42′, W. 68° 00′* [man	30.49	774.4	28	—2.2	.....	w.	3	.....	.....	.....	.....	.....	.....	sm'h	.....	clear	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Timmer- N. 23° 09′, W. 83° 44′*† [nolds	30.26	768.6	74	23.3	.....	e.	4	.....	.....	.....	.....	.....	.....	.....	ne.	clear	.....
S. S. City of Washington, Capt. J. W. Rey- N. 39° 25′, W. 73° 50′*†	30.75	781.0	38	3.3	.....	e.	1	.....	.....	.....	.....	.....	.....	sm'h	.....	fine	.....
S. S. Maas, Capt. T. H. Bonjer, N. 50° 10′ W. 29° 57′*	29.52	749.8	51	10.6	.....	ssw.	.....	.....	.....	.....	.....	.....	.....	high	ssw.	raining	.....
S. S. New York, Capt. R. B. Quick, N. 24° 45′, W. 80° 24′*†	30.26	768 6	75	23.9	.....	se.	3	.....	.....	.....	.....	.....	.....	.....	ne.	clear	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers, N. 50° 22′, W. 2° 45′	30.68	779.3	.....	.....	.....	se.	3	.....	8	.....	sw.	0	0	sm'h	.....	covered	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander, N. 50° 30′, W. 2° 00′*	30.75	781.0	41.0	5.0	.....	ese.	3	.....	10	.....	s.	0	0	mod.	e.	.....	G. H. Lose, 3d Off.
S. S. Leipzig, Capt. F. Pfeiffer, N. 49° 59′, W. 17° 22′	30.64	778.2	52.0	11.1	?	s.	4	.....	5	.....	ssw	1 h'r	1 h'r	mod.	w.	fair	Sander & Waller.
S. S. Neckar, Capt. R. Bussius. N. 45° 07′, W. 49° 56′	30.27	768.8	27.5	—2.5	.....	nnw.	7	.....	9	.....	nnw.	2 h'r and	snow hail	r'gh	nnw.	snow & hail	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger, N. 35° 11′, W. 13° 47′*	30.36	771.1	64.4	18.0	83	s.	2	.....	2	.....	sse.	0	0	3	s.	fair	Montz & Kohlenbeck.
S. S. Oder, Capt. Undeutsch, N. 40° 17′, W. 36° 50′*	29.48	748.8	44.6	7.0	.....	nw.	6	.....	10	.....	w.	rain	rain	h'vy	w.	light rain	.....
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany	.....	.....	41.0	5.0	.....	n.	2	.....	10	.....	.....	0	0	.....	.....	foggy	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal	.....	.....	43	6.1	75	w.	1	.....	0	.....	.....	0	0	.....	.....	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 38° 12′, E. 145° 13′*†	30.40	772.1	52	11.1	72	se.	6	.....	7?	.....	se.	.....	.....	mod.	se.	clear?	.....
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.03	702.7	70	21.1	84	e.	2	.....	4	.....	.....	.....	.....	.....	.....	fine	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	30.46	773.7	.....	.....	.....	nw.	1	.....	2	.....	n.	.....	.....	.....	.....	hazy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Vineyard Sound Mass.†	30.62	777.7	20	—6.7	.....	sw.	1	.....	2	.....	ne.	8 h'r	snow	sm'h	ene.	.....	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, San Francisco, Cal†	29.89	759.2	51	10.6	78	n.	1	.....	0	.....	.....	.....	.....	mod.	w.	clear	E. W. Holmes.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d officer
S. S. Columbia, Capt. F. Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.51	749.5	38	3.3	90	s.	2	.....	10	.....	s.	.....	.....	.....	.....	raining	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, San Francisco, Cal†	29.81	757.2	41	5.0	83	w.	1	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†	29.45	748.0	31	—0.6	.....	ne.	4	.....	4	.....	ne.	0	0	sm'h	.....	clear	.....
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	29.81	757.2	44	6.7	83	nw.	1	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 42′, W. 118° 14′†	29.80	756.9	53	11.7	48	nw.	2	.....	.....	.....	nw.	0	0	sm'h	nw.	fair	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.06	763.5	42	5.6	91	nw.	1	.....	0	.....	.....	0	0	.....	.....	clear	T. Wallace.
S. S. State of California, Capt. G. Dobney, N. 41° 00′, W. 124° 30′†	29.80	756.9	45	7.2	76	w.	3	.....	10	.....	sw.	.....	.....	short	wsw.	showery	.....
S. S. Victoria, Capt. H. M. Hayward, Nanaimo, Vancouver I'd†	29.36	745.8	33	0.6	79	calm	0	.....	10	.....	.....	.....	.....	.....	.....	cloudy	.....
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. —— San Francisco Cal	29.93	760.2	46	7.8	69	se.	3	.....	2	.....	se.	.....	.....	.....	.....	fine	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, Sydney, N. S. W†	30.03	762.7	71	21.7	80	se.	1	.....	8	.....	.....	0	0	.....	.....	cloudy	W. H. Hawes, 2d Off
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 34° 46′, E. 166° 42′†	30.06	763 5	60	15.6	66	nw.	5	.....	5	.....	nw.	0.1	3.	mod. cross	.....	fair	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn, N. 15° 36′, W. 160° 29′†	29.98	761.5	70	24.4	90	ene.	5	.....	8	.....	ene.	0	0	mod.	ene.	cloudy	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 33° 26′, E. 143° 06′	.....	.....	68	20.0	79	ssw.	7	.....	8	.....	sw.	8h'r	8h'r	mod.	nne.	cloudy	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 15° 45′, W. 97° 14′..†	29.90	759.4	79	26.1	82	wnw.	3	.....	2	.....	nw.	0	0	small	se.	clear	.....
S. S. Granada, Capt. M. Connolly, Panama, Panama..†	29.84	757.9	73	22.8	90	nnw.	3	.....	5?	.....	nnw.	0	0	.....	.....	clear?	.....
S. S. Zealandia, Capt. H. Webber, Sydney, N. S. W	29.93	760.2	69	20.6	100	s.	1	.....	5?	.....	.....	.....	.....	.....	.....	clear?	.....

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke Off St. Kitts, W. I.						ne.	4		2			0	0	sm'h		fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 40° 41′, W. 65° 10′*†	30.73	780.5	32	0.0	?	w.	3		2		w.	2 h'r	snow	sm'h	w.	fair	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, N. 49° 37′, W. 22° 41′*	30.35	770.9	53	11.7	79	s.	5		8		wsw.	0.05	1.3		sw.	cloudy	C. H. Grant, 2d Offi.
S. S. Vaderland, Capt. W. A. Beynon, Antwerp, Belgium			30	—1.1	30	sse.	1		10			0	0			overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels, New York, N. Y*	30.54	775.7	15	—9.4		n.	3		5		nne.	0	0			fair	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis N. 49° 46′, W. 10° 58′*	30.48	774.2	58.9	14.9	81	sse.	3		3		s.	0	0				
THINGVALLA LINE *Funch, Edye & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub Copenhagen, Denmark†	30.46	773.7	43.3	6.3		w.	3		10		w.	1 h'r	1 h'r			covered	J. T. Uiberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters																	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent.*																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 45° 30′, W. 44° 28′*†.	29.80	756.9	36	2.2		nnw.	6		8		nne.	shr's	shr's	h'vy	nw.	snowing	W. Thomas.
S. S. Celtic, Capt. B. Gleadell Liverpool, Eng.*†	30.38	771.6	42	5.6	?	w.	5		8		ne.	0	0			fair	B. Gleadell
S. S. Germanic, Capt. O. W. Kennedy. N. 46° 09′, W. 45° 32′*†	30.13	765.3	30	—1.1		n.	6		8		nw.	12 h'r	shr's	r'gh.	nnw.	squally	H. D. Jay, 4th Officer H. Goulden, 4th Officer
S. S. Republic, Capt. P. J. Irving,																	
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, Pensacola, Florida†	30.26	768.6	58	14.4	93	ene.	3		10 n		e.	0.16	4.1			drizzling	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona,																	
Bk. Alpha, Capt. Ole Grönn,																	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis N. 23° 08′, W. 64° 31′*†	30.22	767.6	75	23.9		e.	4		5		e.	2 h'r	2 h'r	very h'vy	ne.	fair	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin S. 11° 14′ W. 34° 19′						var.					ese.				e.	clear	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.77	781.5				sse	3				wsw.	0	0			cloudy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 14° 00′, W. 35° 54′†	30.00	762.0				ese.	3		2		ese.	0	0	sm'h	ese.		
S. Enoch Train, Capt. H. D. Chapman. Off Beachy Head, Eng.*	30.65	778.5				e.	1		9		e.	0	0	sm'h		overcast	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 49° 08′, W. 14° 45′*	30.51	774.9				se.	3		8		ssw.	2 h'r	light	mod.	nw	cloudy	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.67	779.0	24	—4.4		ne.	2		10		w.	0	0	sm'h		cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 56° 52′, W. 74° 08′†	29.24	742.7	50	10.0		ne.	3		10		ne.	0	0	mod	nnw.	cloudy	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 49° 22′, W. 23° 19′			53	11.7		s.	7		8		ssw.	0	0	high	w.	cloudy	
Bk. Gamaliel, Capt. D. J. Anthony, S. 20° 27′, W. 35° 27′*†	29.07	738.4				nne.	5		5		nne.	0	0	sm'h	nne.		
Bk. Geo. Booth, Capt. D. Williams																	D. Williams.
S. Hedwig, Capt. T. Minssen																	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 32° 49′, W. 24° 23′*	30.14	765.5				nne.	3		1		ne.	0	0	mod	ene.	clear	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 36° 36′, W. 6° 45′*†	30.50	774.7				se.					se.	0	0	mod.	e.	fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.43	772.9	59	15.0	48	calm	0		0							clear	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly N. 19° 30′, W. 38° 50′*†	30.00	762.0				e.					e.	0	0			fair	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 4° 55′, W. 24° 35′*	29.83	757.7	79.3	26.3	97	ne.	2		7		e.			sm'h			
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.41	772.4	56	13.3	93	ne.	5					0	0			foggy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 29° 25′, W. 16° 55′*†	30.30	769.6				sse.	4		3		sse.			sm'h	sw.		I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton. N. 24° 06′, W. 42° 50′*†	30.10	764.5				ene.										clear	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 26, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.43	772.8	69.4	20.8	87	se.			2		0			0	0	clear	Moiroud.
Algiers			30.56	776.2	57.2	14.0	76	ene.			2		1			0	0	fair	Nicolas.
La Calle			30.63	778.1	58.6	14.8	72	ene.			3		2			0	0	fair	Foufréde.
Tunis			30.64	778.2															Jacques.
Sfax																			Gau.
Saida			30.53	775.4	53.2	11.8	42	sw.			4		2			0	0	fair	Perès.
Tebessa			30.62	777.8	52.2	11.2	43	nnw.			1		3			0	0	pretty fair	Derché.
Geriville					46.4	8.0	77	e.			2		0			0	0	clear	Lonchamp.
Laghouat			30.65	778.6	46.0	7.8	67	e.			1		0			0	0	clear	Herbin.
Biskra					61.9	16.6	48	nw.			1		3			0	0	pretty fair	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.80	756.9	29.89	759.2	63 2	17.3	68	wsw.	17	76			1			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.24	768.0	30.83	783.1	29.8	— 1.2	81	se.			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.98	761.5	30.79	782.0	41.0	5.0	72	w.	9.8	4.4			0			0	0		Dr. Wierzbiski.
Eperies	29.81	757.2	30.75	781.1	33.8	1.0	75	calm			0		9		s.	0	0		Julius Mikolik.
Gratz	29.43	747.6	30.77	781.6	34.2	1.2	65	s.			1		0			0	0		Andreas Rospini.
Hermannstadt	29.23	742.5	30.77	781.6	32.2	0.1	92	nw.			2		2			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.32	744.7	30.78	781.7	26.6	— 3.0	96	e.			1		10			0	0	foggy	The Staff.
Lemberg	29.59	751.5	30.63	778.0	35.1	1.7	93	nw.			2		10			0	0		Dr. T. Stanecki.
Pola	30.48	774.1	30.52	775.1	49.3	9.6	82	n.			1		0			0	0		I. R. Hydrographic Office.
Szathmar	30.28	769.1	30.75	781.0	32.0	0.0	81	nw.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.49	774.5	30.80	782.2	31.6	— 0.2	87	calm			0		10			0	0		Karl Stancel.
Trieste	30.52	775.3	30.63	777.9	56.1	13.4	36	ne.			2		0			0	0		Rieder.
Vienna	30.04	763.1	30.82	782 7	29.1	— 1.6	88	calm			0		0			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.28	769.1	30.38	771.6	39.0	3.9	73	s.	20	8.9			7			0	0	misty	W. Boswell.
Armagh, Observatory	30.11	764.8	30.36	771.1	43.6	6.4	83	s.	16	7.2			10					overcast	S. Call.
Bidston, Liverpool Obs'y			30.47	773.9	37.0	2.8	80	se.	18	8.0			1					blue sky	John Hartnup.
Bolton, Sharples	29.91	759.7	30.47	773.9	35.0	1.7	81	ssw.					10					gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.03	762.7	30.43	772.9	38.6	3.7	86	sw.			1		10			0	0	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	82.0	27.8	61	ne			2		2					blue sky	Corpl. J. Surgenor.
Cardington			30.55	776.0	32.0	0.0	100	s.			0.4		10					foggy	John McLaren.
Chatham, School M. E.	30.44	773.2	30.58	776.7	32.4	0.2	88	sw.			1		10					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.19	766.8	30.42	772.7	43.9	6.6	88	se.			3		10					overcast	The Staff.
Fort Napier, Natal	27.75	704.8	29.97	761.2	76.2	24.6	52	ne.			2		3					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	89.0	31.7	66	w.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.21	767.3	48	8.9	77	s.			2		6			0	0	d. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.30	769.6	30.36	771.1	59.0	15.0	87	e.			4		9					overcast	Cpl. O. Baldwin
Glasgow, Observatory	30.19	766.8	30.40	772.1	39.0	3.9	76	s.			3		10 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.38	771.6	30.57	776.5	31.9	— 0.1	94	sse.			1		10					overcast	The Staff.
Guernsey	30.15	765.8	30.46	773.7	36.0	2.2	99	se.			1		10					foggy	A. Collenette, F. M. S.
Kew, Observatory	30.53	775.4	30.57	776.5	33.6	0.9	87	s.	5	2.2			10					misty	The Staff.
Leicester, Museum	30.24	768.1	30.51	774.9	35.0	1.7	92	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.45	773.4	30.53	775.4	59.0	15.0	64	ne.			2		6					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.25	768.3	30.30	769.6	73.0	22.8	90	e.			2		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.97	761.2	30.52	775.2	34.8	1.6	89	se.			2		10					misty	John Mac Email.
Oxford, Radcliffe Obs'y	30.31	769.9	30.54	775.7	31.6	— 0.2	89	sse.			1		10					misty	The Staff.
Plymouth	30.38	771.6	30.46	773.7	42.0	5.6	85	se.			3		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.28	769.1	41.5	5.3	79	sw.	11	4.9			0					blue sky	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.50	774.7	30.57	776.5	44.2	6.8	74	ne.			2		8					d. clouds	W. H. Lyne
Sheffield	30.20	767.1	30.50	774.7	36.4	2.4	85	sw.			1		10			0	0	overcast	W. F. Cooper.
Silloth Rectory	30.40	772.1	30.43	772.9	40.5	4.7	72	e.			4		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.47	773.9	37.0	2.8	74	s.	6	2.7			10					misty	Rev. S. J. Perry.
Straifield Turgiss					33.8	1.0	83	se.			1		10					overcast	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.30	769.6	30.38	771.6	47	8.3	77	se.			6		10					gloomy	W. Newcombe.
Valencia, Observatory	30.23	767.8	30.25	768.3	48.3	9.1	81	se.	27	12.1			10			blank	blank	misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.23	767.8	30.28	769.1	11	—11.7	100	se.	5	2.2			10 n			0	0	threatening.	H. J. Cundall, C. E.
Chatham, N. B.*	30.13	765.3	30.20	767.1	— 1	—18.3	?	calm	0	0			10 n		calm	0.01	0.3	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.90	759.4	29.92	760.0	12	—11.1	96	calm	0	0			10 n			0	0	light snow	J. McWilliams.
Fort Garry, Manitoba*	29.06	738.1	30.01	762.2	—16	—26.7	?	nw.	2	0.9		0	0			0	0	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.19	766.8	30.32	770.1	22	— 5.6	100	s.	5	2.2			10 n			inap.	inap.	heavy snow	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.47	748.5	29.82	757.4	36	2.2	96	s.	10	4.5			10 n			0.25	6.3	light rain	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.59	751.6	29.80	756.9	18	— 7.8	100	s.	3	1.3			10 n			0.27	6.9	sleeting	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.03	737.3	29.73	755.1	38	3.3	96	sw.	10	4.5			10 n		sw.	0.07	1.8	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.15	740.4	29.85	758.2	38	3.3	100	s.	9	4.0			fg.			0.29	7.4	foggy	H. Morgan.
Port Stanley, Ontario	29.20	741.7	29.87	758.7	36	2.2	96	w.	8	3.6			fg.			0.32	8.1	foggy	M. Payne.
Quebec, Quebec*	29.53	750.0	29.87	758.7	16	— 8.9	96	e.			5		10 n		e.	0.15	3.8	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.28	743.7	29.77	756.1	11	—11.7	87	se.	1	0.4			10 n			0.25	6.3	light snow	W. H. McIntyre.
Saugeen, Ontario*	29.03	737.3	29.76	755.9	38	3.3	100	sw.	7	3.1			10 s			0.12	3.0	cloudy	K. Stewart.
St. Andrews, N. B.	30.02	762.5	30.07	763.8	27	— 2.8	99	s.	12	5.4			10 n			0.07	1.8	heavy snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.37	771.4	30.44	773.2	—10	—23.3	100	calm	0	0		2 c	0			0	0	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.43	747.5	29.82	757.4	37	2.8	100	sw.	12	5.4			10 n			0.15	3.8	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.09	764.3	30.16	766.1	30	— 1.1	84	se.	14	6.3			10 n			0.37	9.4	heavy snow	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.22	767.6	30.50	774.7	0	—17.8		w.	2	0.9		0	0			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.89	759.2	29.92	760.0	79.0	26.1	75	e.	9.8	4.4		0	2 s			0.685	2.2	hazy	John Duthie.
Cape Town, O. G. H. Obs'y	29.92	760.0	29.96	761.0	86.5	30.3	61	sse	31	13.9		4	4			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-ka-Wei.																			
Sub-Series.																			
Hankow	30.41	772.4	30.70	779.8	39.3	4.1	55	une.			3		8			0.23	5.8	almost cov'd	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.54	775.8	30.57	776.5	36.0	2.2	67	nnw.	3.6	1.6			10			0.315	8.0	covered	M. Marc Dechevrens, S. J

Stations.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Amount and kind. Lo'er 0—10	Direction. Upper. From.	Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.64	778.2	30.69	779.4	37.8	3.2	97	nw.	11	5			10					foggy	Oversergent Fischer.
Fanöe	30.64	778.3	30.66	778.8	38.1	3.4	100	ssw.			2		10					foggy	Overloerer Lauridsen.
Godthaab, Greenland	29.64	754.9	29.69	754.0	—3.1	—19.5	100	n.			4		4						S. Kleinschmidt.
Stykkisholm, Iceland	28.84	732.4	28.88	733.5	31.6	—0.2		w.			2		10					snowing	A. O. Thorlacius.
Thorshavn	29.84	758.0	29.88	758.9	45.9	7.7	77	sw.	29	13			10					raining	Overloerer Bergh.
Vestervig	30.50	774.7	30.59	777.0	41.2	5.1	89	wsw.			4		9						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.87	758.7	30.54	775.7	49.6	9.8	89	se.			1	0	8			0	0	very cloudy	M. Labroue, Director.
Alençon, Normal School	30.05	763.3	30.60	777.3	30.6	—0.8	96	se.			3		k			0	0		M. Nicot, Director.
Arras, Engineer School	30.32	770.2	30.61	777.4	27.3	—2.6	66	s.			3		10			0	0	foggy	M. Klein, Commandant.
Avignon, Normal School	30.55	776.0	30.63	778.0	44.6	7	71	nne.			1		10			0	0	covered	M. Girand, Director.
Bar-sur-Seine	30.05	763.3	30.64	778.3	39.0	3.9	70	s.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.35	770.9	30.64	778.2	30.0	—1.1	92	e.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.66	778.7	33.8	1	96	ne.			1		fg		ne.	0	0	dense fog	M. Gobin, Director.
Bordeaux, Observatory	30.24	768.1	30.51	775.0	47.3	8.5	85	se.			1		8		se.	0	0	very cloudy	M. Rayet, Director.
Bourges, Normal School	30.00	762.0	30.58	776.6	43.7	6.5	91	nnw.			1		fg		nnw.	0	0	light fog	M. Postel, Director.
Brest, Naval Observatory	30.17	766.4	30.42	772.6	35.2	1.8	89	se.			1		10		se.	0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.45	773.5	30.53	775.5	33.8	1	74	se.			2		2		se.	0	0	slighly cl'dy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.26	768.6	30.60	777.1	37.6	3.1	89	se.			1		0			0	0	clear	M. Jadot, Director.
Charleville, Normal School	30.13	765.3	30.68	779.2	28.8	—1.8		ese.			3		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.17	741.0	30.54	775.8	56.8	13.8	48	se.			1		0			0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.80	756.9	30.70	779.7	33.1	0.6	88	ne.			1		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.80	756.8	30.73	780.5	28.4	—2	90	e.			3		2	e.	e.	0	0	light fog	Dr. Coulet, Director.
Gap, Normal School	28.09	713.6	30.74	780.8	42.8	6	63	w.			1					0	0		M. Jeangirard, Director.
Grésque, du. Rhone	29.49	749.0	30.64	778.3	54.9	12.7	52	n.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.90	759.4	30.72	780.3	34.2	1.2	85	ese.			1		0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.93	734.7	30.55	775.9	53.2	11.8	45	s.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.20	767.0	30.49	774.5	33.8	1	96	ne.			1		10		ne.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	29.92	759.9	30.49	774.5	58.6	14.8	61	ne.			1	0	2 s			0	0	slightly cl'dy	M. Chauvin, Director.
Lorient, Naval Observatory	30.39	771.8	30.49	774.4	35.6	2	100	e.			2		fg			0	0	foggy	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.58	751.3	30.71	780.1	29.8	—1.2	100	ne.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.29	769.3	30.62	777.8	30.4	—0.9	98	ese.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.35	771.0	30.63	778.0	58.1	14.5	62	wsw.			0.1		hz			0	0	huzy	M. Stephan, Director.
Montlouis l'Instituteur	25.18	639.5	30.02	762.5	37.8	3.2	58	sw.	15.0	6.7			8	w.					M. Cave, for Dr. Fines.
Montpellier, Normal School	30.52	775.1	30.63	778.0	49.3	9.6	66	ene.			2		5		sse.	0.012	0.3	cloudy	M. Galzin, Director.
Nancy, Normal School	29.85	758.2	30.69	779.6	25.2	—3.8	95	n.			1		10 kn			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.38	771.6	30.54	775.8	41.5	5.3	81	e.			0-1		mist			0	0	dense mist	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.48	774.1	30.59	777.0	56.3	13.4	72	se.	11.2	5.0			1		sw.	0.039	1.0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.46	545.0			22.8	—5.1		sw.			2		1		sw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.58	751.4	30.74	780.8	28.4	—2.0							fg			0	0	foggy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.56	649.1			40.3	4.6	70	s.			2	0	2 k			0	0	¾ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.53	775.4	30.56	776.2	46.0	7.8	89	se.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.33	770.3	30.55	776.0	43.9	6.6	85	se.			2		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.37	720.7	30.58	776.8	47.8	8.8	78	e.			2		k		w.	0	0		M. Colrat, Director.
Rouen, Normal School	30.58	776.7	30.63	777.9	28.0	—2.2	96	s.			2		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.37	771.3	30.64	778.3	37.4	3	74	ne.			1		1		ne.	0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.45	773.5	30.62	777.7	28.8	—1.8	97	e.			1		10		ese.	0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.83	757.7	30.57	776.4	54.0	12.2	69	sse.			4		1	w.		0	0	clear	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.09	764.2	30.58	776.6	28.8	—1.8	96	se.			1					0.004	0.1		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.87	758.8	30.75	781.0	28.9	—1.7	77	se.			2	0	1 s			0	0	foggy	Prof. Dr. Hoh.
Berlin	30.55	775.9	30.74	780.7	30.9	—0.6	100	sw.			1		10			0	0	foggy	Prof. Dr. Arndt.
Breslau	30.22	767.7	30.77	781.6	36.0	2.2	77	nw.			1		0			0	0		Royal University Obs'y.
Carlsruhe	30.28	769.2	30.77	781.5	24.8	—4.0	90	ne.			1		10	n.		0	0		Albert Senz.
Cassel	29.92	760.0	30.63	778.1	27.3	—2.6	89	s.			2		0			0	0		Dr. H. Mohl.
Frankfort on the Main	30.37	771.3	30.70	781.4	27.1	—2.7	81	s.			1		10			0	0		Physical Society.
Friedrichshafen	29.23	742.5	30.78	781.9	26.6	—3.0	94	ese.			2		10			0	0	foggy	Wilhelm, Chief Tel.
Hamburg	30.62	777.8	30.72	780.2	29.5	—1.4	100	se.			2		10			0	0	dense fog	E. Preller.
Kiel	30.66	778.8	30.68	779.2	36.0	2.2	93	ssw.			1		10			0.008	0.2		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.30	769.5	30.75	781.0	33.1	0.6	75	sse.			1		2			0	0		H. Leppig, Asst.
Magdeburg	30.54	775.8	30.75	781.1	29.5	—1.4	100	se.			2		10 ks			0	0	dense fog	Dr. Assmann.
Memel	30.54	775.8	30.59	777.0	39.0	3.9	95	nw.			4	1 c	0						Issermann.
Munich	28.81	731.8	30.72	780.2	27.9	—2.3	92	calm			0		10			0	0	foggy	Central Station.
Neufahrwasser	30.66	778.8	30.68	779.2	42.3	5.7	83	wnw.			2		7			0	0		A. Lothes.
Neustadt, Palatinate	30.20	767.1	30.74	780.7	25.7	—3.5		sse.			2		10	s.		0	0		Dickuether.
Stuttgart	29.72	754.9	30.68	779.3	30.2	—1.0	90	ne.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.70	779.8	30.72	780.4	33.4	0.8	100	ssw.			2		10			0	0	dense fog	Profs. Brandes & Reimer.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.12	765.0	30.52	775.2	50.9	10.5		ne.			4.0		2 k			0	0		Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.97	761.2	30.02	762.6	73.9	23.3	50	wsw.	23.	10.3	.....	.....	0	.....	.....	0	0	blue sky	
Deesa	29.44	747.7	29.91	759.7	81.5	27.5	36	wsw.	7.6	3.4	.....	.....	0	.....	.....	0	0	blue sky	
Bombay	29.87	758.7	29.91	759.6	81.9	27.7	58	nnw.	21	9.4	.....	.....	0	.....	.....	0	0	blue sky	
Poona, Yarrowda	28.05	712.5	29.88	758.8	88.8	31.6	23	sw.	5	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Belgaum	27.37	695.3	29.87	758.7	85.5	29.7	14	ene.	6	2.7	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.14	740.1	29.90	759.4	69.7	20.9	59	nw.	1.2	0.5	.....	.....	4	.....	.....	0	0	blue sky	
Roorkee	28.95	735.4	29.87	758.7	71.2	21.8	57	nw.	1.2	0.5	.....	.....	5	.....	.....	0	0	.....	
Agra	29.32	744.7	29.89	759.1	79.2	26.2	37	w.	3.0	1.3	.....	.....	2	.....	w.	0	0	.....	
Nagpur	28.86	732.9	29.89	759.2	84.5	29.2	27	calm	2.7	1.2	.....	.....	0	.....	.....	0	0	blue sky	
Jubbulpore	28.60	726.4	29.98	761.6	70.5	21.4	27	s.	2.2	1.0	.....	.....	5	ne.	.....	0	0	d. clouds	
Lucknow	29.49	749.0	29.87	758.6	77.7	25.4	36	wsw.	2.3	1.0	.....	.....	3	.....	.....	0	0	d. clouds	
Allahabad	29.55	750.6	29.87	758.6	74.0	23.3	55	calm	1.9	0.8	.....	.....	0	.....	.....	0	0	blue sky	
Patna	29.67	753.5	29.86	758.3	74.5	23.6	49	wnw.	2.7	1.2	.....	.....	0	.....	.....	0	0	blue sky	
Hazaribagh	27.85	707.4	29.87	758.6	76.6	24.8	17	w.	8.0	3.6	.....	.....	0	.....	.....	0	0	blue sky	
Cuttack	29.82	757.3	29.90	759.4	80.5	26.9	41	calm	.....	.....	.....	.....	0	.....	.....	0	0	blue sky	
Calcutta, Alipore	29.84	758.0	29.86	758.5	75.3	24.1	56	w.	1.0	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Dhubri	29.72	754.8	29.84	758.0	71.0	21.7	65	calm	0.6	0.3	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.82	757.5	29.92	759.8	72.1	22.3	85	sw.	2.8	1.2	.....	.....	1	.....	.....	0	0	blue sky	
Sibsagar	29.55	750.4	29.90	759.3	61.4	16.3	97	sw.	2.1	0.9	.....	.....	10	w.	w.	0.09	2.3	overcast	
Jeypore	28.45	722.6	29.90	759.6	76.5	24.7	35	nw.	4.2	1.9	.....	.....	4	nw.	.....	0	0	d. clouds	
Zanzibar, Africa	29.77	756.1	.....	.....	84.3	29.1	73	ne.	7.4	3.3	.....	ck	9pk;k	.....	ene.	0	0	threatening.	
Trichinopoly	29.67	753.6	.....	.....	83.6	28.7	39	calm	0	0	.....	.....	0	.....	.....	0	0	blue sky	
Bellary	28.40	721.3	.....	.....	88.4	31.3	32	e.	2.5	1.1	.....	0	0	.....	.....	0	0	blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.22	767.5	30.64	778.3	55.8	13.2	26	ne.	4.2	1.9	.....	.....	0	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	30.15	765.9	30.71	779.9	30.9	— 0.6	96	sw.	3.1	1.4	.....	.....	3	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	30.54	775.7	30.65	778.6	41.0	5.0	74	nw.	2.5	1.1	.....	.....	0	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.73	755.2	30.69	779.5	37.2	2.9	81	ne.	0.7	0.3	.....	.....	0	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	30.44	773.1	30.63	778.1	56.7	13.7	28	ne.	0.7	0.3	.....	.....	0	.....	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.68	728.5	30.69	779.4	46.4	8.0	19	w.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. D. O. Bruno.
Pesaro	30.58	776.6	30.63	778.0	45.0	7.2	76	w.	4.2	1.9	.....	.....	0	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	30.37	771.3	30.63	778.1	43.3	6.3	45	se.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	30.55	776.0	30.64	778.3	49.8	9.9	56	ne.	2.5	1.1	.....	.....	0	.....	.....	0	0	.....	Prof. P. Monte.
Rome	30.43	772.8	30.61	777.4	50.0	10.0	46	nw.	1.3	0.6	.....	.....	0	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	30.29	769.4	30.56	776.1	53.6	12.0	76	nw.	18.6	8.3	.....	.....	6	nw.	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.66	753.4	30.58	776.8	50.0	10.0	74	ese.	2.5	1.1	.....	.....	0	.....	.....	0	0	.....	Prof. D. Conti.
Cagliari	30.38	771.6	30.58	776.7	56.8	13.8	66	nw.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	30.36	771.1	30.62	777.7	55.8	13.2	57	n.	4.9	2.2	.....	.....	9	n.	.....	0	0	.....	Prof. G. Ciaccatore.
Syracuse	30.51	774.9	30.56	776.1	54.5	12.5	60	ne.	6.3	2.8	.....	.....	2	wnw.	.....	0	0	.....	Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	30.04	762.9	30.58	776.7	52.9	11.6	58	se.	0	0	.....	.....	1	ene.	.....	0	0	.....	Prof. T. Brioschi.
Stelvio	22.58	573.4	.....	.....	28.4	— 2.0	30	se.	.....	.....	1	.....	0	.....	.....	0	0	clear	Prof. P. F. Denza.
Valdobbia	22.52	574.6	.....	.....	25.7	— 3.5	28	e.	.....	.....	2	.....	0	.....	.....	0	0	clear	Prof. P. F. Denza
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.64	752.8	29.67	753.6	36.9	2.7	84	wsw.	32.4	14.5	.....	0	5 ks;n	.....	.....	0.180	4.8	stormy	
Hakodate	29.57	751.1	29.58	751.3	40.2	4.6	69	sw.	33.0	14.7	.....	.....	6	.....	ssw.	0.478	12.1	cloudy	
Hiroshima, I. M. Obs'y	30.15	765.8	30.16	765.0	40.7	4.8	61	n.	5.0	2.2	.....	9ck;cs	0	w.	.....	0	0	cloudy	K. Sasaki.
Kanazawa	30.14	765.5	30.25	768.3	42.1	5.6	84	nw.	12.6	5.6	.....	.....	10 n	.....	.....	.....	.....	light rain	S. Endo.
Kioto	29.84	757.9	30.02	762.5	45.9	7.7	66	wnw.	8.6	3.8	.....	ck	10 s	.....	w.	0.575	14.6	cloudy	M. Tojima.
Kochi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Nagasaki, I. M. Obs'y	30.06	763.5	30.27	768.8	42.3	5.7	67	nw	5.6	2.5	.....	4 c	0	.....	.....	0.020	0.5	clear	S. Takehayashi.
Niigata	29.85	758.2	29.89	759.2	43.9	6.6	76	w.	16.0	7.1	.....	10 ck	0	.....	.....	0.495	12.6	covered	
Nobiru	29.70	754.4	29.72	754.9	46.5	8.1	67	nnw.	15.5	6.9	.....	.....	10 s	.....	.....	0	0	cloudy	H. Midzushina.
Sapporo	.....	.....	.....	.....	33.9	1.1	95	e.	2.4	1.1	.....	.....	4	.....	.....	0.140	3.6	clear	
Tokei Obs'y, Yeddo	29.65	753.1	29.72	754.9	51.7	10.9	91	nw.	2.5	1.1	.....	ck	9 ks;s	.....	sw	0	0	cloudy	The Staff.
Wakayama	30.00	762.0	30.06	763.5	48.3	9.1	73.	wnw.	10.2	4.6	.....	ck	10 s	.....	wnw.	0.207	5.3	cloudy	Y. Kuwamoea
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.66	753.4	29.85	758.2	84.4	29.1	68	w.	11.0	4.9	.....	2 c;cs	4 k	.....	wnw.	0	0	fair	Oliver & Figot.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	23.66	601.0	29.88	759.0	50.9	10.5	79	calm	0	0	.....	0	0	.....	.....	0	0	fine	Vicente Fernandez.
Leon	24.45	621.0	30.22	767.6	52.9	11.6	78	nw.	.....	.....	1	0	0	.....	.....	0	0	foggy	Prof. M. Leal.
Mazatlan	29.75	755.8	30.02	762.5	65.5	18.6	86	n.	.....	.....	1	.....	10 n	.....	sw.	0	0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.08	586.2	30.23	767.8	48.2	9.0	80	calm	0	0	.....	0	0	.....	.....	0	0	.....	The Staff.
Morelia	24.29	617.1	30.61	777.5	49.5	9.7	80	ne.	.....	.....	3	2 c	0	s.	.....	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.92	607.6	30.01	762.3	47.3	8.5	73	calm	.....	.....	0	0	0	.....	.....	0	0	.....	M. V de Leon, M. E.
Puebla, Catholic Institute	23.43	595.1	30.35	770.9	43.7	6.5	68	calm	0	0	.....	0	0	.....	.....	0	0	.....	Prof. P. Spina.
San Luis Potosi	24.21	614.8	30.22	767.8	50.5	10.5	55	sw.	.....	.....	1	0	0	.....	.....	0	0	fine	G. Barroeta, M. D
Tacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházare.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	22.51	571.8	30.23	767.8	48.0	8.9	42	sw.	5.8	2.6	.....	0	0	.....	.....	.....	.....	clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.65	778.4	30.65	778.4	29.8	— 1.2	.....	sse.	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Groningen	30.57	776.5	30.63	777.9	29.8	— 1.2	.....	s.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Helder	30.64	778.2	30.64	778.2	28.4	— 2.0	.....	sse.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.63	778.1	30.63	778.1	27.7	— 2.4	.....	se.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	30.61	777.6	30.66	778.8	26.2	— 3.2	93	se.	.....	.....	1	.....	10	.....	.....	0	0	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.37	771.4	30.43	773.0	44.6	7.0	94	s.	22	10			10			0.102	2.6	raining	
Brono	29.90	759.5	29.94	760.5	41.0	5.0	97	sw.	27	12			10			0.354	9.0	raining	
Christiania	30.26	768.7	30.42	772.6	41.9	5.5	76	wnw.	0	0			5			0	0		
Gjæsvær	29.36	745.7	29.38	746.3	23.0	— 5.0		w.			8		10						
Lodingen	29.74	755.4	29.78	756.6	30.7	— 0.7	83	wnw.			6		10			0.335	8.5	snowing	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.0	15.0	75	se.	14.3	6.4			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.41	746.9	30.44	773.1	50.9	10.5	68	e.	0.7	0.3			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.02	762.4	30.10	764.6	59.2	15.1	88	e.	2.5	1.1			10			0.697	17.7	raining	Capt. D. A. de Cunha.
Lisbon, Observatory	30.08	764.0	30.45	773.4	51.1	10.6	79	ne.	6.9	3.1			8	wsw.		0	0		The Staff.
Ponta Delgada, Azores	30.01	762.2	30.08	764.0	64.4	18.0	78	s.	8.7	3.9			4			0	0		
Saint Paul de Loando	29.68	753.9	29.88	759.0	77.0	25.0	100	nnw.	0.7	0.3			10			0	0		
Serra da Estrella	25.54	648.6	30.50	774.6	32.0	0.0	100	se.	12.5	5.6			8	s.		blank	blank	foggy	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.05	737.8	30.27	768.9	— 6.9	—21.6		s.	7	3		3 c	0			0	0		Major K. Lasarew.
Archangel	29.69	754.1	29.71	754.6	27.1	— 2.7	89	wnw.	13	6			8 ks			0	0		Capt. Sseliwerstow.
Astrakhan	30.15	765.7	30.06	763.6	21.4	— 5.9	74	w.	7	3		c	8 s			0.110	2.8	light clouds	Capt. Wisganow.
Barnaul	29.85	758.3	30.40	772.1	18.3	— 7.6	89	sw.	2	1			10			blank	blank	light clouds	Meteorological Obs'y.
Dorpat	30.04	762.9	30.29	769.3	41.9	5.5	50	wnw.	13	6		2 c	0			0	0		Observatory.
Ekaterinburg	28.52	724.5	29.52	749.8	18.1	— 7.7	78	ssw.	7	3			10			0	0		Meteorological Obs'y.
Kasan	29.00	736.6	29.28	743.7	19.8	— 6.8	85	ssw.	22	10			10			0.087	2.2		Observatory.
Kertch	30.30	769.7	30.32	770.2	37.9	3.3	82	w.	4	2			10 n			0	0		Lagorio & Sastyrex.
Kieff	29.01	752.2	30.28	769.1	37.2	2.9	85	nw.	22	10		c;cs	10 ks			0.016	0.4		Observatory.
Lugan	29.81	757.1	30.02	762.5	34.9	1.6	93	w.	22	10			10			0.004	0.1		Meteorological Obs'y.
Moscow	28.99	736.3	29.47	748.5	40.6	4.8	50	n.	27	12		0	4 ks			0	0		Meteorological Obs'y.
Nikolaiev	30.40	772.2	30.47	774.0	36.5	2.5	91	wsw.	13	6			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.10	764.6	30.19	766.8	— 9.4	—23.0	91	calm	0	0		0	0			0	0		Lieut. Iwanow.
Pekin, China	30.43	773.0	30.58	776.6	26.4	— 3.1	40	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	29.96	760.9	29.97	761.3	39.9	4.4	59	nw.	20	9		1 c	0			0	0	light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.64	727.4	30.34	770.7	20.5	— 6.4	97	calm	45	20			0			0	0		Teich, A. M.
Tiflis	28.82	732.1	30.31	769.9	35.8	2.1	39	nw.	0	0		4 cs	0			0	0		Physical Observatory.
Warsaw	30.25	768.4	30.71	779.9	33.4	0.8	98	w.	9	4			10 n					raining	Astronomical Obs'y.
Wilna	30.06	763.5	30.50	774.7	43.9	6.6	81	nw.	7	3			3			0	0	light clouds	Berg, Assistant.
Yeniseisk	30.15	765.7	30.47	773.8	7.5	—13.6	76	calm	0	0			0			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.15	765.8	46	7.8	92	ssw.			7		10			0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.50	774.6	30.60	777.1	55.4	13.	73	sw.	2.5	1.1			1 k			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.43	772.9	30.49	774.4	55.4	13.0	57	se.	4.3	1.9		2	7	sw.		0	0	almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.44	697.0	30.54	775.8	43.3	6.3	59	se.	7.6	3.4		0	8			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.24	717.4	30.56	776.3	47.3	8.5	68	ne.	9.6	4.3		0	8			0	0	cloudy	The Staff.
Murcia, Met. Obs'y	30.40	772.2	30.56	776.1	58.6	14.8	80	ene.	4.5	2.0		4	4	wsw		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.40	746.7	30.32	770.1	48.2	9.0	88	se.	12.5	5.6			10			0.114	2.9	raining	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.09	764.4	30.16	766.1	68.6	20.3	87	ese.	4.9	2.2		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.96	760.9	30.02	762.4	78.2	25.7	72	e.	1.1	0.5		0	8			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.27	768.9	30.37	771.4	58.1	14.5	63	ese.	20.1	9.0			10		se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.04	763.0	30.13	765.3	74.8	23.8	86	e.	15.9	7.1		4 c	4 km	e.	e.	0.059	1.5	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.93	760.2	30.06	763.5	74.1	23.4	82	nw.	5.1	2.3		2 cs	6 k	sw.	nw.	0	0	cloudy	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.85	758.3	29.89	759.3	32.4	0.2	89	nw.			4		5			0	0		
Umea	30.11	764.8	30.16	766.1	38.1	3.4	63	sw.			4		9			0	0		
Hernosand	30.19	766.8	30.24	768.1	42.6	5.9	51	w.			2		5			0	0		
Stockholm	30.30	769.7	30.48	774.2	42.1	5.6	75	wsw.			2		1			0	0		
Wisby	30.42	772.7	30.48	774.2	41.7	5.4	87	wsw.			2		3			0	0		
SUB SERIES.																			
Upsala	30.34	770.7	30.43	772.9	40.6	4.8	80	sw.	6.9	3.1			3			0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.26	743.1	30.76	781.4	28.4	— 2.0	94	e.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.63	778.0	44.2	6.8	67	nne.	7	3.0			8		n.	0	0		The Observatory.
Valona			30.52	775.1	53.8	12.1		nw.			1		0			0	0	clear	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.21	767.4	57.0	13.9	51	ne.			3	0	0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	29.86	758.4	29.95	760.7	38	3.3	82	s.	6	2.7			10 n		s.	0.22	5.6	light rain	
Alpena, Michigan	29.07	738.4	29.78	756.4	35	1.7	100	se.	3	1.3			10 n			0.09	2.3	light rain	
Atlanta, Georgia	29.01	736.8	30.24	768.1	41.0	5.0	92	e.	7	3.1			10 n		calm	0.12	3.0	light rain	
Atlantic City, New Jersey	30.12	765.0	30.13	765.3	37.4	3.0	100	w.	8	3.6			10 n			0.69	17.5	light rain	
Augusta, Georgia	30.08	764.0	30.28	769.1	40.2	4.6	89	calm	0	0		0	fg.			0.21	5.3	clear	
Baltimore, Maryland	30.06	763.5	30.11	764.8	36	2.2	100	s.	6	2.7			10n;fg		sw.	0.81	20.6	light rain	
Barnegat, New Jersey	30.09	764.3	30.11	764.8	37.0	2.8	100	sw.	11	4.9			10 n		w.	1.17	29.7	light rain	
Bismarck, Dakota	28.07	713.0	30.07	763.8	— 9	—22.8	100	nw.	4	1.8		0	1 s		calm	0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	26.91	683.5	29.84	757.9	30	— 1.1	68	e.	3	1.3			10 s		calm	inap.	inap.	cloudy	
Boston, Massachusetts	29.79	756.7	29.96	761.0	41.0	5.0	100	sw.	11	4.9			10 n		sw.	0.48	12.2	light rain	
Brownsville, Texas	29.84	757.9	29.89	759.2	68	20.0	100	s.	13	5.8			10 s			0.02	0.5	cloudy	
Buffalo, New York	29.11	739.4	29.91	759.7	43	6.1	96	sw.	14	6.3			10n;fg			0.25	6.3	light rain	
Burlington, Vermont	29.53	750.0	29.84	757.9	34.0	1.1	88	s.	15	6.7			10 s		s.	0.02	0.5	cloudy	
Cairo, Illinois	29.51	749.5	29.93	760.2	56.6	13.7	99	se.	12	5.4			10 s		calm	0.29	7.4	threatening	
Campo, California	27.47	697.7	30.10	764.5	21	— 6.1	87	s.	1	0.4		0	0			0.13	3.3	clear	
Camp Thomas, Arizona	27.29	693.2	30.12	765.0	24.5	— 4.2	86	calm			0	2 cs	0			0.01	0.3	clear	
Cape Henry, Virginia	30.18	766.6	30.20	767.1	42	5.6	92	w.	5	2.2			10 s			0	0	cloudy	
Cape May, New Jersey	30.09	764.3	30.12	765.0	37	2.8	89	sw.	15	6.7			10 n		sw.	0.38	9.6	light rain	
Castroville, Texas	29.11	739.4	29.96	761.0	64	17.8	93	s.	4	1.8			10 s			0.01	0.3	cloudy	
Cedar Keys Florida	30.21	767.3	30.23	767.8	64	17.8	93	se.	8	3.6			fg.			0	0	dense fog	
Champaign, Illinois	28.91	734.3	29.78	756.4	46.3	7.9	93	s.	16	7.2			10 s		s.	0.41	10.4	cloudy	
Charleston, S. Carolina	30.17	766.3	30.23	767.8	60	15.6	100	sw.	9	4.0			fg.			0.17	4.3	dense fog	
Charlotte, N. Carolina	29.30	744.2	30.19	766.8	36.0	2.2	89	n.			1		fg.			0.47	11.9	dense fog	
Chattanooga, Tennessee	29.35	745.5	30.21	767.3	43.0	6.1	93	se.	4	1.8			fg.		calm	0.31	7.9	dense fog	
Cheyenne, Wyoming	23.74	603.0	29.99	761.7	16.2	— 8.8	53	nw.	24	10.7		0	0			0.04	1.0	clear	
Chicago, Illinois	28.99	736.3	29.74	755.4	48.5	9.2	91	s.	5	2.2			fg.			0.07	1.8	dense fog	
Chincoteague, Virginia	30.16	766.1	30.18	766.6	37	2.8	100	sw.	4	1.8			10 s		sw.	0.17	4.3	cloudy	
Cincinnati, Ohio	29.27	743.4	29.96	761.0	55	12.8	80	s.	4	1.8			10 s			1.03	26.2	cloudy	
Cleveland, Ohio	29.14	740.1	29.92	760.0	49	9.4	93	s.	10	4.5			10 s		sw.	0.48	12.2	cloudy	
Coleman City, Texas	28.08	713.2			52	11.1	86	w.	11	4.9		0	0			0.01	0.3	clear	
Columbus, Ohio	29.05	737.9	29.95	760.7	48	8.9	93	s.	9	4.0			10 n			0.72	18.3	light rain	
Concho, Texas	28.03	711.9	30.05	763.3	49	9.4	92	calm	0	0			10 s			0	0	cloudy	
Davenport, Iowa	28.96	735.6	29.66	753.4	48	8.9	86	s.	4	1.8			fg.		calm	0.07	1.8	dense fog	
Dayton, Washington T'y	27.88	708.1	29.68	753.9	31	— 0.6	81	s.	12	5.4		0	0			0.01	0.3	clear	
Deadwood, Dakota	25.05	636.3	30.00	762.0	10.9	—11.7	73	calm	0	0		0	0			0	0	clear	
Decatur, Texas					54	12.2	86	w.	8	3.6		0	5 s			0	0	fair	
Delaware Breakwater, Del.	30.10	764.5	30.12	765.0	37	2.8	100	sw.	22	9.8			10n;fog		sw.	0.30	7.6	light rain	
Denison, Texas	29.04	737.6	29.88	758.9	58.6	14.8	87	sw.	14	6.3			10 s			inap.	inap.	cloudy	
Denver, Colorado	24.50	622.3	30.02	762.5	30.0	— 1.1	54	n.	22	9.8		0	0			0.03	0.8	clear	
Des Moines, Iowa	28.61	726.7	29.58	751.3	42	5.6	100	n.	2	0.9			fg			0.02	0.5	dense fog	
Detroit, Michigan	29.11	739.4	29.87	758.7	47.3	8.5	93	s.	8	3.6			fg.			0.30	7.6	dense fog	
Dodge City, Kansas	27.17	690.1	29.92	760.0	33	0.6	81	nw.	19	8.5		0	0			0	0	clear	
Dubuque, Iowa	28.88	733.5	29.65	753.1	41.2	5.1	92	s.	1	0.4			fg.		calm	0.04	1.0	dense fog	
Duluth, Minnesota	29.12	739.6	29.88	758.9	16	— 8.9	83	w.	4	1.8			10 s		w.	0.01	0.3	cloudy	
Eagle Pass, Texas	29.14	740.1	29.98	761.5	58.0	14.4	100	nw.	6	2.7			10 n			inap.	inap.	light rain	
Eagle Rock, Idaho	25.00	635.0	29.96	761.0	18	— 7.8	87	sw.	24	10.7			10 s		sw.	0.06	1.5	threatening	
Eastport, Maine	30.02	762.5	30.09	764.3	31.5	— 0.3	94	s.	22	9.8			10 n		s.	0.11	2.8	heavy snow	
El Paso, Texas	26.31	668.3	30.19	766.8	42.1	5.6	52	w.	4	1.8		5 cs	0	w.		0	0	fair	
Erie, Pennsylvania	29.14	740.1	29.91	759.7	49	9.4	86	s.	7	3.1			10 n		s.	0.67	17.0	light rain	
Escanaba, Michigan	29.04	737.6	29.76	755.9	35	1.7	89	w.	3	1.3			10 s		w.	0.19	4.8	cloudy	
Florence, Arizona																			
Fort Apache, Arizona	24.99	634.7	30.11	764.8	18	— 7.8	61	e.	6	2.7		0	0			0.32	8.1	clear	
Fort Assinnaboine, Montana	27.08	687.8	30.12	765.0	— 9	—22.8	61	sw.	1	0.4		0	0			0.03	0.8	clear	
Fort Bennett, Dakota	28.26	717.8	30.00	762.0	5	—15.0	76	n.	6	2.7		0	0			0	0	clear	
Fort Benton, Montana	27.11	688.6	30.09	764.3	—14	—25.6	50	calm	0	0		0	0			0.05	1.3	clear	
Fort Buford, Dakota	27.90	708.6	30.10	764.5	— 5	—20.6	65	w.	8	3.6			10 s		calm	0	0	cloudy	
Fort Custer, Montana	26.66	677.2	30.04	763.0	— 7	—21.7	100	nw.	7	3.1		0	5 s		calm	0	0	fair	
Fort Davis, Texas	25.04	636.0	30.02	762.5	52	11.1	52	nw.	7	3.1		0	1 s		calm	0	0	clear	
Fort Elliott, Texas	27.03	686.5	29.96	761.0	41	5.0	67	sw.	16	7.2		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.22	742.2	29.82	757.4	61.5	16.4	87	s.	8	3.6			10 s		s.	0.04	1.0	cloudy	
Fort Grant, Arizona	25.22	640.6	30.12	765.0	21	— 6.1	64	e.	4	1.8		2 cs	0			0.05	1.3	clear	
Fort Griffin, Texas	28.60	726.4	29.98	761.5	54	12.2	89	sw.	10	4.5		3 cs	0	sw.		0	0	clear	
Fort Keogh, Montana	27.38	695.4	30.07	763.8	— 4	—20.0	68	nw.	6	2.7		0	0			0	0	clear	
Fort Macon, North Carolina	30.24	768.1	30.25	768.3	56	13.3	93	sw.	12	5.4			10 s		sw.	0	0	cloudy	
Fort McKavett, Texas	27.77	705.3	30.16	766.1	50.2	10.1	59	calm	0	0			8 k			0	0	cloudy	
Fort Missoula, Montana	26.39	668.0	29.76	755.9	24	— 4.4	88	se.	2	0.9			10 n			0.12	3.0	light snow	
Fort St. Michaels, Alaska	29.56	750.8	29.60	751.8	14	—10.0	82	e.	10	4.5			10 s			0	0	cloudy	
Fort Shaw, Montana	26.16	664.5	30.02	762.5	— 7	—21.7	100	calm	0	0		1 cs	0			0.06	1.5	clear	
Fort Sill, Indian Territory	28.59	726.2	29.92	760.0	53.5	11.9	82	s.	10	4.5			10 s			inap.	inap.	cloudy	
Fort Stevenson, Dakota	28.04	712.2	30.10	764.5	—14	—25.6	49	nw.	4	1.8		0	0			0	0	clear	
Fort Verde, Arizona					30	— 1.1	80	sw.			1	0	0			0.30	7.6	clear	
Fredericksburg, Texas																			
Galveston, Texas	29.93	760.2	29.97	761.2	64	17.8	94	s.	11	4.9		6 k	0	s.		0.01	0.3	fair	
Grand Haven, Michigan	29.04	737.6	29.76	755.9	42.5	5.8	96	s.	12	5.4			fg.			0.49	12.4	dense fog	
Hatteras, North Carolina	30.24	768.1	30.26	768.6	58	14.4	86	s.	20	8.9		9 k	0	sw.		0	0	cloudy	
Helena, Montana	25.48	647.2	29.90	759.4	— 2	—18.9	68	n.	4	1.8			10 s			0	0	cloudy	
Henrietta, Texas	28.90	734.0	29.97	761.2	54	12.2	86	s.	12	5.4			10 s			0	0	cloudy	
Huron, Dakota	28.44	722.4	29.68	761.5	7	—13.9	69	nw.	13	5.8			10 s			0	0	cloudy	
Indianapolis, Indiana	29.00	736.6	29.84	757.9	50	10.0	93	s.	6	2.7			10n;fog		s;calm	1.01	25.7	light rain	
Indianola, Texas	29.91	759.7	29.91	760.5	65.4	18.6	100	s.	9	4.0		6 k	3 s	s.	s.	inap.	inap.	cloudy	
Jacksboro, Texas	28.71	729.2	29.95	760.7	54	12.2	86	sw.	12	5.4		0	5 ks		sw.	0	0	fair	
Jacksonville, Florida	30.20	767.1	30.25	768.3	65	18.3	93	s.	6	2.7			10 s		s.	0.48	12.2	cloudy	
Keokuk, Iowa	28.95	735.3	29.65	753.1	48.0	8.9	100	se.	6	2.7			fg.		inap.	inap.	inap.	dense fog	
Key West, Florida	30.15	765.8	30.18	766.6	72.0	22.2	76	e.	8	3.6		0	2 k		e.	0	0	clear	
Kittyhawk, North Carolina	30.22	767.6	30.24	768.1	57	13.9	80	sw.	14	6.3			10 s		w.	0	0	cloudy	
Knoxville, Tennessee	29.11	739.4	30.19	766.8	43.3	6.3	98	sw.	2	0.9			10s;fg			0.01	0.3	cloudy	
La Crosse, Wisconsin	28.87	733.3	29.71	754.6	35	1.7	79	n.	3	1.3			10 s			0.02	0.5	cloudy	
La Mesilla, New Mexico	26.08	662.4	30.11	764.8	40.0	4.4	54	calm	0	0		0	8 s			inap.	inap.	cloudy	
Leavenworth, Kansas	28.66	728.0	29.62	752.3	54	12.2	86	s.	17	7.6		2 cs	3 s	w.	sw.	0.02	0.5	fair	
Lewiston, Idaho	28.81	731.8	29.68	753.9	33.7	0.9	97	w.	7	3.1			10 n		calm	0.08	2.0	light snow	
Little Rock, Arkansas	29.54	750.3	29.87	758.7	64	17.8	93	s.	13	5.8		0	7 s		sw.	0.07	1.8	clearing	
Los Angeles, California	29.74	755.4	30.14	765.5	38.2	3.4	72	nw.	8	3.6		0	0			0	0	clear	
Louisville, Kentucky	29.32	744.7	29.92	760.0	56.0	13.3	93	s.	7	3.1			10 n		s.	0.67	17.0	light rain	
Lynchburg, Virginia	29.43	747.5	30.15	765.8	35.2	1.8	88	sw.	1	0.4			fg			0.30	7.6	dense fog	
Mackinac City, Michigan																			
Madison, Wisconsin	28.61	726.7	29.70	754.4	39	3.9	89	s.	11	4.9			fg.		calm	0.09	2.3	dense fog	
Marquette, Michigan	29.06	738.1	29.84	757.9	29	— 1.7	77	sw.	2	0.9		2 c	0	w.		0.02	0.5	clear	
Mason, Texas	28.29	718.6	30.03	762.7	59	15.0	87	s.	8	3.6		0	4 s		s.	0	0	fair	
Memphis, Tennessee	29.62	752.3	29.98	761.5	62	16.7	96	s.	12	5.4			10 s			0.07	1.8	cloudy	
Milwaukee, Wisconsin	28.90	734.0	29.70	754.4	41	5.0	92	se.	4	1.8			fg.			0.11	2.8	dense fog	

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.08	764.0	30.12	765.0	61.0	16.1	100	s.	3	1.3	.....	4 cs	3 ks	.....	.....	0.40	10.2	fair	
Montgomery, Alabama	29.94	760.5	30.18	766.6	48.5	9.2	98	se.	4	1.8	.....	.....	fg	.....	.....	0.04	1.0	dense fog	
Moorhead, Minnesota	28.82	732.0	29.92	760.0	— 6	—21.1	62	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Morgantown, W. Virginia	28.99	736.3	30.05	763.3	54.0	12.2	90	sw.	1	0.4	.....	.....	10 n	.....	sw.	1.34	34.0	light rain	
Mt. Washington, N. H.	23.48	596.4	30.10	764.5	25.0	— 3.9	94	w.	36	16.1	.....	.....	10n;fg	.....	w.	0.22	5.6	light snow	
Nashville, Tennessee	29.48	748.8	30.04	763.0	55.0	12.8	91	s.	9	4.0	.....	.....	10 ks	.....	s.	0.05	1.3	cloudy	
New Haven, Connecticut	29.89	759.2	30.01	762.2	37.5	3.1	94	sw.	14	6.3	.....	.....	10n;fg	.....	sw.	1.09	27.7	light rain	
New London, Connecticut	29.98	761.5	30.03	762.7	40	4.4	100	w.	14	6.3	.....	.....	10 n	.....	w.	1.26	32.0	heavy rain	
New Orleans, Louisiana	30.05	763.3	30.11	764.8	62.5	16.9	98	s.	3	1.3	.....	.....	fg	.....	.....	0	0	dense fog	
Newport, Rhode Island	29.97	761.2	30.02	762.5	41.0	5.0	100	sw.	15	6.7	.....	.....	10 n	.....	sw.	1.28	32.5	heavy rain	
New River, N. Carolina	.....	.....	.....	.....	58	14.4	100	sw.	.....	.....	4	.....	10 s	.....	sw.	0	0	cloudy	
New Shoreham, Rhode I'd.	30.01	762.2	30.04	763.0	41.4	5.2	100	w.	12	5.4	.....	.....	10 n	.....	w.	0.71	18.0	light rain	
New York, New York	29.90	759.4	30.09	764.3	34	1.1	100	sw.	11	4.9	.....	.....	10 n	.....	sw.	0.86	21.8	light rain	
Norfolk, Virginia	30.17	766.3	30.20	767.1	46	7.8	83	w.	3	1.3	.....	.....	10 ks	.....	.....	inap.	inap.	cloudy	
North Platte, Nebraska	26.83	681.5	29.95	760.7	29.6	— 1.3	88	nw.	14	6.3	.....	.....	10 n	.....	.....	0.01	0.3	light snow	
Olympia, Washington T'y	29.52	749.8	29.56	750.8	32.0	0.0	88	s.	2	0.9	.....	.....	10 n	.....	calm	0.23	5.8	light snow	
Omaha, Nebraska	28.30	718.8	29.57	751.1	37.5	3.1	91	n.	12	5.4	.....	.....	10n;fg	.....	.....	0.02	0.5	light rain	
Ooglaamie, Pt. Barrow, Alas.	29.66	753.4	29.68	753.9	— 2.5	—19.2	67	wnw.	26	11.6	.....	.....	10 s	.....	.....	0.08	2.0	cloudy	
Oswego, New York	29.51	749.5	29.86	758.4	40.0	4.4	86	s.	8	3.6	.....	.....	10 n	.....	.....	0.45	11.4	light rain	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	30.12	765.0	30.15	765.8	64.0	17.8	100	sw.	4	1.8	.....	.....	10 n	.....	.....	0.83	21.1	light rain	
Philadelphia, Pa.	30.02	762.5	30.08	764.0	34	1.1	100	sw.	16	7.2	.....	.....	10n;fg	.....	.....	0.27	6.9	light rain	
Pike's Peak, Colorado	17.23	437.6	29.93	760.2	—10	—23.3	84	sw.	34	15.2	.....	0	0	.....	.....	0.18	4.6	clear	
Pioche, Nevada	23.95	608.3	30.15	765.8	11	—11.7	66	sw.	2	0.9	.....	0	0	.....	.....	0.06	1.5	clear	
Pittsburg, Pennsylvania	29.12	739.6	29.98	761.5	53.0	11.7	86	s.	9	4.0	.....	.....	10 n	.....	s.	0.48	12.2	light rain	
Port Eads, Louisiana	30.11	764.8	30.12	765.0	60.4	15.8	100	se.	5	2.2	.....	.....	10 s	.....	.....	0	0	threatening	
Port Huron, Michigan	29.12	739.6	29.85	758.2	40.3	4.6	100	s.	12	5.4	.....	.....	fg	.....	calm	0.23	5.8	dense fog	
Portland, Maine	29.89	759.2	29.94	760.5	28.5	— 1.9	88	nw.	1	0.4	.....	.....	10 n	.....	calm	0.39	9.9	sleeting	
Portland, Oregon	29.64	752.8	29.71	754.0	35.0	1.7	89	s.	8	3.6	.....	.....	10 s	.....	s.	0.20	5.1	cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	60	15.6	87	sw.	14	6.3	.....	.....	10 ks	.....	s.	0	0	cloudy	
Prescott, Arizona	24.72	627.9	30.10	764.5	6	—14.4	41	sw.	3	1.3	.....	0	0	.....	.....	0.50	12.7	clear	
Punta Rassa, Florida	30.19	766.8	30.20	767.1	65.5	18.6	92	e.	8	3.6	.....	hz.	0	.....	.....	inap.	inap.	clear	
Red Bluff, California	29.61	752.1	29.99	761.7	42.3	5.7	95	se.	11	4.9	.....	.....	10 s	.....	s.	inap.	inap.	cloudy	
Rio Grande City, Texas	29.68	753.9	29.94	760.5	62	16.7	87	se.	3	1.3	.....	.....	fg	.....	calm	0	0	light fog	
Rochester, New York	29.16	740.7	29.88	758.9	41	5.0	100	sw.	8	3.6	.....	.....	10 n	.....	sw.	0.20	5.1	light rain	
Roseburg, Oregon	29.28	743.7	29.86	758.4	37.8	3.2	86	calm	0	0	.....	.....	10 s	.....	.....	0.05	1.3	cloudy	
Sacramento, California	29.98	761.5	30.06	763.5	43.5	6.4	93	se.	11	4.9	.....	.....	10 n	.....	.....	0.10	2.5	light rain	
St. Louis, Missouri	29.14	740.1	29.78	756.4	53.0	11.7	100	s.	16	7.2	.....	.....	10 s	.....	.....	0.17	4.3	threatening	
St. Paul, Minnesota	28.85	732.8	29.80	756.9	27.0	— 2.8	77	nw.	12	5.4	.....	.....	10 s	.....	nw.	0.02	0.5	cloudy	
St. Vincent, Minnesota	29.02	737.1	30.00	762.0	—16	—26.7	100	nw.	7	3.1	.....	0	0	.....	.....	0	0	clear	
Salt Lake City, Utah	25.55	649.0	30.12	765.0	25	— 3.9	53	se.	4	1.8	.....	0	5 s	.....	.....	inap.	inap.	fair	
San Antonio, Texas	29.20	741.7	29.93	760.2	63.6	17.6	93	s.	4	1.8	.....	.....	10 ks	.....	s.	0.03	0.8	cloudy	
San Diego, California	30.02	762.5	30.09	764.0	41.4	5.2	78	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sandusky, Ohio	29.16	740.7	29.88	758.9	47	8.3	93	s.	12	5.4	.....	.....	10 s	.....	.....	0.56	14.2	cloudy	
Sandy Hook, New Jersey	30.03	762.7	30.07	763.8	37.0	2.8	89	w.	16	7.2	.....	.....	10 n	.....	w.	0 91	23.1	light rain	
San Francisco, California	29.98	761.5	30.05	763.3	47	8.3	83	se.	7	3.1	.....	.....	10 n	.....	sw.	0.24	6.1	light rain	
Santa Fé, New Mexico	23.14	587.8	30.15	765.8	16	— 8.9	70	n.	4	1.8	.....	0	0	.....	.....	0.01	0.3	clear	
Savannah, Georgia	30.16	766.1	30.26	768.6	52	11.1	93	w.	6	2.7	.....	.....	fg	.....	.....	0.34	8.6	dense fog	
Shreveport, Louisiana	29.68	753.9	29.93	760.2	65	18.3	93	calm	0	0	.....	.....	10 s	.....	.....	0.03	0.8	cloudy	
Silver City, New Mexico	24.18	614.2	30.04	763.0	28	— 2.2	61	n.	7	3.1	.....	0	0	.....	.....	0.02	0.5	clear	
Sitka, Alaska	30.01	762.2	30.09	764.3	10	—12.2	64	ne.	7	3.1	.....	0	0	.....	.....	0	0	clear	
Smithville, North Carolina	30.18	766.6	30.22	767.0	58	14.4	93	s.	15	6.7	.....	.....	10 n	.....	s.	0.11	2.8	light rain	
Spokane Falls, Wash. Ter.	27.53	699.2	29.07	753.6	24	— 4.4	84	sw.	6	2.7	.....	0	0	.....	.....	0.03	0.8	clear	
Springfield, Illinois	29.04	737.6	29.77	756.1	51	10.6	94	s.	14	6.3	.....	.....	10n;fg	.....	s.	0.07	1.8	light rain	
Springfield, Massachusetts	29.83	757.7	29.97	761.2	35.8	2.1	92	s.	3	1.3	.....	.....	10 n	.....	.....	0.67	17.0	light rain	
Springfield, Mo.	28.28	718.3	29.80	758.4	59	15.0	87	sw.	18	8.0	.....	.....	10 s	.....	sw.	0.07	1.8	cloudy	
Stockton, Texas	26.96	684.8	30.10	764.5	42.0	5.6	100	nw.	4	1.8	.....	.....	10 s	.....	nw.	0	0	cloudy	
Thatcher's Island, Mass.	29.87	758.7	29.93	760.2	41.0	5.0	100	sw.	21	9.4	.....	.....	10 n	.....	.....	0.59	15.0	light rain	
Toledo, Ohio	29.14	740.1	29.88	758.9	47	8.3	93	s.	8	3.6	.....	.....	10n;fg	.....	.....	0.27	6.9	light rain	
Tucson, Arizona	27.62	701.5	30.12	765.0	35	1.7	89	calm	0	0	.....	0	0	.....	.....	0.20	5.1	clear	
Umatilla, Oregon	29.32	744.7	29.71	754.6	36.2	2.3	64	w.	16	7.2	.....	.....	10 n	.....	w.	inap.	inap.	light snow	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.76	755.9	30.03	762.7	66	18.9	90	s.	7	3.1	.....	0	8 s	.....	s.	0	0	cloudy	
Visalia, California	29.71	754.6	30.10	764.5	32.5	0.3	83	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Washington, D. C.	30.01	762.2	30.13	765.3	35	1.7	100	s.	3	1.3	.....	.....	10 n	.....	.....	0.86	21.8	light rain	
West Los Animas, Colorado	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wickenburg, Arizona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Williamsport, Pa.	29.40	746.7	30.03	762.7	34	1.1	78	e.	5	2.2	.....	.....	10 s	.....	calm	0.38	9.7	threatening	
Wilmington, N. Carolina	30.17	766.3	30.23	767.8	61	16.1	93	sw.	8	3.6	.....	.....	10n;fg	.....	calm	0.03	0.8	light rain	
Winnemucca, Nevada	25.41	645.4	29.95	760.7	29	— 1.7	61	sw.	18	8.0	.....	.....	10 ks	.....	sw.	0	0	cloudy	
Wood's Holl, Mass.	29.99	761.7	30.03	762.7	41	5.0	92	sw.	21	9.4	.....	.....	10 n	.....	sw.	0.74	18.8	light rain	
Yankton, Dakota	28.44	722.4	29.80	758.4	23	— 5.0	88	calm	0	0	.....	.....	10 n	.....	.....	0.01	0.3	light snow	
Yuma, Arizona	29.94	760.5	30.09	764.3	36.6	2.6	73	ne.	3	1.3	.....	0	0	.....	.....	0.02	0.5	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.01	559.0	.....	.....	52.5	11.4	79	calm	0	0	.....	2 k	1 s	.....	.....	0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.05	763.3	30.06	763.5	78	25.6	77	e.	.....	.....	.....	2 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.90	759.4	29.92	760.0	78	25.6	86	se.	4	1.8	.....	.....	10 ks	.....	se.	0.30	7.6	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.97	761.2	29.99	761.7	77	25.0	90	e.	.....	.....	.....	5 k	2 ks	.....	.....	0	0	.....	B. Bigar.
Havana, Cuba, W. I.	30.16	766.1	30.21	767.3	71	21.7	84	calm	0	0	.....	0	2 ks	.....	calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.06	763.5	30.07	763.8	68.1	20.1	84	calm	0	0	.....	1 ck	1 s	ese.	.....	0	0	fair	Robert Johnstone
Navassa, W. I.	29.97	761.2	30.05	763.3	77	25.0	65	ne.	12	5.4	.....	5 ck	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.03	762.7	30.03	762.7	78	25.6	86	e.	.....	.....	3	.....	8 ps	e.	.....	0.300	7.6	cloudy	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mbia	29.36	745.7	29.91	759.7	82	27.8	80	calm	.....	.....	0	1 c	1 s	calm	calm	0	0	clear	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	73	22.8	90	ne.	.....	.....	4	0	0	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.08	764.0	30.10	764.5	75	23.9	72	n.	8.4	3.8	.....	1 ck	0	.....	.....	0.45	11.4	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.41	772.4	30.47	773.9	—36.0	—37.8	.....	nw.	10	4.5	.....	2 c	0	nw.	.....	0	0	fair	J. Fortescue & W. Wood

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 21° 29′, E. 109° 05′	30.07	763.8	64	17.8		nne.			3-5		10					4		misty	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads. India.	29.86	758.4	81	27.2	76	ne.			1		3							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.48	774.2	61	16.1	73	calm			0		0							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante.																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.93	760.2	75	23.9	59	ese.			5		3	e.						d. clouds	Com. Sir F. W. Richards
H. M. S. Champion, S. 10° 10′, W. 78° 20′	29.87	758.7	69	20.6	90	se.			1-2		6	calm				3	ssw.	d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice.																			Capt. H. Y. Grenfell.
H. M. S. Condor, N. 37° 02′, E. 23° 26′	30.43	772.9	52	11.1	60	n.			6-7		4	nnw.				6-7	nnw.	d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.39	771.9	60	15.6		ene.			4		6	ene.				2	wsw.	squally	Lieut. J. L. Burr
H. M. S. Cormorant.																			Capt. Bruce.
H. M. S. Curacoa, N. 32° 07′, E. 118° 45′	30.38	771.6	41.5	5.3	100	n.			2-4		4	n.						d. clouds	Capt. S. Long.
H. M. S. Diamond, S. 36° 03′, E. 5° 10′	30.12	765.0	68.5	20.3	79	nw.			3		9					2	w.	d. clouds	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	30.48	774.2	56	13.3	68	ene.			1-2		5	ene.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 20° 45′, W. 75° 43′	30.16	766.1	75	23.9	98	ne.			3		8	e.				1		squally	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 37′, W. 59° 32′	29.41	747.0	52	11.1	89	calm			0		5					sm'h		d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.82	757.4	82	27.8		ene.			2		5							d. clouds	Capt. E. St. J. Garforth
H. M. S. Emerald, S. 42° 53′, E. 147° 22′	29.66	753.4	62	16.7	83	se.			3										Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	29.72	754.9	58	14.4		nnw.			2-3		7	n.						d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, S. 27° 23′, W. 28° 36′	30.20	767.1	75	23.9	95	ene.			4		1					3	ese.	blue sky	Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′ E. 43° 12′	29.86	758.4	77.5	25.3	73	s.			6		1					3	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.02	762.5	52	11.1	72	wnw.			1		7	w.						misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Coquimbo, Chili	29.88	758.9	62	16.7	88	n.			2		4							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 52° 11′, W. 59° 32′	29.46	748.3	47	8.3	92	ene.			3		10							drizzling	Capt. L. Jones.
H. M. S. Iris, Famagusta, Cyprus	30.31	769.9	57	13.9	62	n.			4-5		0							blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.13	765.3	63	17.2	94	ene.			2-4		10	ne.						squally	Capt. R. E. Tracey.
H. M. S. Lark, S. 33° 42′, E. 168° 22′	29.89	759.2	74.3	25.5	88	ene.			2		6					1	sse.	d. clouds	Lieut. C. F. Oldham.
H. M. S. Liffey.																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.13	765.3	64.9	18.3	85	e.			2-4		10							misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 19° 14′, E. 39° 18′	29.91	759.7	74	23.3	81	n.			1-2		4	nnw.				3	nnw.	d. clouds	Capt. H. Hand.
H. M. S. Mutine, Callao, Peru.	30.02	762.5	69	20.6	94	calm			0		8							misty	Comm. F. Edwards.
H. M. S. Northampton, St. Vincent, W. I.	29.94	760.5	76	24.4	86	ene.			2-5		3	ene.						d. clouds	Capt. E. Drummond
H. M. S. Orontes, Bombay, India	29.90	759.4	81	27.2	82	n.			2		0							blue sky	Capt. R. J. Kinahan.
H. M. S. Pelican, S. 3° 24′, W. 19° 30′	29.93	760.2	80	26.7	100	se.			3		7					2	se.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Réady, Bassorah, Asiatic Turkey	30.19	766.8	55.1	12.8		nw.			1									d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	29.47	748.5	30	—1.1	?	wsw.			1		4							snowing	Lieut. V. B. Orlebar.
H. M. S. Ruby, Colombo, Ceylon, India	29.85	758.2	80.5	26.9	91	nnw.			3		5	n.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis, N. 19° 30′, E. 72° 00′	29.93	760.2	79	26.1	95	ne.			3		1	ene.				sm'h		blue sky	Capt. G. O. Twiss.
H. M. S. Tenedos, N. 16° 00′, W. 86° 15′	30.01	762.2	78	25.6	71	e.			3		1					2	e.	blue sky	Capt. C. G. Fane.
H. M. S. Triumph, N. 7° 22′, W. 79° 20′	29.88	758.9	73	22.8	90	n.			3-4		1	calm				5	n.	blue sky	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	29.99	761.7	74	23.3		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Bahrein, Arabia	30.20	767.1	61.5	16.4	71	nw.			5		5	nw.				3	nw.	d. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr, Nagasaki, Japan	30.25	768.3	45	7.2	75	nnw.			2		3	nw.						d. clouds	Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Brava, C. Verd Ids	29.98	761.6	75.2	24.0	76	ne.			3		0					3	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 10° 37′, W. 66° 57′	30.00	762.1	73.4	23.0	81	calm			0		1							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				

UNITED STATES NAVAL SERIES.

Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.

By authority of the SECRETARY OF THE NAVY.

N. Yard, Pensacola, Fla	30.13	765.3	66	18.9	89	wsw.	8	3.6			10			0.96	24.4			rain & fog	
N. Yard, Portsmouth, N. H.	29.93	760.2	35	1.7		s.	5	2.2			10		s.					raining	
Naval Hospital Yokohama, Japan	29.59	751.6	53	11.7	90	calm			0		8		sw.	0.02	0.5			clearing	
Adams, Callao, Peru	29.71	754.6	68	20.0	95	sse.			1		8					gr'd		cloudy	
Alaska, Valparaiso, Chili	29.79	756.7	67	19.4	84	calm			0		0			0	0	sm'h		clear	
Alert, N. 80° 48′, E. 106° 23′*	29.81	757.2	79	26.1	91	ne.			2		2		calm	0	0	sm'h		hazy	
Alliance, Boston, Mass.*†	30.05	763.3	41	5.0	91	sw.			1		10			h'vy	h'vy			raining	
Ashuelot Tientsin, China	30.62	777.7	32	0.0	100	ssw.			4		0							clear	
Brooklyn, Montevideo, Uruguay	29.82	757.4	73	22.8	85	ssw.	18	8.0			10		sw.	0	0	mod.	sw.	cloudy	
Colorado, New York, N. Y	30.04	763.0	36	2.2	100	sw.	6	2.7			10			0.08	2.0			raining	
Essex, N. 35° 32′, W. 35° 32′	30.07	763.8	59	15.0	70	ene.			4		10		n.			long		gloomy	
Franklin, Norfolk, Va	30.23	767.8	47	8.3	77	calm	0	0			10		calm	0	0			cloudy	
Galena, N. 28° 24′, W. 16° 02′	30.03	762.7	67	19.4	100	se.			4		10		se.			r'gh	se.	cloudy	
Independence, N. Yard, Mare I'd, Cal.	29.89	759.2	45	7.2	84	s.	3.6	1.6			10		s.	0.15	3.8			overcast	
Kearsarge, New Orleans, La	30.07	763.8	64	17.8	89	sse.			1		10							foggy	
Lackawanna, Valparaiso, Chili†	29.93	760.2	63	17.2	100	calm			0		0							clear	
Lancaster, Leghorn, Italy	30.56	776.2	51	10.6	72	ene.			1		2		calm	0	0			misty	
Michigan, Erie, Pa	29.83	757.7	48	8.9	78	ssw.			2		10							raining	
Minnesota, Newport, R. I	30.02	762.5	43	6.1	100	sw.	8	3.6			10		sw.			sm'h		rainy	
Monocacy, Yokohama, Japan	29.72	754.9	55	12.8	93	nnw.			2		8		nw.					fair	
Nipsic, Leghorn, Italy	30.63	778.0	56	13.3	63	ne.			2		0					sm'h		clear	
Onward, Callao, Peru†	30.03	762.7	66	18.9	100	sse.			1		5		nnw.			long	w.	fair	
Palos, Hong Kong, China	30.13	765.3	62	16.7	94	ese.			3		10		n;e.					cloudy	
Passaic, Washington, D. C	30.15	765.8	35	1.7	100	sw.			2		10							rainy	
Pensacola, Valparaiso, Chili	29.85	758.2	75	23.9	52	calm	0	0			0			0	0	sm'h		clear	
Powhatan, N. 39°19′, W. 72° 41′	30.14	765.5	53	11.7	93	sw.			6		10		sw.			mod.	sw.	raining	
Quinnebaug, Off Villafranca, France	30.62	777.7	59	15.0	65	s.			2		0					sm'h		clear	
Ranger, N. 19° 17′, W. 104° 50′*	29.87	758.7	69	20.6	90	nne.			2		0			0	0	sm'h		clear	
Richmond, N. 2° 58′, W. 171° 53′*	29.72	754.9	81	27.2	83	ne.			5		2		ne.	0.03	0.8	sm'h	ne.	clear	
Shenandoah, Montevideo, Uruguay*.	29.91	759.7	71	21.7	80	s.			4		5		s.			sm'h		fair	
St. Louis, League Island, Pa	30.35	770.9	34	1.1	100	sw.	14	6.3			10			0.34	8.6			raining	
Swatara, Kobe, Japan*	29.86	758.4	50	10.0	72	nw.			1		8		nw.			sm'h		fair	
Tennessee, New York, N. Y	30.04	763.0	37	2.8	100	wsw.	6	2.7			10			0.4	10.			rainy	
Vandalia, N. 12° 00′, W. 68° 54′	29.99	761.7	77	25.0	82	e.			4		8		e.					fair	
Wabash, Boston, Mass	29.95	760.7	42	5.6	53	sw.	6	2.7			10		sw.	0.66	16.8			raining	
Wachusetts, San Francisco, Cal	30.05	763.3	46	7.8	92	se.			2		10		sw.					showery	
Wyoming, Port Royal, S. C	30.22	767.6	51	10.6	100	w.	6	2.7			10			0.44	11.2			foggy	
Yantic, Aspinwall, Panama*	29.87	758.7	77	25.0	91	n.			4		5		nne.			mod.	n.	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. **Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.**																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon.
S. S. Polynesian, Capt. Robt. Brown, N. 52° 21′, W. 31° 14′*	29.51	749.5	37	2.8		nnw.	4		7		n.	6 h'r	sleet	r'gh	ne; sw.	cloudy	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, Portland, Oregon*	29.90	759.4	27	—2.8		nnw.	2		10							foggy	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.46	773.7	41	5.0		se.	5				s.	0	0			overcast	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	29.74	755.4	39	3.9	81	nw.	3		10		s.					overcast	Cauffman & Morse.
S. S. Ohio, Capt. Henry Morrison, N. 49° 40′, W. 37° 22′*†	29.86	758.4	37	2.8	90	w.	9		9		w.			h'vy	sw. to wnw.	squally	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, St. George's Channel, Eng†	30.40	772.1	48	8.9	85	ssw.	4									foggy	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
S. S. Assyria, Capt. James Brown, N. 55° 04′ W. 27° 59′½†	29.72	754.9	42	5.6		w.	6		2		w.			con.	w.	clear	J. Brown.
Utopia, Capt. A. McRitchie,																	W. Haynes.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 18° 26′, W. 72° 51′†*	30.17	766.3	73	22.8	85	calm	0		0			0	0	sm'h		clear	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 10° 00′, W. 78° 50′*	29.91	759.7	80	26.7		nne.	5		1			0	0	high	nne.	very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 34° 10′, W. 73° 34′*†.	30.06	763.5	65	18.3		sw.	6		0			0	0	r'gh	sw.	clear	W. H. Bennett.
S. S. Arden, Capt. . de Echevarrieta, N. 22° 30′, W. 68° 00′			74	23.3		e.	2		10			0	0	mod.	e.	squally	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse,																	Fisher & Welden.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, N. 43° 11′, W. 66° 19′†*	29.95	760.7	44	6.7	92	s.	10					hail;	snow		s.	rain & snow	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell, N. 26° 57′, W. 23° 26′	30.14	765.5	66.3	19.1	78	wsw.	4		3							misty	
British Merchant, Capt. E. J. Molony, N. 19° 58′, E. 87° 44′	29.90	759.4	76.2	24.6	86	wsw.	2-3		0							blue sky	
Bk. Caldew, Capt. W. Peterson S. 44° 13′, W. 83° 50′	29.39	746.5	55	12.8		wsw.	7		10							raining	
S. S. Cipero, Capt. W. N. Lailey N. 21° 07′, W. 43° 08′	30.13	765.3	77	25.0	77	e.	2		7					1	ene.	d. clouds	
S. City of Agra, Capt. Thos. Young. N. 16° 52′, W. 37° 08′	30.08	764.0	76.0	24.4		ene.	4		1							blue sky	
Bk. Glaramara, Capt. R. Morton, N. 39° 01′, W. 30° 31′	29.99	761.7	55	12.8	80	nnw.	4		9							squally.	
Glencairn, Capt. R. S. Tannock, S. 42° 26′, E. 67° 26′	30.22	767.6	52	11.1	59	ssw.	5-6		3							d. clouds	
S. S. Gordon Castle, Capt. W. Waring,																	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 25° 46′, E. 53° 13′	29.97	761.2	69.8	21.0	81	sse.	9		10							showery	
May Hulse, Capt. H. Youlden, R. N. R., S. 37° 19′, W. 48° 07′	29.66	753.4	70	21.1	90	nne.	1		10							raining	
Bk. Mertola, Capt. E. W. Turner, N. 37° 40′, W. 10° 50′	30.41	772.4	60.5	15.8	88	se.	2		10							overcast	
Minho, Capt. J. Lawson, Rio de Janeiro, Brazil, S. A	29.93	760.2	77.5	25.3	90	calm	0		10							misty	
Naiad, Capt. J. Smith, N. 4° 20′, W. 31° 56′	29.98	761.5	78.8	26.0	90	n.	3		3							d. clouds	
Pole Star, Capt. F. Norman, S. 54° 40′, W. 79° 05′	29.04	737.6	52.8	11.6	79	se.	3		10							overcast	
Queen of Cambria, Capt. M. Parry. S. 44° 19′, E. 43° 28′	30.44	773.2	48	8.9	71	nne.	5		8							d. clouds	
S. S. Strathleven, Capt. J. W. Pearson, N. 40° 22′, W. 70° 29′	30.08	764.0	50.0	10.0	93	s.	6		10							raining.	
S. Superb, Capt. Berridge. N. 24° 55′, W. 41° 24′						nne.	1		0							blue sky	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham																	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO. *J. Birmingham, Agent San Francisco.*																	
S. S. Newbern, Capt. E. Y. Rogers,																	
CROMWELL LINE. *Clark & Seaman, Agents, New York.*																	
S. S. Hudson, Capt. H. R. Freeman,																	H. R. Freeman.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, Havre, France	30.46	773.6	32.0	0.0		ene.	3		10		ene.	0	0				
S. S. St. Laurent, Capt. A. Servan, N. 49° 02′, W. 38° 13′	29.96	761.0	50.0	10.0		wnw.	5					snow	&hail	large	wnw.		A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Silesia, Capt. A. Albers, N. 48° 46′, W. 31° 36′*†	29.84	757.9	45.5	7.5		w.	7		5		w.			5	w.	hailing	
S. S. Wieland, Capt. C. Hebich, N. 50° 12′, W. 24° 00′*	29.74	755.4	52	11.1		wsw.	6		10		nw.	2 h'r	2 h'r	3-5	sw; nw.	stormy.	C. Jorgensen.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch.																	Patterson & Thompson.
LAMPERT & HOLT S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Montevideo, Uruguay*†	30.04	763.0	74	23.3		sw.	4		5		ssw.	0	0			fair	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.56	776.2				se.	2		5		s.	0	0			fine	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 10° 28′, W. 75° 30′†	29.85	758.2	79	26.1		ne.	2									hazy	
S. S. Bothnia, Capt. MacMackan, [man																	E. F. Stembridge, 3d offi
S. S. City of Alexandria, Capt. L. F. Timmer- Havana, Cuba, W. I*† [nolds	30.21	767.3	76	24.4		ene.	3								ene.	clear	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Mans, Capt. T. N. Bonjer, N. 49° 40, W. 33° 50′*	29.71	754.6	45	7.2		w.								high	W; wnw.	snowing	
S. S. New York, Capt. R. B. Quick, N. 30° 06′, W. 79° 46′†*	30.38	771.6	73	22.8		sse.	3								se.	rainy	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers, N. 49° 46′, W. 10° 20′	30.26	768.6				sse.	6		2		w.	0	0	cross	sse.	clear	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander, N. 53° 35′, E. 4° 10′*	30.57	776.5	41.0	5.0		sse.	4		10		s.	0	0	mod.	s.		G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer, N. 49° 59′, W. 23° 29′	29.92	760.0	50.0	10.0	50	ssw; nw.	6		8		w.	2 h'r	2h'r	cross	wnw.	cloudy	Sander & Waller.
S. S. Neckar, Capt. R. Bussius, N. 45° 09′, W. 43° 16′	30.04	763.0	30.2	—1.0		nw.	6		9		nw; ne	9 h'r	snow	mod.	nw.	snowing	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A, Jaeger, N. 32° 00′, W. 14° 33′*	30.11	764.8	62.6	17.0	88	se.	6		10		se.			6	se.	raining	
S. S. Oder, Capt. C. Undeutsch, N. 47° 18′, W. 41° 38′*	29.97	761.2	28.4	—2.0		nnw.	6		10		n.	snow	snow	long	wnw.	snowy	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany			40.1	4.5		wnw.	3		8		sw.	8 h'r	8 h'r			raining	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, San Francisco, Cal.			44	6.7	92	nw.	1		0			0	0			clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 40° 43′, E. 150° 18′†*	29.94	760.5	56	13.3	73	se.	6		8		se.			mod.	se.	overcast	
S. S. Oceanic, Capt J. Metcalf, Hong Kong, China*	30.16	766.1	64	17.8	78	nw.	3		8		sw.					overcast	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.85	758.2				sw.	1		10							rainy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Boston, Mass†	29.97	761.2	48	8.9		wsw.	3		8		wnw.	8 h'r and	rain snow			cloudy	H. K. Hallett.
OREGON IMROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes,																	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d Off.
S. S. Oregon, Capt. E. Polemann, Portland, Oreg n†	29.63	752.6	38	3.3	90	sse.	1		8		s.					misty	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 35° 31′, W. 121° 10′†	30.06	763.5	48	8.9	77	se.	3		8		sw.			mod.	wnw.	fair	
S. S. Geo. W. Elder, Capt. H. G. Morse, Puget Sound†	29.45	748.0	31	—0.6		e.	4		4		e.	light	snow	sm'h		cloudy	
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	29.98	761.5	46	7.8	?	se	1		10		nw.					rainy	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 34° 27′, W. 120° 25′†	30.10	764.5	52	11.1	72	calm	0		0			0	0	sm'h			G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.18	766.6	45	7.2	92	ene.	1		2			0	0	sm'h		clear	T. Wallace.
S. S. State of California, Capt. G. Debney, N. 45° 50′, W. 131° 10′†	29.57	751.1	36	2.2	90	w.	5		10		sw.	0	0	hv'y	w.	squally	
S. S. Victoria, H. M. Hayward, Nanaimo, Vancouvers Id†	29.55	750.5	24	—4.4	88	calm	0		0							clear	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. ———																	A. Bannerman, 2d Offi.
S. S. City of New York, Capt. W. B. Cobb, S. 32° 57′, E. 152° 30′†	29.79	756.7	75	23.9	85	nne.	4		1		ne.	0	0	mod.	ne.	clear	W. H. Hawes, 2d Offi.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 34° 49′, E. 172° 54′†	30.42	772.7	57	13.9	57	nw.	5		5		nw.	0	0	mod. cross		fair	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn, N. 10° 55′, W. 162° 29′†	29.93	760.2	78	25.6	82	ene.	5		5		ne.	0	0	long	ne	hazy	E. Le Salk.
S. S. City of Tokio, Com. J. Maury N. 35° 20′, E. 140° 53′†	30.01	762.2	58	14.4	76	nne.	6		10		n.	8 h'r	8 h'r	mod.	sw.	cloudy	W. Thaxter.
S. S. Colima, Capt. R. R. Searle,																	
S. S. Grenada, Capt M. Connolly, Panama, Panama†	29.87	758.7	73	22.8	95	nne.	2		2		nne.	0	0			clear	
S. S. South Carolina, Capt. W. J. Russell, N. 34° 58′, W. 121° 26′*†	30.08	764.0	55	12.8	74	sw.	3		5		wsw.	0	0	small	sw.		
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	29.95	760.7	69	20.6	90	se.	2		8		s.					fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO.																	
E. A. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke, St Kitt's, W. I.						ne.	4		0			0	0	mod.		fair.	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes N. 40° 31′, W. 71° 25′*†			48	8.9	71	wsw.	5		10		wsw.	12 h'r	12 h'r	sm'h	w.	cloudy	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, N. 49° 04′, W. 29° 31′*	29.82	757.4	43	6.1	75	w.	6		5		w.	0	0		w.	fair	C. H. Grant, 2d Off
S. S. Vaderland, Capt. W. A. Beynon, Antwerp, Belgium			29	—1.7	100	s.	1		10			0	0			foggy	M. Eymond.
S. S. Waesland, Capt. H. Nickels. N. 40° 30′ W. 69° 25′*	29.99	761.7	46	7.8		sw.	3		10		sw.	6 h'r	6 h'r	sm'h	sw.	heavy rain	
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis. N. 49° 16′, W. 17° 50′*	29.88	758.9	58.1	14.5	81	ssw.	6		7		sw.	1 h'r	1 h'r	mod.	sw.		
THINGVALLA LINE.																	
Funch, Edye, & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub, Copenhagen, Denmark†	30.38	771.6	38.3	3.5		wnw.	2		10		wnw.	0	0			covered	J. T. Ulberling.
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters.																	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent, New York.																	
S. S. Adriatic, Capt. J. W. Jennings, New York, N. Y*†	30.09	764.3	32	0.0		ne.	3		10		nw.	snow	snow	sm'h		snowing	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 47° 50′, W. 36° 26′*†	29.82	757.4	38	3.3		wnw.	5		5		nw.	snow	snow	mod.	nw.	snowing	W. Thomas.
S. S. Celtic, Capt. B. Gleadell Liverpool, England†*	30.24	768.1	48	8.9	71	nw.	5		5?		n.	0	0			cloudy?	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. N. 44° 06′, W. 52° 09′*†	30.50	774.7	26	—3.3		wnw.	5		2		nw.	18 h'r	snow	sm'h	w.	d. clouds	H. D. Jay, 4th Officer.
S. S. Republic, Capt. P. J. Irving, N. 51° 25′, W. 15° 37′†	30.19	766.8	54	12.2	93	s.	4		5		sw.	sh'rs	shr's	mod.	sw.	fair	H. Goulden, 4th Officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.25	768.3	63	17.2	100	calm	0		10 n			0.61	15.5			raining	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona																	
Bk. Alpha, Capt. Ole Grönn, Off Cape Sacratif, Spain*†	30.42	772.7	63	15.6		e.	8		4		se.	0	0	r'gh	ese.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis. N. 19° 38′, W. 64° 24′*†	30.20	767.1	78	25.6		ne.	4		5		e.	shr's	shr's	sm'h	ene.	fair	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin, S. 8° 48′, W. 34° 03′						se.					se.				e.	clear	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.32	770.1				s.	3		5		ssw.	0	0			fair	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 16° 48′, W. 36° 52′†	30.00	762.0				ese.	3		2		ese.	0	0	sm'h	ese.		
S. Enoch Train, Capt. H. D. Chapman. Off Beachy Head, Eng*	30.55	776.0				ese.	2		10		se.	0	0	sm'h		overcast	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 49° 40′. W. 12° 58′*	30.13	765.3				sse.	3		1		ssw.	1 h'r	sleet	long	cross	clear	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.22	767.6	44	6.7	75	sw.	3		10		sw.	snow	snow	sm'h		cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 56° 08′, W. 78° 23′†	29.32	744.7	50	10.0		sse.	5		10		s.	0	0	hv'y	nnw.	cloudy	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 49° 16′, W. 24° 28′			52	11.1		w.	3		5		wnw.	3 h'r	h'vy	hv'y	sw. nw.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, S. 19° 09′, W. 35° 35′*†	29.06	738.1				ene.	5		5		ene.	0	0	sm'h	ene.		
Bk. Geo. Booth, Capt. D. Williams,																	D. Williams.
S. Hedwig, Capt. T. Minssen																	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 33° 50′, W. 22° 10′*	30.14	765.5				nw.	3		3		nw.	0	0	sm'h	nw.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. N. 35° 17′. W. 6° 07′*†	30.45	773.4				e.	4				e.	0	0	long	e.	cloudy	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.48	774.2	65	18.3	52	calm	0		0							clear	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 17° 15′. W. 37° 35′*†	30.10	764.5				e.			2		ese.	0	0			fair	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 4° 10′, W. 21° 32′*	29.85	758.2	80.6	27.0	97	ne.	1		2		e.			sm'h			
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.37	771.4	54	12.2	93	ne.	4		8		nw.	0	0			cloudy	J. Green.
Bg. Wanburn, Capt. I. W. Covert, S. 29° 55′, W. 18° 00′*†	30.40	772.1				sse.	2		3		sse.			sm'h			I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton, N. 23° 20′, W. 42° 18′*†	30.05	763.3				ene.										clear	N. P. Dutton.

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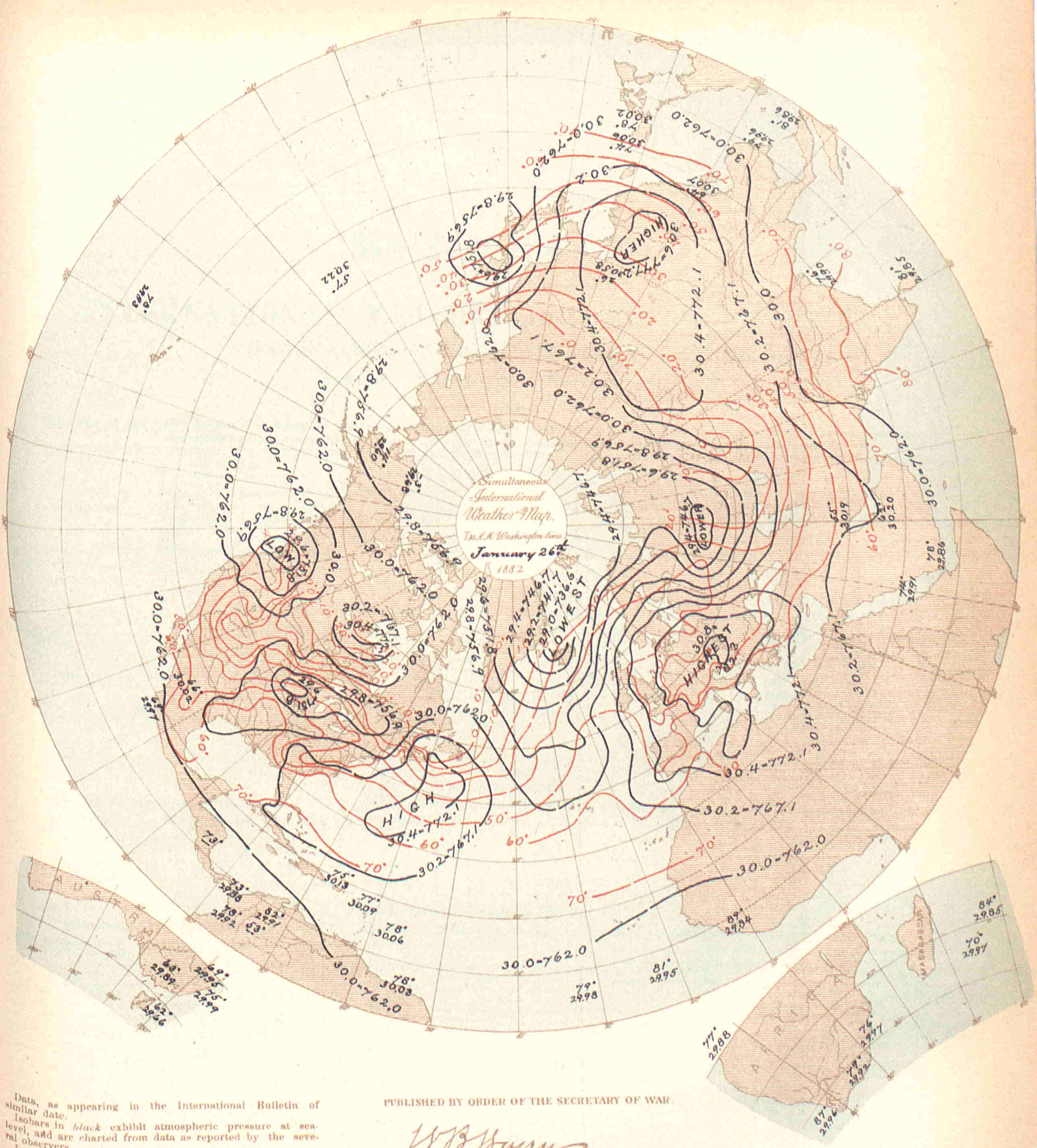
W. B. HAZEN,

Brig. & Bvt. Maj. Gen'l,

Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

Heliotype Printing Co Boston

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 27, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.41	772.3	71.6	22.0	76	se.			7		0			0	0	clear	Moiroud.
Algiers			30.50	774.7	57.2	14.0	74	se.			1		10			0	0	covered	Nicolas.
La Calle			30.56	776.2	58.6	14.8	74	ene.			3		2			0	0	fair	Fonfrède.
Tunis			30.58	776.7															Jacques.
Sfax																			Giau.
Saida			30.48	774.2	49.6	9.8	62	sw.			5		3			0	0	pretty fair	Perès.
Tebessa			30.58	776.6	51.4	10.8	52	nw.			2		1			0	0	fair	Derché.
Geriville					45.7	7.6	77	se.			6		2			0	0	fair	Lonchamp.
Laghouat			30.63	777.9	44.2	6.8	68	w.			1		3			0	0	pretty fair	Herbin.
Biskra			30.55	776.0	62.2	16.8	41	nw.			1		3			0	0	pretty fair	Malan.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.79	756.6	29.88	758.9	62.6	17.0	73	sse.	6	2.7			4			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.11	764.9	30.71	780.0	29.8	—1.2	88	s.			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.78	756.5	30.60	777.2	32.0	0.0	89	wsw.	3.1	1.4			10			0	0		Dr. Wierzbiski.
Eperies	29.72	754.9	30.66	778.8	32.7	0.4	85	calm			0		10			0	0	foggy	Julius Mikolik.
Gratz	29.34	745.2	30.69	779.5	27.0	—2.8	74	s.			2		10			0	0		Andreas Rospini.
Hermannstadt	29.19	741.3	30.72	780.3	32.4	0.2	90	se.			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.21	741.8	30.66	778.7	25.9	—3.4	98	calm			0		10			0	0	foggy	The Staff.
Lemberg	29.53	750.0	30.58	776.6	33.8	1.0	92	se.			1		10			0	0		Dr. T. Stanecki.
Pola	30.43	772.8	30.54	775.8	47.8	8.8	84	ese.			2		0			0	0		I. R. Hydrographic Office.
Szathmar	30.22	767.5	30.69	779.5	30.9	—0.6	85	se.			2		10			0	0		Joseph Midlinsky, S. J.
Szegedin	30.40	772.1	30.70	779.8	32.0	0.0	89	calm			0		10			0	0		Karl Stancel.
Trieste	30.46	773.6	30.56	776.2	50.4	10.2	65	e.			1		0			0	0		Rieder.
Vienna	29.91	759.8	30.69	779.4	28.0	—2.2	92	calm			0		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.00	762.0	30.10	764.5	42.4	5.8	81	s.	17	7.6			9			0.150	3.8	overcast	W. Boswell.
Armagh, Observatory	29.85	758.2	30.09	764.3	46.3	7.9	83	s.	21	9.4			2					squally	S. Call.
Bidston, Liverpool Obs'y			30.26	768.6	43.1	6.2	83	se.	19	8.5			9					overcast	John Hartnup.
Bolton, Sharples	29.72	754.9	30.27	768.8	40.8	4.9	91	sse.	6	2.7			10					gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.86	758.4	30.25	768.3	48.9	9.4	80	sw.			1		7			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	81.0	27.2	66	ne.			2		3					d. clouds	Corpl. J. Surgenor.
Cardington			30.32	770.1	42.0	5.6	100	s.			0.4		10					foggy	John McLaren.
Chatham, School M. E.	30.27	768.8	30.40	772.1	43.1	6.2	94	sw.			1		10					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.10	764.5	30.34	770.6	50.6	10.3	78	sw.			3		6					d. clouds	The Staff.
Fort Napier, Natal	27.63	701.8	29.85	758.2	85.4	30.2	43	se.			2		0					blue sky	Pvt. E. K. Annise, A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	87.0	30.6	69	nw.			1		3					d. clouds	Sergt. John Robinson.
Galway, Queen's College			29.95	760.7	49	9.4	85	s.			3		8			0.36	9.1	overcast	J. O'Donnghue.
Gibraltar, Mediterranean	30.31	769.9	30.37	771.4	59.2	15.1	87	e.			3		7						Cpl. O. Baldwin.
Glasgow, Observatory	29.90	759.4	30.10	764.5	41.7	5.4	85	sse.			4		10 n;k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.22	767.0	30.40	772.1	43.6	6.4	91	s.			1		10					overcast	The Staff.
Guernsey	30.10	764.5	30.41	772.4	50.0	10.0	89	ssw.			1		3					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.35	770.9	30.39	771.9	45.2	7.3	88	s.	11	4.9			10					misty	The Staff.
Leicester, Museum	30.08	764.0	30.35	770.9	43.0	6.1	84	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.43	772.9	30.51	774.9	58.6	14.8	73	ne.			1		4					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.29	769.4	30.34	770.6	72.5	22.5	85	e.			1		4					d. clouds	G. S. Duncombe.
Oscott, St. Mary's College	29.78	756.4	30.33	770.4	42.0	5.6	95	sse.			2		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.12	765.0	30.35	770.9	42.6	5.9	94	sse.			2		10					misty	The Staff.
Plymouth	30.26	768.6	30.33	770.4	50.2	10.1	93	sw.			1		7					d. clouds	John Merrifield.
Sandwick Manse, Orkneys.			29.89	759.2	45.2	7.3	83	s.	25	11.2			7					d. clouds	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.53	775.4	30.60	777.2	38.4	3.6	87	ne.			2		10					drizzling	W. H. Lyne.
Sheffield	30.01	762.2	30.28	769.1	43.4	6.3	100	calm			0		10			0.02	0.5	overcast	W. F. Cooper.
Silloth Rectory	30.14	765.5	30.17	766.3	42.3	5.7	83	sw.			2		10			0.230	5.8	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.28	769.1	41.2	5.1	89	sw.	8	3.6			10					overcast	Rev. S. J. Perry.
Stratfield Turgiss					45.2	7.3	91	sw.			2		10					d. clouds	Rev. O.H. Griffiths, F.M.S.
Truro, Royal Institution	30.24	768.1	30.31	769.9	55	12.8	73	sw.			6		5					d. clouds	W. Newcombe.
Valencia, Observatory	30.01	762.2	30.04	763.0	51.7	10.9	83	sse.	43	19.2			10			blank	blank	misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.36	745.7	29.41	747.0	23	— 5.0	99	e.	6	2.7			10 n			0.400	10.2	light snow	H. J. Cundall, C. E.
Chatham, N. B.*	29.33	745.0	29.39	746.5	20	— 6.7	100	ne.	7	3.1			10 n		ne.	0.29	7.4	heavy snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.29	744.0	29.31	744.5	22	— 5.6	96	ne.	30	13.4			10 n			0.50	12.7	heavy snow	J. McWilliams.
Fort Garry, Manitoba*	29.35	745.5	39.31	769.9	—12	—24.4	100	ne.	3	1.3			10 n			0.032	0.8	light snow	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.31	744.5	29.44	747.8	33	0.6	96	e.	8	3.6			10			0.480	12.2	foggy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.50	749.3	29.85	758.2	37	2.8	66	w.	12	5.4			8 k		nw.	0.55	14.0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			O. H. Rigby.
Montreal, Quebec*	29.23	742.4	29.43	747.5	36	2.2	72	nw.	36	16.1		5 ck	5 ks	w		0.64	16.3	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.33	745.0	30.06	763.5	25	— 3.9	88	nw.	12	5.4		2 k	5 ks	nw.	nw.	0.34	8.6	fair	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.44	747.8	30.16	766.1	33	0.6	89	w.	7	3.1		10 k	0	w.		0.85	21.6	fair	H. Morgan.
Port Stanley, Ontario	29.50	749.3	30.18	766.6	33	0.6	81	w.	14	6.3			8 k		nw.	0.99	25.1	cloudy	M. Payne.
Quebec, Quebec*	28.79	731.3	29.11	739.4	30	— 1.1	100	e.			7		10 n		e.	0.25	6.3	heavy snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.42	747.3	29.91	759.7	21	— 6.1	84	nw.	12	5.4			8 s		nw.	0.30	7.6	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.37	746.0	30.12	765.0	29	— 1.7	96	sw.	23	10.3			10 ks			0.28	7.1	cloudy	K. Stewart.
St. Andrews, N. B.	29.13	739.9	29.18	741.2	36	2.2	94	s.	7	3.1			fg.			0.32	8.1	foggy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	29.49	749.0	29.55	750.6	28	— 2.2	96	sw.	2	0.9			10 n			0.37	9.4	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.71	754.6	30.11	764.8	35	1.7	82	w.	17	7.6		0	8 ks		nw.	0.75	19.0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	29.22	742.2	29.29	744.0	37	2.8	96	s.	11	4.9			fg.			0.68	17.3	foggy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.56	750.8	29.82	757.4	26	— 3.3		e.					10			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.98	761.5	30.01	762.2	78.0	25.6	89	w.	10.2	4.6			7 s			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.88	758.9	29.92	760.0	85.2	29.6	64	s.	30	13.4		4	6			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.42	772.7	30.71	780.0	33.2	0.7	69	ne.			2		10					snowing	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.54	775.7	30.56	776.3	37.6	3.1	84	ne.	3.6	1.6			10			0	0	covered	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.40	772.1	30.45	773.3	34.2	1.2	89	wsw.	13	6			10						Oversergent Fischer.
Fanöe	30.41	772.3	30.43	774.8	39.0	3.9	93	wsw.			2		10						Overloerer Lauridsen.
Godthaab, Greenland	29.42	747.3	29.47	748.4	— 2.6	—19.2	88	ene.			2		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.11	739.5	29.16	740.6	24.1	— 4.4		sw.			2		10					snowing	A. O. Thorlacius.
Thorshavn	29.56	750.7	29.59	751.6	38.1	3.4	92	calm	0	0			10						Overloerer Bergh.
Vestervig	30.24	768.0	30.33	770.3	39.0	3.9	92	sw.			4		10						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.88	759.0	30.55	776.0	53.2	11.8	78	se.			1	0	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.97	761.2	30.52	775.2	37.4	3	96	s.			4		k		se.	0	0		M. Nicot, Director.
Arras, Engineer School	30.21	767.3	30.49	774.4	29.7	—1.3	48	ssw.			2	ck	0			0	0		M. Klein, Commandant.
Avignon, Normal School	30.43	773.0	30.51	775.0	47.1	8.4	67	nne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.98	761.6	30.56	776.3	42.4	5.8	73	s.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.24	768.1	30.52	775.3	36.1	2.3	79	e.			1		5			0	0	cloudy	M. Frère Eugène Marié.
Besançon, Normal School			30.51	775.0	34.5	1.4	82	ne.			1		fg			0	0	dense fog	M. Gobin, Director.
Bordeaux, Observatory	30.26	768.5	30.52	775.3	51.3	10.7	75	se.			1		5			0	0	cloudy	M. Rayet, Director.
Bourges, Normal School	29.98	761.4	30.54	775.8	50.0	10	100	nne.			1		k		nne.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.18	766.5	30.42	772.6	52.2	11.2	86	sw.			1		2		sw.	0.087	2.2		M. de Kennaree, Dir.
Caen, Normal School	30.37	771.4	30.45	773.4	46.0	7.8	64	s.			2		0			0	0	clear	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.13	765.3	30.46	773.7	42.8	6.0	75	s.			1		5		sw.	0	0	cloudy	M. Jadot, Director.
Charleville, Normal School	30.06	763.6	30.61	777.5	32.7	0.4		ene.			3		2			0	0	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.16	740.6	30.57	776.4	45.1	7.3	64	wsw.			1		5			0	0	½ covered	M. Alluard, Director.
Cluny, Normal School	29.73	755.2	30.63	778.0	31.1	—0.5	100	n.			1		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.67	753.7	30.60	777.3	39.6	4.2	93	se.			1	0	2 s	se.	se.	0	0	light fog	Dr. Coulet, Director.
Gap, Normal School	28.00	711.1	30.63	778.0	41.9	5.5	61	w.			3		4 n		n.	0	0		M. Jeangirard, Director.
Grésaque, du. Rhone	29.41	746.9	30.56	776.3	49.1	9.5	69	n.			1		8		s.	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.85	758.1	30.67	778.9	34.9	1.6	82	ese.			1	cs	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.89	733.9	30.52	775.1	52.3	11.3	59	sw.			2	2 c	c	ne.		0	0	slightly cl'dy	M. Rivoire, Director.
Lamballe, Normal School	30.16	766.0	30.43	773.0	52.2	11.2	75	e.			1		2		e.	0	0	slightly cl'dy	M. Ollitrault, Director.
Lescar, Normal School	29.97	761.2	30.54	775.8	59.4	15.2	48	ne.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.38	771.6	30.48	774.2	51.8	11.0	86	s.			2		5		sw.	0	0	½ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.52	749.7	30.63	778.1	37.9	3.3	90	e.			1	c	5 n	s.	s.	0	0	cloudy	M. André, Director.
Mans, Normal School	30.20	767.1	30.52	775.3	40.5	4.7	95	s.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.32	770.0	30.59	776.9	55.9	13.3	65	sse.			0.1		9		wsw.	0	0		M. Stephan, Director.
Montlouis Pinstituteur	25.19	639.7	30.03	762.7	40.6	4.8	36	sw.	9.4	4.2			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.46	773.7	30.58	776.6	51.4	10.8	80	ene.			2		5		se.	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	29.76	755.8	30.56	776.3	23.4	—4.8	95	n.			1	0	2 k			0	0	slightly cl'dy	M. Hasse, Director
Nantes, Observatory	30.37	771.3	30.53	775.4	46.0	7.8	95	sse.			0-1		10			0	0	dense fog	M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.45	773.4	30.59	776.2	51.1	10.6	74	se.	3.8	1.7			1		sw.	0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.46	545.1			21.0	—6.1		sw.			2		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.50	749.3	30.62	777.7	42.8	6.0	88						fg			0	0	foggy	M. Tailleu.
Puy de Dôme Obs'y, Summit	25.54	648.6			35.1	1.7	71	w.			1		2		ssw.	0	0	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.52	775.3	30.56	776.1	42.8	6.0	97	ssw.			1		8		sw.	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.32	770.2	30.55	775.9	45.7	7.6	91	se.			1		8			0	0	very cloudy	M. Mouillot, Director.
Rodez, Normal School	28.36	720.4	30.58	776.7	47.1	8.4	76	e.			2		8			0	0		M. Colrat, Director.
Rouen, Normal School	30.44	773.2	30.49	774.4	31.6	—0.2	96	e.			1		5			0	0	cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.26	768.6	30.42	772.6	50.9	10.5	74	sse.			1		0			0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.35	770.8	30.51	775.0	41.7	5.4	81	s.			1		6		s.	0.004	0.1		M. Renou, Director.
Toulouse, Observatory	29.84	758.0	30.58	776.7	52.3	11.3	83	se.			2		2		se.	0	0	slightly cl'dy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.99	761.7	30.48	774.2	41.4	5.2	91	sw.			1					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.74	755.4	30.61	777.6	25.3	—3.7	77	se.			2	0	9 s			0	0		Prof. Dr. Hok.
Berlin	30.32	770.1	30.51	774.9	29.8	—1.2	92	sw.			1		10			0	0	foggy	Prof. Dr. Arndt.
Breslau	30.00	762.1	30.54	775.8	35.4	1.9	77	w.			2		0			0.008	0.2		Royal University Obs'y.
Carlsruhe	30.18	766.5	30.66	778.7	25.9	—3.4	100	s.			1		10			0	0	dense fog	Albert Senz.
Cassel	29.79	756.7	30.51	774.9	28.2	—2.1	79	s.			6		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.24	768.1	30.64	778.3	24.8	—4.0	93	s.			1		10			0	0		Physical Society.
Friedrichshafen	29.16	740.6	30.71	779.9	27.3	—2.6	85	sw.			1		10			0	c	foggy	Wilhelm, Chief Tel.
Hamburg	30.43	773.0	30.53	775.4	30.9	—0.6	92	s.			2		0			0	0	hazy	E. Preller.
Kiel	30.47	773.8	30.48	774.2	32.2	0.1	91	calm			0		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.11	764.8	30.56	776.2	32.7	0.4	82	ssw.			2		6	sw.		0	0		H. Leppig, Asst.
Magdeburg	30.34	770.7	30.55	775.0	27.0	—2.8	100	sse.			1		10			0	0	dense fog	Dr. Assmann.
Memel	30.47	773.9	30.52	775.1	34.9	1.6	94	wsw.			3		10					hazy	Issermann.
Munich	28.71	729.1	30.60	777.3	25.2	—3.2	91	n.			1		0			0	0	hazy	Central Station.
Neufahrwasser	30.48	774.2	30.50	774.6	35.2	1.8	95	ssw.			1		3			0	0		A. Lothes.
Neustadt, Palatinate	30.08	764.0	30.61	777.5	25.2	—3.2		calm.			0		10	sw.		0	0	dense fog	Dickmether.
Stuttgart	29.60	751.8	30.55	775.0	32.0	0.0	90	ne.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.50	774.8	30.53	775.4	32.7	0.4	96	nw.			2		10			0	0		Profs. Brandes & Reimer.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.10	764.4	30.49	774.5	52.3	11.3		ne.			5.0		2 k			0	0		Schmidt & Wourlisch.

JANUARY 27, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.91	759.6	29.96	761.0	73.7	23.2	70	wsw.	28	12.5			0			0	0	misty	
Deesa	29.42	747.2	29.89	759.3	80.8	27.1	35	wsw.	6.7	3.0			0			0	0	blue sky	
Bombay	29.86	758.3	29.89	759.3	81.2	27.3	68	nnw.	18	8.0			0			0	0	blue sky	
Poona, Yarrowda	28.02	711.8	29.85	758.2	88.4	31.3	24	sw.	3	1.3			0			0	0	blue sky	
Belgaum	27.35	694.6	29.84	757.9	86.5	30.3	18	ne.	7	3.1			0			0	0	blue sky	
Lahore	29.13	740.0	29.90	759.4	65.6	18.7	49	w.	3.1	1.4			10			0	0	overcast	
Roorkee	28.97	735.8	29.90	759.3	66.6	19.2	57	nw.	2.6	1.2			8			0	0		
Agra	29.30	744.3	29.87	758.7	79.2	26.2	34	nw	2.6	1.2			1		w.	0	0		
Nagpur	28.84	732.6	29.88	759.0	84.3	29.1	30	calm	3.4	1.5			0			0	0	blue sky	
Jubbulpore	28.56	725.5	29.96	760.8	68.2	20.1	32	s.	2.9	1.3			0			0	0	blue sky	
Lucknow	29.49	749.1	29.87	758.8	76.4	24.7	29	wsw.	5.8	2.6			0			0	0	blue sky	
Allahabad	29.55	750.4	29.86	758.5	74.8	23.8	49	ne.	2.5	1.1			0			0	0	blue sky	
Patna	29.68	753.9	29.87	758.7	73.9	23.3	49	w.	4.7	2.1			0			0	0	blue sky	
Hazaribagh	27.85	707.3	29.88	758.8	73.8	23.2	30	w.	11.8	5.3			0			0	0	blue sky	
Cuttack	29.81	757.1	29.89	759.2	81.0	27.2	43	wnw.					0			0	0	blue sky	
Calcutta, Alipore	29.84	758.0	29.87	758.6	76.0	24.4	52	wsw.	2.0	0.9			0			0	0	blue sky	
Dhubri	29.73	755.0	29.85	758.2	70.0	21.1	54	calm	4.0	1.8			0			0	0	blue sky	
Chittagong	29.84	758.0	29.94	760.3	73.0	22.8	81	s.	4.8	2.2			1			0	0	blue sky	
Sibsagar	29.58	751.4	29.93	760.3	61.2	16.2	96	ne.	2.4	1.1			10	w.	w.	0.25	6.4	overcast	
Jeypore	28.43	722.0	29.88	759.1	75.4	24.1	22	nw.	4.1	1.8			0			0	0	blue sky	
Zanzibar, Africa	29.78	756.4			80.7	27.1	80	nne.	8.7	3.9			10k;p1		nne.	2.94	74.7	raining	
Trichinopoly	29.67	753.6			81.8	27.7	44	e.	2	0.9			5			0	0	d. clouds	
Bellary	28.40	721.3			90.0	32.2	17	ene.	2.2	1.0			0			0	0	clear	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.11	764.9	30.54	775.7	55.6	13.1	26	calm	0	0			0			0	0		Prof. Giovanni Clodig.
Milan	30.04	763.1	30.60	777.1	40.1	4.5	72	w.	3.8	1.7			2			0	0		Prof. Schiaparelli.
Padua	30.45	773.3	30.56	776.2	48.0	8.9	47	nw.	0.7	0.3			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.64	752.9	30.60	777.2	40.5	4.7	68	ene.	0.7	0.3			8			0	0		Prof. P. F. Denza.
Genoa	30.37	771.4	30.57	776.4	54.5	12.5	53	sw.	1.8	0.8			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.60	726.3	30.60	777.2	47.5	8.6	17	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.51	775.0	30.57	776.4	46.0	7.8	51	n.	4.9	2.2			0			0	0		Prof. Luigi Guidi.
Florence	30.31	769.8	30.58	776.6	42.4	5.8	59	w.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.52	775.3	30.61	777.6	51.3	10.7	80	nne.	1.8	0.8			0			0	0		Prof. P. Monte.
Rome	30.36	771.2	30.54	775.8	51.8	11.0	39	n.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	30.25	768.3	30.51	775.0	55.4	13.0	77	nw.	15.0	6.7			1	nw.		0	0		Prof. C. de Giorgi.
Cosenza	29.62	752.3	30.54	775.7	52.5	11.4	76	se.	1.8	0.8			0			0	0		Prof. D. Conti.
Cagliari	30.33	770.4	30.53	775.5	55.2	12.9	69	calm			0		0			0	0		Prof. A. Pacinotti.
Palermo	30.28	769.1	30.54	775.7	55.9	13.3	57	nne.	1.3	0.6			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.45	773.4	30.50	774.6	55.0	12.8	62	nne.	6.3	2.8			0			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.98	761.5	30.52	775.2	55.0	12.8	61	s.	0	0			1	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.48	570.9			26.6	— 3.0	36	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.52	572.0			27.5	— 2.5	24	se.			2		10			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.07	763.8	30.11	764.8	27.5	— 2.5	93	w.	13.5	6.0			10 n			0.223	5.7	light rain	
Hakodate	30.03	762.7	30.04	763.0	29.0	— 1.7	74	nw.	15.0	6.7			8		nw.	0.022	0.6	cloudy	
Hiroshima, I. M. Obs'y †	30.35	770.9	30.37	771.4	35.2	1.8	75	nne.	5.8	2.6		2 ck	0			0	0	clear	K. Sasaki.
Kanazawa	30.16	766.0	30.27	768.8	35.3	1.8	69	n.				ck	10 n	n.				overcast	S. Endo.
Kioto	30.16	766.0	30.34	770.6	34.4	1.3	93	nw.	1.6	0.7		ck	8 s		nw.	0.010	0.2	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.23	767.8	30.44	773.2	39.1	3.9	77	ne.	0.8	0.4		0	0			0	0	clear	S. Takehayashi.
Niigata	30.24	768.1	30.28	769.1	35.4	1.9	65	wnw.	23.3	10.4		6 ck	0	w.		0.020	0.5	cloudy	
Nobiru	30.14	765.5	30.16	766.0	31.6	— 0.2	67	nw.	7.1	3.2		0	0			0	0	clear	H. Midzushima.
Sapporo					25.5	— 3.6	91	nnw.	12.0	5.4			10			0.076	1.9	snowing	
Tokei Obs'y, Yeddo	30.13	765.3	30.20	767.1	38.7	3.7	66	nnw.	8.7	3.9		0	9 s;ks		ssw.	0	0	cloudy	The Staff.
Wakayama	30.29	769.3	30.35	770.9	42.8	6.0	64	nw.	4.3	1.9		ck	10 ks		n.	0	0	cloudy	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.69	754.1	29.88	758.9	82.0	27.8	71	sse.	8.5	3.8		10;cs;ck	4k;ks;n	wnw.	wsw.	0.02	0.5	cloudy	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.71	602.3	29.93	760.3	55.4	13.0	72	calm	0	0		0	0			0	0		Vicente Fernandez.
Leon	24.45	621.0	30.18	766.5	52.5	11.4	74	nw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.77	756.2	30.03	762.9	62.5	16.9	97	nnw.			3	8 cs	0	w.		0	0	cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.14	587.8	30.31	769.9	48.0	8.9	66	calm	0	0		0	0			0	0		The Staff.
Morelia	24.27	616.4	30.50	774.8	49.6	9.8	81	se.			3	2 c	5 k	se.	s.	0	0		M. Tena, M. D.
Pabellon, Aguascalientes	23.97	608.9	30.08	763.9	49.5	9.7	70	calm			0	0	0			0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.46	595.8	30.39	771.8	43.7	6.5	68	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.25	615.9	30.22	767.6	50.5	10.3	60	se.			1	3	1	w.	w.	0	0	hazy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.55	572.8	30.28	769.1	46.4	8.0	55					0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.47	773.9	30.47	773.9	38.7	3.7		s.			3					0	0		
Groningen	30.43	772.8	30.48	774.2	34.3	1.3		se.			1					0	0		
Helder	30.44	773.2	30.44	773.2	35.2	1.8		sse.			1					0	0		
Hellevoetsluis	30.45	773.4	30.45	773.4	38.3	3.5	63	s.			1					0	0		
Utrecht	30.43	772.8	30.47	774.0	39.0	3.9	79	sse.			1		2			0	0	lightly cl'dy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.05	763.2	30.11	764.8	39.9	4.4	90	s.	27	12			10			0.433	11.0	raining	
Brono	29.76	755.8	29.80	756.8	41.2	5.1	82	sw.	27	12			10			0.150	3.8	raining	
Christiania	30.00	762.1	30.16	766.0	36.3	2.4	75	wsw.	7	3			0			0	0		
Gjæsvær	29.17	740.8	29.19	741.4	41.4	5.2		sw.			6		10						
Lodingen	29.44	747.7	29.48	748.9	41.7	5.4	81	sw.			8		10			0.965	24.5	raining	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					56.8	13.8	67	nne.	4.9	2.2			3			0.488	12.4		Dr. J. A. Sampaio.
Campo Major	29.44	747.8	30.46	773.7	55.4	13.0	61	e.	8.7	3.9			4			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.07	763.7	30.15	765.9	65.7	18.7	80	sse.	2.5	1.1			5			0.177	4.5		Capt. D. A. de Cunha.
Lisbon, Observatory	30.11	764.9	30.49	774.4	49.5	9.7	74	nne.	14.3	6.4			2			0	0		The Staff.
Ponta Delgada, Azores	30.02	762.5	30.09	764.3	54.3	12.4	86	nne.	18.1	8.1			10			0.272	6.9		
Saint Paul de Loando	29.67	753.5	29.87	758.6	80.2	26.8	86	nw.	1.3	0.6			5	sse.		0	0		
Serra da Estrella	25.58	649.8	30.47	774.0	39.2	4.0	75	se.	11.2	5.0			0			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.80	731.5	29.95	760.6	19.6	— 6.9		se.	11	5			9 ks			0	0		Major K. Lasarew.
Archangel	29.63	752.5	29.65	753.0	25.5	— 3.6	95	ssw.	4	2			10			0.098	2.5	snowing	Capt. Sseliwerstow.
Astrakhan	29.69?	754.1?	29.61?	752.0?	25.0	— 3.9	80	nw.	34	15			10 n			0.134	3.4	heavy clouds	Capt. Wisganow.
Barnaul	29.86	758.4	30.42	772.6	4.5	—15.3	92	ne.	4	2			0			0	0		Meteorological Obs'y.
Dorpat	30.04	762.9	30.29	769.4	33.4	0.8	96	w.	9	4			10 n			0.016	0.4		Observatory.
Ekaterinburg	28.76	730.5	29.78	756.3	12.2	—11.0	65	ssw.	2	1			9			0.028	0.7	light clouds	Meteorological Obs'y.
Kasan	29.58	751.2	29.86	758.5	20.3	— 6.5	77	nnw.	2	1			10			0.008	0.2		Observatory.
Kertch	30.39	771.8	30.41	772.3	38.7	3.7	82	nw.	9	4		0	0			0	0		Lagorio & Sastyrex.
Kieff	29.87	758.8	30.54	775.8	37.4	3.0	73	wnw.	2	1		c	1 ks			0	0	light clouds.	Observatory.
Lugan	30.06	763.5	30.27	768.9	35.6	2.0	61	nnw.	34	15			7			0	0		Meteorological Obs'y.
Moscow	29.60	751.7	30.09	764.3	34.7	1.5	67	ssw.	7.8	3.5		0	3 ks			0	0		Meteorological Obs'y.
Nikolaiev	30.52	775.3	30.60	777.1	41.0	5.0	80	n.	13	6		0	0			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor.	30.07	763.8	30.16	766.0	— 7.2	—21.8	87	w.	9	4			0			0	0		Lieut. Iwanow.
Pekin, China	30.51	774.9	30.65	778.5	25.9	— 3.4	54	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	30.11	764.7	30.12	765.1	34.0	1.1	92	w.	16	7			10 n			0.012	0.3		Central Physical Obs'y.
Tashkend, Laboratory	28.56	725.4	30.21	767.4	33.4	0.8	65	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.58	725.8	30.06	763.6	32.2	0.1	81	nw.	22	10			10			0.346	8.8	sleeting	Physical Observatory.
Warsaw	30.11	764.9	30.57	776.4	30.9	— 0.6	96	s.	4	2			10					foggy	Astronomical Obs'y.
Wilna	30.07	763.7	30.52	775.1	33.1	0.6	94	wsw.	4	2			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.30	769.5	30.62	777.7	1.2	—17.1	85	e.	4	2			7			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park								s.			7		10						Andrew Gibb.
Monach Lt. House, Hebrides			29.74	755.4	49	9.4	93									0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.45	773.4	30.55	775.9	55.4	13	63	sw.	2.5	1.1			6			0	0	clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.49	774.4	30.55	775.9	59.5	15.3	50	se.	5.1	2.3		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.50	698.6	30.57	776.5	47.5	8.6	55	se.	5.4	2.4		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.26	717.7	30.56	776.1	51.4	10.8	59	e.	7.6	3.4		0	2			0	0		The Staff.
Murcia, Met. Obs'y	30.39	771.8	30.54	775.8	51.1	10.6	93	sw.	2.0	0.9		5	5	w.		0.079	2.0	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.52	749.8	30.43	773.0	55.0	12.8	78	calm	0	0		0	9			0.220	5.6	almost cov'd	R. Gil Valkanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.14	765.4	30.20	767.1	68.8	20.4	89	ene.	4.3	1.9		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.99	761.8	30.05	763.2	76.9	24.9	75	ne.	3.3	1.5		3 c	4 k		ene.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.32	770.0	30.42	772.6	60.4	15.8	61	e.	16.4	7.3		2	4	s.	se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.10	764.5	30.19	766.8	73.4	23.0	92	se.	4.7	2.1		4 c	5 kn	se.	se.	0.165	4.2	cloudy	E. Gadea, Chief Engu'r.
Tuguegarao, Philippine Id's	29.99	761.7	30.12	765.0	72.8	22.7	83	ese.	1.9	0.8		4 cs	3 ks		se.	0	0	cloudy	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.70	754.3	29.74	755.3	35.2	1.8	82	sw.			4		2			0	0		
Umea	29.89	759.3	29.95	760.6	36.0	2.2	93	nw.			2		0			0	0		
Hernosand	29.96	761.0	30.01	762.3	32.9	0.5	90	calm			0		5			0	0		
Stockholm	30.03	762.7	30.21	767.2	38.5	3.6	73	w.			2		10			0	0		
Wisby	30.29	769.3	30.35	770.8	35.2	1.8	95	wsw.			4		10			0	0		
Sub Series.																			
Upsala	30.06	763.5	30.15	765.7	36.7	2.6	79	wsw.	15.0	6.7						0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.18	741.2	30.69	779.5	28.0	— 2.2	100	e.			2					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.65	778.5	42.6	5.9	86	nne.	9	4.0			10		n.	0.079	2.0		The Observatory.
Valona			30.51	774.9	60.4	15.8		w.			1		0			0	0	clear	A. Bertraud.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.16	766.1	58.1	14.5	57	nw.			1	2 c	0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	29.62	752.3	29.71	754.6	43	6.1	68	nw.	29	13.0		0	9 ks		nw.	0.21	5.3	cloudy	
Alpena, Michigan	29.53	750.0	30.24	768.1	21.5	— 5.8	84	nw.	20	8.9			10 s			0.63	16.0	cloudy	
Atlanta, Georgia	29.02	737.1	30.24	768.1	59.0	15.0	100	sw.	4	1.8			10 n		calm	0.03	0.8	light rain	
Atlantic City, New Jersey	29.85	758.2	29.86	758.4	50.1	10.1	93	w.	18	8.0		3 ck	5 s	w.		0.64	16.3	cloudy	
Augusta, Georgia	30.05	763.3	30.25	768.3	55.8	13.2	90	s.	2	0.9			10s;fg			0	0	cloudy	
Baltimore, Maryland	29.95	760.7	30.00	762.0	51	10.6	59	nw.	12	5.4		0	6 s		nw.	0.06	1.5	fair	
Barnegat, New Jersey	29.82	757.4	29.84	757.9	49.2	9.6	86	nw.	18	8.0		0	5 s		w.	0.22	5.6	fair	
Bismarck, Dakota	28.09	713.5	30.09	764.3	— 5	—20.6	65	e.	12	5.4			10 s		calm	0.01	0.3	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.20	690.9	30.13	765.3	11	—11.7	91	w.	4	1.8			10 s		calm	0.20	5.1	cloudy	
Boston, Massachusetts	29.27	743.4	29.44	747.8	49.3	9.6	80	sw.	29	13.0		0	2 s			0.20	5.1	clear	
Brownsville, Texas	29.99	761.7	30.04	763.0	70.4	21.3	100	sw.	4	1.8			10 s			0.02	0.5	cloudy	
Buffalo, New York	29.35	745.5	30.15	765.8	36	2.2	69	w.	18	8.0		0	3 ks		w.	1.05	26.7	clear	
Burlington, Vermont	29.10	739.1	29.41	747.0	41.7	5.4	63	w.	40	17.9		0	5 s		w.	0.08	2.0	fair	
Cairo, Illinois	29.91	759.7	30.33	770.4	38.3	3.5	84	nw.	10	4.5		5 k	5 s	w.	calm	0.10	2.5	cloudy	
Campo, California																			
Camp Thomas, Arizona	27.33	694.2	30.16	766.1	23	—5.0	80	calm			0	3 cs	0			0	0	clear	
Cape Henry, Virginia	29.99	761.7	30.01	762.2	62	16.7	78	sw.	20	8.9		2 c	3 ks	sw.	sw.	0.06	1.5	fair	
Cape May, New Jersey	29.88	758.9	29.91	759.7	46	7.8	93	w.	25	11.2		0	8 ks		w.	0.30	7.6	cloudy	
Castroville, Texas	29.26	743.2	30.11	764.8	60	15.6	81	e.	4	1.8			10 s			0.02	0.5	cloudy	
Cedar Keys Florida	30.24	768.1	30.26	768.6	62	16.7	90	se.	3	1.3			fg.			0	0	dense fog	
Champaign, Illinois	29.48	748.8	30.35	770.9	29.1	— 1.6	77	ne.	1	0.4		0	3 s		e.	0.02	0.5	clear	
Charleston, S. Carolina	30.18	766.6	30.24	768.1	55	12.8	100	sw.	3	1.3			fg.			0	0	dense fog	
Charlotte, N. Carolina	29.29	744.0	30.18	766.6	55.0	12.8	93	w.	4	1.8			10s;fg		w.	0	0	cloudy	
Chattanooga, Tennessee	29.37	746.0	30.23	767.8	55.0	12.8	100	e.	4	1.8			10m;fog		calm	0.18	4.6	light rain	
Cheyenne, Wyoming	23.76	603.5	30.01	762.2	21.2	— 6.0	40	w.	16	7.2		0	0			0	0	clear	
Chicago, Illinois	29.58	751.3	30.33	770.4	31.8	— 0.1	82	nw.	4	1.8		6 k	0			0.14	3.6	fair	
Chincoteague, Virginia	29.92	760.0	29.94	760.5	58	14.4	87	w.	20	8.9		1 ck	8 s	w.	w	0.01	0.3	cloudy	
Cincinnati, Ohio	29.66	753.4	30.35	770.9	40.2	4.6	65	n.	8	3.6			10 s		n.	0.05	1.3	cloudy	
Cleveland, Ohio	29.50	749.3	30.28	769.1	33	0.6	86	nw.	11	4.9		0	1 s			0.72	18.3	clear	
Coleman City, Texas	28.27	718.0			48	8.9	66	e.	2	0.9		6 k	0			0	0	fair	
Columbus, Ohio	29.42	747.3	30.32	770.1	38	3.3	62	nw.	16	7.2		8 k	0	nw.		0.16	4.1	cloudy	
Concho, Texas	28.12	714.2	30.14	765.5	49	9.4	71	ne.	2	0.9			10 s			0	0	cloudy	
Davenport, Iowa	29.62	752.3	30.33	770.4	29	— 1.7	67	w.	2	0.9		hz.	sk.	calm	w.	0.01	0.3	dense haze	
Dayton, Washington T'y	28.22	716.8	30.02	762.5	28.7	— 1.8	93	sw.	8	3.6			10 n			0.05	1.3	light snow	
Deadwood, Dakota	24.99	634.7	29.94	760.5	28.5	— 1.9	80	sw.	32	14.3		0	0			0	0	clear	
Decatur, Texas					49	9.4	86	se.	8	3.6			10 s			0	0	cloudy	
Delaware Breakwater, Del.	29.88	758.9	29.90	759.4	52	11.1	93	w.	28	12.5		4ck;cs	6 s	w.	w.	0.13	3.3	cloudy	
Denison, Texas	29.34	745.2	30.18	766.6	45.4	7.4	76	ne.	4	1.8			10 s			0	0	cloudy	
Denver, Colorado	24.56	623.8	30.08	764.0	33.0	0.6	71	sw.	2	0.9		0	0			0	0	clear	
Des Moines, Iowa	29.32	744.7	30.29	769.4	23	— 5.0	73	s.	3	1.3		0	0			0.09	2.3	clear	
Detroit, Michigan	29.55	750.6	30.31	769.9	33.4	0.8	85	nw.	12	5.4		hz.	0			0.52	13.2	clear	
Dodge City, Kansas	27.41	696.2	30.16	766.1	29.8	— 1.2	85	s.	7	3.1		c	5 s			0	0	fair	
Dubuque, Iowa	29.56	750.8	30.34	770.6	19.2	— 7.1	70	calm	0	0		0	0			0.11	2.8	clear	
Duluth, Minnesota	29.48	748.8	30.24	768.1	9	—12.8	76	nw.	4	1.8			10 s		nw.	0	0	cloudy	
Eagle Pass, Texas	29.27	743.4	30.11	764.8	62.5	16.9	93	e.	4	1.8			10 s			inap.	inap.	cloudy	
Eagle Rock, Idaho	25.05	636.3	30.01	762.2	10	—12.2	76	sw.	29	13.0			10 s			0	0	threatening	
Eastport, Maine	29.12	739.6	29.19	741.4	38.5	3.6	94	s.	16	7.2			10 n		s.	0.41	10.4	light rain	
El Paso, Texas	26.31	668.3	30.19	766.8	33	0.6	81	w.	3	1.3		7 ck	0	sw.		0	0	fair	
Erie, Pennsylvania	29.46	748.3	30.23	767.8	35	1.7	79	w.	16	7.2		8 k	0	nw.		1.06	26.9	clearing	
Escanaba, Michigan	29.56	750.8	30.28	769.1	14	—10.0	80	w	4	1.8		3 c	3 s	w.	sw.	0.21	5.3	fair	
Florence, Arizona																			
Fort Apache, Arizona	25.04	636.0	30.16	766.1	20	— 6.7	64	e.	1	0.4		0	0			0	0	clear	
Fort Assinnaboine, Montana	27.13	689.1	30.17	766.3	— 9	—22.8	61	ne.	7	3.1		0	7 s			0.02	0.5	fair	
Fort Bennett, Dakota	28.18	715.8	29.92	760.0	3	—16.1	79	nw.	2	0.9		0	3 s			inap.	inap.	clear	
Fort Benton, Montana	27.18	690.4	30.16	766.1	—10	—23.3	57	calm	0	0		0	0			0.08	2.0	clear	
Fort Buford, Dakota	27.99	710.9	30.19	766.8	— 7	—21.7	61	n.	12	5.4		0	0			0	0	clear	
Fort Custer, Montana	26.70	678.2	30.08	764.0	— 4	—20.0	68	e.	5	2.2		0	6 k		se.	0	0	fair	
Fort Davis, Texas	25.01	625.2	29.99	761.7	50	10.0	86	s.	3	1.3			10 s		s.	0	0	cloudy	
Fort Elliott, Texas	27.28	692.9	30.21	767.3	30	— 1.1	70	e.	2	0.9			10 s		e.	0	0	cloudy	
Fort Gibson, Indian T'y	29.60	751.8	30.20	767.1	38.0	3.3	72	e.	4	1.8			10 s		e.	0	0	cloudy	
Fort Grant, Arizona	25.27	641.8	30.17	766.3	30	— 1.1	71	ne.	4	1.8		5 cs	0			0	0	fair	
Fort Griffin, Texas	28.83	732.3	30.21	767.3	47	8.3	77	ne.	1	0.4			10 ks		calm	0	0	cloudy	
Fort Keogh, Montana	27.34	694.4	30.04	763.0	— 2	—18.9	56	nw.	9	4.0			10 s		nw.	0	0	cloudy	
Fort Macon, North Carolina	30.17	766.3	30.18	766.6	53	11.7	100	sw.	12	5.4			hz.			0.52	13.2	dense haze	
Fort McKavett, Texas	27.87	707.9	30.26	768.6	50	10.0	86	ne.	7	3.1			10 s			0	0	cloudy	
Fort Missoula, Montana	26.48	672.6	29.94	760.5	15	— 9.4	83	sw.	2	0.9		0	0			0.08	2.0	clear	
Fort St. Michaels, Alaska	29.45	748.0	29.48	748.8	16	— 8.9	100	ne.	31	13.9			10 n			0.26	6.6	light snow	
Fort Shaw, Montana	26.26	667.0	30.12	765.0	—18	—27.9	100	w.	1	0.4		0	0			0.06	1.5	clear	
Fort Sill, Indian Territory	28.88	733.5	30.21	767.3	38.3	3.5	77	n.	2	0.9		10 c	0			0	0	cloudy	
Fort Stevenson, Dakota	28.09	713.5	30.15	765.8	— 8	—22.2	61	ne.	11	4.9			10 n		calm	inap.	inap.	light snow	
Fort Verde, Arizona					24.9	— 3.9	64	nw.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.32	719.3	30.14	765.5	53	11.7	80	calm	0	0			10 s			0.02	0.5	cloudy	
Galveston, Texas	30.07	763.8	30.11	764.8	65	18.3	100	s.	8	3.6		0	hz.			0	0	dense haze	
Grand Haven, Michigan	29.60	751.8	30.31	769.9	31.0	— 0.6	88	w.	6	2.7		0	5 s		w.	0.43	10.9	fair	
Hatteras, North Carolina	30.10	764.5	30.12	765.0	55	12.8	100	sw.	24	10.7		0	fg.			0.08	2.0	clear	
Helena, Montana	25.52	648.2	29.95	760.7	— 4	—20.0	45	calm	0	0			10 s			0.12	3.0	cloudy	
Henrietta, Texas	29.16	740.7	30.23	767.8	41	5.0	92	calm	0	0		0	6 s			0	0	fair	
Huron, Dakota	28.49	723.6	30.03	762.7	14.8	— 9.6	64	se.	13	5.8		0	1 s			0	0	clear	
Indianapolis, Indiana	29.48	748.8	30.32	770.1	36	2.2	79	e.	4	1.8			9 ks		e.	0.49	12.4	cloudy	
Indianola, Texas	30.07	763.8	30.10	764.5	68.2	20.1	100	s.	7	3.1		0	4 k			0.09	2.3	fair	
Jacksboro, Texas	28.94	735.1	30.18	766.6	46	7.8	68	e.	7	3.1			10 s		se.	0	0	cloudy	
Jacksonville, Florida	30.20	767.1	30.25	768.3	62	16.7	87	s.	4	1.8		0	fg.			0	0	clear	
Keokuk, Iowa	29.59	751.6	30.29	769.4	25.4	— 3.7	80	n.	3	1.3		0	0			0	0	clear	
Key West, Florida	30.20	767.1	30.23	767.8	73.5	23.1	84	e.	5	2.2		0	2ks;fg			0	0	clear	
Kittyhawk, North Carolina	30.06	763.5	30.08	764.0	55	12.8	93	w.	17	7.6		3 c;ck	2 s	w.	w.	0.01	0.3	fair	
Knoxville, Tennessee	29.16	740.7	30.24	768.1	55.3	12.9	98	nw.	3	1.3			10 s		sw.	0.13	3.3	cloudy	
La Crosse, Wisconsin	29.44	747.8	30.28	769.1	7	—13.9	76	s.	4	1.8		0	0			0.34	8.6	clear	
La Mesilla, New Mexico	26.14	663.9	30.17	766.3	31.0	— 0.6	71	calm	0	0		4 ck	0			0	0	fair	
Leavenworth, Kansas	29.34	745.2	30.30	769.6	29	— 1.7	77	se.	6	2.7		8 cs	0	sw.		0	0	cloudy	
Lewiston, Idaho	29.13	739.9	30.00	762.0	27	— 2.8	64	w.	1	0.4			10 s		calm	0.01	0.3	cloudy	
Little Rock, Arkansas	29.88	758.9	30.21	767.3	47	8.3	68	ne.	8	3.6			10 ks			0.25	6.3	cloudy	
Los Angeles, California	29.86	758.4	30.26	768.6	36.3	2.4	79	se.	1	0.4		7 ck	0	w.		0	0	fair	
Louisville, Kentucky	29.71	754.6	30.30	769.6	38.0	3.2	73	n.	10	4.5			10 s		calm	0.26	6.6	cloudy	
Lynchburg, Virginia	29.33	745.0	30.05	763.3	52.5	11.4	90	sw.	2	0.9		0	0			0.16	4.1	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.24	742.7	30.33	770.4	20	— 6.7	76	w.	5	2.2		0	0			0.33	8.4	clear	
Marquette, Michigan	29.46	748.3	30.24	768.1	18	— 7.8	83	nw.	5	2.2			10 s		nw.	0.06	1.5	cloudy	
Mason, Texas																			
Memphis, Tennessee	29.90	759.4	30.26	768.6	46	7.8	60	ne.	6	2.7		0	5 s		ne.	0.24	6.1	fair	
Milwaukee, Wisconsin	29.54	750.3	30.34	770.6	27	— 2.8	77	w.	3	1.3		0	1 s			0.09	2.3	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.17	766.3	30.21	767.3	62.2	16.8	93	s.	1	0.4	.....	.....	fg	.....	.....	0.01	c.3	dense fog	
Montgomery, Alabama	29.96	761.0	30.20	767.1	64.8	18.2	94	sw.	2	0.9	.....	.....	10 s	.....	sw.	0	0	cloudy	
Moorhead, Minnesota	29.06	738.1	30.17	766.3	—10	—23.3	100	ne.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	
Morgantown, W. Virginia	29.26	743.2	30.32	770.1	47.8	8.8	68	nw.	16	7.2	.....	.....	10 s	.....	nw.	0.20	5.1	cloudy	
Mt. Washington, N. H.	22.91	581.9	29.54	750.3	26.0	— 3.3	100	nw.	60	26.8	.....	.....	fg	.....	nw.	0.80	20.3	dense fog	
Nashville, Tennessee	29.72	754.9	30.28	769.1	42.9	6.1	69	n.	5	2.2	.....	10 cs	0	w.	.....	0.19	4.8	cloudy	
New Haven, Connecticut	29.55	750.6	29.67	753.6	49	9.4	67	w.	15	6.7	.....	1 c	2 s	nw.	nw.	0.16	4.1	clear	
New London, Connecticut	29.59	751.6	29.64	752.8	47	8.3	86	sw.	23	10.3	.....	5 cs	3 s	w.	sw.	0.25	6.3	clearing	
New Orleans, Louisiana	30.13	765.3	30.19	766.8	68.0	20.0	93	s.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
Newport, Rhode Island	29.52	749.8	29.57	751.1	46.3	7.9	88	sw.	25	11.2	.....	2 ck	2 ks	w.	sw.	0.31	7.9	clearing	
New River, N. Carolina	.....	.....	.....	.....	54	12.2	100	sw.	.....	.....	1	.....	fg	.....	.....	0.14	3.6	dense fog	
New Shoreham, Rhode I'd.	29.59	751.6	29.62	752.3	43.0	6.1	83	w.	25	11.6	.....	.....	fg	.....	.....	0.14	3.6	dense fog	
New York, New York	29.62	752.3	29.81	757.2	47	8.3	77	sw.	20	8.9	.....	2 cs	3 s	sw.	.....	0.08	2.0	fair	
Norfolk, Virginia	30.00	762.0	30.03	762.7	59	15.0	87	w.	12	5.4	.....	2 ck	5 ks	w.	w.	0.09	2.3	fair	
North Platte, Nebraska	26.94	684.3	30.06	763.5	24.6	— 4.1	74	w.	4	1.8	.....	0	0	.....	.....	0.01	0.3	clear	
Olympia, Washington T'y	30.05	763.3	30.09	764.3	24.0	— 4.4	88	s.	1	0.4	.....	.....	10 s	.....	calm	0.13	3.3	cloudy	
Omaha, Nebraska	28.96	735.6	30.22	767.6	28.5	— 1.9	82	se.	10	4.5	.....	0	0	.....	.....	0.01	0.3	clear	
Ooglaamie, Pt. Barrow, Alas.	29.75	755.6	29.77	756.1	—19.7	—28.7	80	w.	22	9.8	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	29.58	751.3	29.93	760.2	40.0	4.4	70	w.	18	8.0	.....	.....	10 s	.....	nw.	0.71	18.0	cloudy	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	30.20	767.1	30.23	767.8	66.1	18.9	97	s.	3	1.3	.....	0	4 s	.....	.....	0.10	2.5	fair	
Philadelphia, Pa.	29.84	757.9	29.90	759.4	49.5	9.7	91	nw.	18	8.0	.....	3 ck	0	w.	.....	0.12	3.0	clear	
Pike's Peak, Colorado	17.31	439.7	30.01	762.2	— 6.5	—21.4	86	sw.	42	18.8	.....	0	0	.....	.....	0	0	clear	
Pioche, Nevada	23.97	608.8	30.17	766.3	21	— 6.1	64	s.	10	4.5	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.42	747.3	30.27	768.8	39.0	3.9	67	nw.	8	3.6	.....	.....	10 s	.....	nw.	0.29	7.4	cloudy	
Port Eads, Louisiana	30.20	767.1	30.21	767.3	58.0	14.4	93	s.	2	0.9	.....	.....	fg	.....	calm	0.01	0.3	dense fog.	
Port Huron, Michigan	29.55	750.6	30.28	769.1	28.6	— 1.9	64	nw.	14	6.3	.....	0	0	.....	.....	0.81	20.6	clear	
Portland, Maine	29.21	741.9	29.26	743.2	40.5	4.7	92	sw.	13	5.8	.....	0	2 s	.....	w.	0.29	7.4	clear	
Portland, Oregon	30.05	763.3	30.12	765.0	31.0	— 0.6	88	s.	4	1.8	.....	0	2 s	.....	calm	0.12	3.0	clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	58	14.4	80	sw.	18	8.0	.....	0	5 ks	.....	sw.	0.26	6.6	fair	
Prescott, Arizona	24.75	628.6	30.13	765.3	7	—13.9	30	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Punta Rassa, Florida	30.25	768.3	30.26	768.6	69	20.6	90	ne.	5	2.2	.....	.....	10 s	.....	e.	0	0	cloudy	
Red Bluff, California	29.84	757.9	30.22	767.6	36.1	2.3	96	w.	3	1.3	.....	0	9 s	.....	.....	0.09	2.3	cloudy	
Rio Grande City, Texas	29.80	756.9	30.05	763.3	64	17.8	93	calm	0	0	.....	4 c	0	calm	.....	0	0	fair	
Rochester, New York	29.34	745.2	30.05	763.3	37	2.8	82	w.	20	8.9	.....	.....	10 ks	.....	w.	0.48	12.2	cloudy	
Roseburg, Oregon	29.60	751.8	30.17	766.3	31.2	— 0.4	95	e.	1	0.4	.....	.....	10 ks	.....	w.	0.24	6.1	cloudy	
Sacramento, California	30.14	765.5	30.22	767.6	36.6	2.6	89	s.	4	1.8	.....	0	3 s	.....	.....	0.48	12.2	clear	
St. Louis, Missouri	29.71	754.6	30.35	770.9	30.0	— 1.1	88	n.	7	3.1	.....	1 c	0	.....	.....	0.05	1.3	clear	
St. Paul, Minnesota	29.26	743.2	30.21	767.3	1.0	—17.2	72	se.	9	4.0	.....	0	0	.....	.....	0.27	6.9	clear	
St. Vincent, Minnesota	29.28	743.7	30.26	768.6	—23	—30.6	100	n.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Salt Lake City, Utah	25.46	646.7	30.03	762.7	32	0.0	62	se.	20	8.9	.....	.....	10 s	.....	.....	0	0	cloudy	
San Antonio, Texas	29.38	746.2	30.11	764.8	58.6	14.8	75	n.	8	3.6	.....	.....	10 s	.....	n.	0.02	0.5	cloudy	
San Diego, California	30.12	765.0	30.19	766.8	42.0	5.6	82	ne.	3	1.3	.....	0	7 s	.....	.....	0	0	fair	
Sandusky, Ohio	29.58	751.3	30.30	769.6	33	0.6	78	w.	17	7.6	.....	0	0	.....	.....	0.59	15.0	clear	
Sandy Hook, New Jersey	29.77	756.1	29.81	757.2	46.5	8.1	77	nw.	29	13.0	.....	1 ck	0	nw.	.....	0.15	3.8	clear	
San Francisco, California	30.18	766.6	30.26	768.6	44	6.7	72	w.	6	2.7	.....	0	1 s	.....	.....	0.15	3.8	clear	
Santa Fé, New Mexico	23.18	588.8	30.19	766.8	19	— 7.2	67	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Savannah, Georgia	30.16	766.1	30.26	768.6	57	13.9	86	s.	4	1.8	.....	0	fg	.....	s.	0.01	0.3	clear	
Shreveport, Louisiana	29.89	759.2	30.14	765.5	57	13.9	80	n.	4	1.8	.....	0	5 s	.....	.....	0.15	3.8	fair	
Silver City, New Mexico	24.22	615.2	30.08	764.0	28	— 2.2	70	n.	2	0.9	.....	0	3 s	.....	calm	0	0	clear	
Sitka, Alaska	30.09	764.3	30.16	766.1	24.5	— 4.2	78	ne.	10	4.5	.....	.....	10 s	.....	calm	0	0	cloudy	
Smithville, North Carolina	30.16	766.1	30.20	767.1	52	11.1	100	w.	6	2.7	.....	.....	fg	.....	.....	0.28	7.1	dense fog	
Spokane Falls, Wash. Ter.	27.84	707.1	29.98	761.5	10	—12.2	80	nw.	7	3.1	.....	0	0	.....	.....	0.04	1.0	clear	
Springfield, Illinois	29.62	752.3	30.34	770.6	33.6	0.9	70	n.	4	1.8	.....	0	0	.....	.....	0.05	1.3	clear	
Springfield, Massachusetts	29.45	748.0	29.59	751.6	47.7	8.7	63	w.	13	5.8	.....	3 k	0	w.	.....	0.08	2.0	clear	
Springfield, Mo.	28.78	731.0	30.36	771.1	30	— 1.1	77	e.	5	2.2	.....	9 cs	0	.....	.....	0	0	cloudy	
Stockton, Texas	26.99	685.5	30.13	765.3	48.7	9.3	86	calm	0	0	.....	3 c	0	calm	.....	0	0	clear	
Thatcher's Island, Mass.	29.38	746.2	29.44	747.8	44.0	6.7	96	sw.	18	8.0	.....	0	0	.....	.....	0.58	14.7	clear	
Toledo, Ohio	29.55	750.6	30.29	769.4	36	2.2	72	w.	8	3.6	.....	0	0	.....	.....	0.59	15.0	clear	
Tucson, Arizona	27.64	702.0	30.14	765.5	35	1.7	89	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Umatilla, Oregon	29.74	755.4	30.12	765.0	22.7	— 5.2	93	nw.	5	2.2	.....	0	0	.....	.....	0.01	0.3	clear	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.90	759.4	30.17	766.3	64	17.8	93	calm	0	0	.....	.....	10 n	.....	calm	0.06	1.5	light rain	
Visalia, California	29.82	757.4	30.21	767.3	43.5	6.4	88	e.	1	0.4	.....	0	6 s	.....	.....	0.12	3.0	fair	
Washington, D. C.	29.90	759.4	30.02	762.5	51	10.6	80	nw.	3	1.3	.....	0	3 s	.....	nw.	0.36	9.1	fair	
West Los Animas, Colorado	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wickenburg, Arizona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Williamsport, Pa.	29.39	746.5	30.02	762.5	42	5.6	57	nw.	21	9.4	.....	.....	10 ks	.....	nw.	0.02	0.5	cloudy	
Wilmington, N. Carolina	30.14	765.5	30.20	767.1	59	15.0	93	w.	6	2.7	.....	0	7 k; fg	.....	w; c.	0.05	1.3	fair	
Winnemucca, Nevada	25.51	647.9	30.05	763.3	22	— 5.6	61	sw.	16	7.2	.....	0	0	.....	.....	0.02	0.5	clear	
Wood's Holl, Mass.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.45	11.4	.....	
Yankton, Dakota	28.70	729.0	30.12	765.0	26	— 3.3	76	calm	0	0	.....	.....	10 s	.....	.....	0.02	0.5	cloudy	
Yuma, Arizona	29.99	761.7	30.14	765.5	37.2	2.9	88	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.04	559.8	.....	.....	52.0	11.1	76	calm	0	0	.....	0	1 s	.....	.....	0	0	clear	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.08	764.0	30.09	764.3	77	25.0	81	e.	.....	.....	.....	2 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.96	761.0	29.98	761.5	77	25.0	90	s.	8	3.6	.....	.....	10 ks	.....	s.	0.80	20.3	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.98	761.5	30.00	762.0	76	24.4	90	ne.	.....	.....	.....	0	5 ks	.....	.....	0.1	3.	.....	B. Bigar.
Havana, Cuba, W. I.	30.18	766.6	30.23	767.8	72	22.2	84	calm	0	0	.....	0	2 ks	.....	calm	0	0	fair	A. Van Cangheim, Ass't
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	64.8	18.2	88	calm	0	0	.....	0	0	.....	.....	0	0	fine	Robert Johnstone
Navassa, W. I.	30.01	762.2	30.09	764.3	76	24.4	74	ne.	10	4.5	.....	2 ck	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	76	24.4	86	e.	.....	.....	2	5 k	5 ps	e.	.....	1.200	30.5	.....	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.96	761.0	82	27.8	80	calm	.....	.....	0	7 cs	2 s	n.	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	73	22.8	92	ne.	.....	.....	3	0	5 ks	.....	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.14	765.5	30.17	766.3	74	23.3	76	n.	6	2.7	.....	2 ck	0	.....	.....	0	0	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.03	762.7	30.09	764.3	—34.0	—36.7	.....	sw.	8	3.6	.....	5 k	5 s	sw.	sw.	inap.	inap.	snowing	J. Fortescue & W. Wood

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 21° 29′, E. 109° 05′	30.11	764.8	65	18.3		ne.			3-5		10					4		raining	Comm. A. J. Errington.
H. M. S Alert, Singapore Roads, India	29 89	759.2	81.8	27.7	75	ne.			2		3							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.44	773.2	60	15.6	76	e.			1		0							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.91	759.7	75	23.9	71	ese.			5-6		2	se.						squally	Com. Sir F. W. Richards.
H. M. S. Champion, S. 9° 20′, W. 78° 40′	29.94	760.5	68	20.0	90	s.			1		5	calm				2	se.	d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, N. 36° 22′, E. 20° 50′	30.41	772.4	60.5	15.8	68	w.			1-2		2					2		d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.40	772.1	60	15.6		ene.			2		4	ene.				1	wsw.	d. clouds	Lieut. J. L. Burr.
H. M. S. Cormorant																			Capt. Bruce.
H. M. S. Curacoa, N. 32° 13′, E. 119° 27′	30.46	773.7	44.5	6.9	100	e.			1		10							raining	Capt. S. Long.
H. M. S. Diamond, S. 36° 00′, E. 7° 08′			68	20.0	79	n.			1		1	wnw.				3	w.	blue sky	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.40	772.1	63	17.2	78	ssw.			1-2		6	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 21° 17′, W. 74° 54′	30.19	766.8	76	24.4	95	e.			3-4		5	e.				4	ese.	squally	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 37′, W. 59° 32′	28.99	736.3	58.5	14.7	76	wnw.			4-5		0					3-4	wnw.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.83	757.7	82	27.8		nne.			1-2		4							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald, S. 42° 53′, E. 147° 22′	29.51	749.5	60	15.6	94	nw.			2-3		4	nw.						squally	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.20	767.1	41	5.0		n.			4-5		8	w.						d. clouds	Capt. G. Robinson.
H. M. S. Espiegle																			Capt C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.79	756.7	79	26.1	69	s.			6		3					3	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.35	770.9	45	7.2	76	n.			1		8	n.						misty	Capt. R. F. Hoskyn.
H. M S. Gannet, Coquimbo, Chili	29.94	760.5	62	16.7	86	nnw.			3		10							overcast	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. Jones.
H. M. S. Iris, Famagusta, Cyprus	30.21	767.3	57	13.9	62	n.			3		1					2	ne.	blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.22	767.6	62	16.7	94	ene.			1		9	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark, S. 33° 56′, E. 170° 07′	29.97	761.2	69.3	20.7	88	nne.			2		7					2	sse.	d. clouds	Lieut. C. F. Oldham.
H. M. S. Liffey																			Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.18	766.6	60.9	16.1	88	e.			1		10					1	ene.	misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 22° 46′, E. 37° 10′	29.88	758.9	73	22.8	85	nnw.			2-3		4	nnw.				3	nnw.	d. clouds	Capt. H. Hand.
H. M. S. Mutine, Callao, Peru	29.95	760.7	68	20.0	90	calm			0		2							misty	Comm. F. Edwards.
H. M. S. Northampton, St. Vincent, W. I.	29.99	761.7	76.5	24.7	79	ene.			2		4	ene.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. J. Kinahan.
H. M. S. Pelican, S. 2° 09′, W. 21° 04′	29.90	759.4	81.5	27.5	100	ese.			2		4					2	ese.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.17	766.3	54.1	12.3		wnw.			1		5	w.						d. clouds	Capt. W. H. Edwards.
H. M S. Rocket, N. 48° 27′, W. 123° 27′	29.98	761.5	25	— 5.0	86	nne.			1		2							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Colombo, Ceylon, India	29.89	759.2	80.5	26.9	82	n.			3		4	n.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis																			Capt. G. O. Twiss.
H M. S. Tenedos, N. 15° 55′, W. 86° 02′	30.05	763.3	76	24.4	81	ene.			1		8					sm'h		d. clouds	Capt. C. G. Fane.
H. M. S Triumph, N. 5° 12′, W. 79° 57′	29.93	760.2	74	23.3	90	n.			2-3		2	calm				3	n.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.05	762.3	77	25.0		ne.			1		4							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Bahrein, Arabia	30.15	765.8	59.5	15.3	82	nnw.			5-6		7	nw.				3	wnw.	squally	Capt. T. P. Nesham.
H. M. S. Zephyr, Nagasaki, Japan	30.40	772.1	42	5.6	?	calm			0									blue sky	Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Brava, Cape Verd Ids	29.98	761.5	74.3	23.5	87	ne.			2		0					2	ne.	blue sky	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stocknolm.																			
H. M. Corvette Balder, N. 10° 37′, W. 66° 57′	30.04	763.0	73.8	23.2	80	ne.			1		6							misty	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				

UNITED STATES NAVAL SERIES.

Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.

By authority of the Secretary of the Navy.

N. Yard, Pensacola, Fla	30.08	764.0	67	19.4	89	s.	5	2.2	.....	.....	5	.....	s.	0.02	0.5	.....	.....	fair	
N. Yard, Portsmouth, N. H.	29.41	747.0	44	6.7	.....	w.	17	7.6	.....	.....	0	.....	.....	0.6	15.	.....	.....	clear	
Naval Hospital Yokohama, Japan	29.98	761.5	40.5	4.7	36	n.	.....	.....	4	.....	8	.....	sw.	sli't	sli't	.....	.....	cloudy	
Adams, Callao, Peru	29.74	755.4	70	21.1	90	calm	.....	.....	0	.....	2	.....	.....	.....	.....	gr'd	.....	fair	
Alaska, Valparaiso, Chili	29.90	759.4	60	15.6	94	calm	.....	.....	0	.....	8	.....	.....	0	0	sm'h	.....	cloudy	
Alert, N. 8° 31′, E. 104° 24′*	29.79	756.7	81	27.2	87	ne.	.....	.....	3	.....	8	.....	sw.	0	0	sm'h	.....	fair	
Alliance, Boston, Mass.*†	29.54	750.3	48	8.9	92	w.	.....	.....	3	.....	2	.....	.....	0	0	.....	.....	fair	
Ashuelot, Tientsin, China	30.63	778.0	28	— 2.2	100	se.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	overcast	
Brooklyn, Montevideo, Uruguay	29.94	760.5	70	21.1	95	n.	10	4.5	.....	.....	2	.....	n.	0	0	sm'h	.....	fair	
Colorado, New York, N. Y.	29.76	755.9	46	7.8	77	wsw.	16	7.2	.....	.....	8	.....	wsw.	0.09	2.3	.....	.....	fair	
Essex, N. 34° 47′, W. 32° 49′	30.16	766.1	58	14.4	70	ene.	.....	.....	5	.....	10	.....	ne.	.....	.....	mod.	ne.	gloomy	
Franklin, Norfolk, Va.	29.99	761.7	60	15.6	88	wsw.	16.8	7.5	.....	.....	8	.....	wsw.	0.01	0.3	.....	.....	fair	
Galena, N. 30° 03′, W. 16° —′	30.23	767.8	65	18.3	89	wnw.	.....	.....	3	.....	8	.....	.....	.....	.....	mod.	se.	fair	
Independence, N. Yard, Mare I'd, Cal.	30.10	764.5	43	6.1	75	calm	0	0	.....	.....	0	.....	.....	0.26	6.6	.....	.....	clear	
Kearsarge, New Orleans, La.	30.13	765.3	67	19.4	100	s.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	dense fog	
Lackawanna, Valparaiso, Chili†	30.05	763.3	62	16.7	100	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Lancaster, Leghorn, Italy	30.50	774.7	51	10.6	86	ne.	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	misty	
Michigan, Erie, Pa.	30.00	762.0	36	2.2	70	wsw.	.....	.....	5	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I.	29.58	751.3	49	9.4	93	wsw.	20	8.9	.....	.....	8	.....	wsw.	.....	.....	.....	.....	squally	
Monocacy, Yokohama, Japan	30.19	766.8	41	5.0	82	nnw.	.....	.....	4	.....	10	.....	sw.	.....	.....	.....	.....	cloudy	
Nipsic, Leghorn, Italy	30.58	770.7	58	14.4	70	ne.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.05	763.3	68	20.0	95	calm	.....	.....	0	.....	5	.....	nw.	.....	.....	long	w.	fair	
Palos, Hong Kong, China	30.20	767.1	61	16.1	100	e.	.....	.....	2	.....	10	.....	calm	.....	.....	.....	.....	cloudy	
Passaic, Washington, D. C.	29.98	761.5	47	8.3	85	nw.	.....	.....	4	.....	2	.....	nw.	.....	.....	.....	.....	clear	
Pensacola, Valparaiso, Chili	30.03	762.7	61	16.1	77	calm	0	0	.....	.....	10	.....	ne.	0	0	sm'h	.....	cloudy	
Powhatan, N. 38°04′, W. 74° 24′	30.08	764.0	52	11.1	93	sw.	.....	.....	6	.....	10	.....	sw.	.....	.....	mod.	sw.	overcast	
Quinnebaug, Off Villafranca, France	30.56	776.2	60	15.6	71	w.	.....	.....	2	.....	5	.....	.....	.....	.....	sm'h	.....	fair	
Ranger, N. 19° 17′, W. 104° 50′*	29.90	759.4	73	22.8	90	e.	.....	.....	1	.....	8	.....	calm	0	0	sm'h	.....	fair	
Richmond, N. 5° 18′, W. 173° 51′*	29.74	755.4	82	27.8	87	ene.	.....	.....	4	.....	2	.....	ne.	0	0	sm'h	e.	fair	
Shenandoah, Montevideo, Uruguay*.	30.02	762.5	71	21.7	85	n.	.....	.....	2	.....	5	.....	.....	.....	.....	sm'h	.....	fair	
St. Louis, League Island, Pa.	30.06	763.5	44	6.7	92	wnw.	30	13.4	.....	.....	5	.....	wnw.	0.01	0.3	.....	.....	fair	
Swatara, Kobe, Japan*	30.21	767.3	45	7.2	61	ne.	.....	.....	1	.....	8	.....	w.	.....	.....	sm'h	.....	fair	
Tennessee, New York, N. Y.	29.74	755.4	46	7.8	92	w.	13	5.8	.....	.....	2	.....	.....	0.04	1.0	.....	.....	hazy	
Vandalia, Santa Anna, Curacoa, W. I.	30.03	762.7	77	25.0	82	e.	.....	.....	3	.....	2	.....	e.	.....	.....	.....	.....	clear	
Wabash, Boston, Mass.	29.42	747.3	38	3.3	81	wsw.	18	8.0	.....	.....	2	.....	w.	0.40	10.2	.....	.....	hazy	
Wachusetts, San Francisco, Cal.	30.19	766.8	45	7.2	70	w.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Wyoming, Port Royal, S. C.	30.21	767.3	52	11.1	100	calm	0	0	.....	.....	2	.....	calm	0	0	.....	.....	fair	
Yantic, Aspinwall, Panama*	29.87	758.7	77	25.0	91	n.	.....	.....	4	.....	8	.....	n.	.....	.....	mod.	n.	cloudy	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. Gapon, 2d Officer.
S. S. Polynesian, Capt. R. Brown, N. 53° 49′, W. 23° 38′	29.63	752.6	38	3.3	.....	w.	5	.....	3	.....	wnw.	8 h'r	snow	r'gh	nw.	clear	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, N. 41° 32′, W. 64° 56′*	29.48	748.8	40	4.4	.....	sw.	5	.....	10	.....	.....	.....	.....	h'vy	sw.	dense fog	J. G. Stephens.
S. S. Waldensian Glasgow, Scotland*	30.18	766.6	42	5.6	.....	s.	6	.....	.....	.....	.....	1 h'r	1 h'r	.....	.....	raining	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, N. 30° 41′, W. 69° 30′	29.72	754.9	49	9.4	93	ssw.	6	.....	8	.....	w.	.....	.....	r'gh	sw.	fair	Caulfman & Morse.
S. S. Ohio, Capt. Henry Morrison, N. 47° 50′, W. 42° 40′*†	30.15	765.8	30	—1.1	89	wsw.	9	.....	8	.....	wsw.	.....	.....	mod.	nw.	overcast	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 51° —′, W. 14° —′†	29.90	759.4	48	8.9	85	ssw.	5	.....	10	.....	nw.	.....	.....	mod.	nw.	gloomy	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown.. N. 55° 17′, W. 21° 48′†*	29.78	756.4	41	5.0	.....	w.	7	.....	2	.....	w.	.....	.....	r'gh	w.	clear	J. Brown.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 18° 33′, W. 72° 20′*†	30.24	768.1	75	23.9	76	calm	0	.....	0	.....	.....	0	0	sm'h	.....	clear	C. P. Krause.
S. S. Alvo, Capt. D. W. Williams, Colon, U. S. C.*	29.98	761.5	80	26.7	.....	nne.	5	.....	4	.....	ne.	0	0	.....	.....	very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin N. 31° 09′, W. 73° 51′*†	30.11	764.8	69	20.6	.....	s.	4	.....	5	.....	s.	light	light	light	ssw.	fine	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 18° 40′, W. 67° 00′	.....	.....	74	23.3	.....	e.	3	.....	8	.....	ene.	0	0	hv'y	ene.	squally	R. de Echevarrieta.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, N. 43° 38′, W. 70° 43′*†	29.55	750.6	47	8.3	69	nnw.	9	.....	.....	.....	.....	light	light	short	nnw.	misty	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
Baroda, Capt. C. J. Russell N. 25° 15′, W. 24° 10′	30.23	767.8	69.3	20.7	71	se.	4	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Caldew, Capt. W. Peterson S. 46° 50′, W. 82° 12′	29.72	754.9	51	10.6	.....	sw.	6	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
S. S. Cipero, Capt. W. N. Lally N. 19° 07′, W. 45° 54′	30.14	765.5	70.8	21.6	100	n.	2	.....	10	.....	.....	.....	.....	1	nne.	drizzling	.....
S. City of Agra, Capt. Thos. Young, N. 18° 33′, W. 37° 25′	30.07	763.8	76.0	24.4	.....	ese.	2	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Bk. Glaramara, Capt. R. Morton, N. 40° 34′, W. 28° 00′	30.15	765.8	53	11.7	79	wnw.	3	.....	9	.....	.....	.....	.....	.....	.....	overcast	.....
Glencairn, Capt. R. S. Tannock, S. 39° 50′, E. 69° 34′	30.00	762 0	56	13.3	93	sse.	5	.....	9	.....	.....	.....	.....	.....	.....	squally	.....
Bq. Hermine, Capt. S. G. Jones, S. 47° 40′, W. 83° 30′.	29.69	754.1	49.0	9.4	93	sw.	6	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Humboldt, Capt. A. W. Jeffery, Off Cape St Maria, Uraguay, S. A.	29.97	761.2	72.5	22.5	67	e.	2	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
S. Lochee, Capt. J. Raeburn, S. 26° 20′ E. 47° 50′	30.11	764.8	73	22.8	81	se.	6	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, S. 38° 39′ W. 46° 13′	29.80	756.9	69.5	20 8	75	sse.	6	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Mertola, Capt. E. W. Turner, N. 39° 12′, W. 11° 07′	30.45	773.4	57.9	14.4	96	ese.	4	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Naiad, Capt. John Smith N. 5° 33′, W. 33° 28′	29.95	760.7	79.5	26.4	86	n.	4	.....	4	.....	.....	.....	.....	.....	.....	misty	.....
Pole Star, Capt. F. Norman S. 51° 47′, W. 80° 16′	29.41	747.0	49.5	9.7	78	s.	6	.....	7	.....	.....	.....	.....	.....	.....	blue sky	.....
Queen of Cambria, Capt. M. Parry, S. 43° 40′, E. 48° 18′	30.09	764.3	47	8.3	92	nnw.	6	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Strathleven, Capt. C. W. Pearson, N. 40° 08′, W. 66° 11′	29.66	753.4	47.0	8.3	96	ssw.	5	.....	10	.....	.....	.....	.....	.....	.....	rain & fog	.....
S. Superb, Capt. Berridge, N. 25° 12′ W. 41° 24′	30.14	765.5	69.6	20.9	79	ne.	1	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York																	
S. S. Brooklyn City, Capt S. Windham,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. Fitt.
CALIFORNIA, AND MEXICAN S. S. CO.																	
J. Birmingham, Agent San Francisco.																	
S. S. Newbern, Capt. E. Rogers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. H. Freeman.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul, Havre, France	30.37	771.4	33.8	1.0	.....	ne.	3	.....	5	.....	ne.	0	0	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Servan, N. 47° 39′, W. 44° 07′*	30.00	762.0	41.0	5.0	.....	w	5	.....	.....	.....	.....	0	0	sm'h	w.	.....	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York																	
S. S. Gellert, Capt. Kuhlewein, N. 40° 25′, W. 70° 01′*	29.63	752.6	49	9.4	.....	w.	5-6	.....	5	.....	nw.	2 h'r	2 h'r	r'gh	nw.	fair	P. Frochlien, 3d Offi.
S. S. Silesia, Capt. A. Albers N. 49° 26′, W. 24° 25′*†	30.03	762.7	50.0	10.0	.....	se.	3	.....	2	.....	sw.	0	0	2-4	se.	fair	.....
S. S. Wieland, Capt. C. Hebich. N. 49° 38′, W. 29° 51′*	29.86	758.4	.....	.....	.....	wnw.	4	.....	2	.....	wnw.	2 h'r	2 h'r	4	wnw.	.....	Patterson & Thompson.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. Jorgensen.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Havelius. Capt. J. Carroll, Montevideo*†	30.02	762.5	72	22.2	.....	ene.	2	.....	2	.....	ne.	0	0	.....	.....	clear	J. Carroll.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.*		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E Parry
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.36	771.1				w.	2		5		se.	0	0			fine.	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,																	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom N. 10° 28′, W. 75° 30′†	29.81	757.2	76	24.4		n.	2								n.	hazy.	
S. S. Bothnia, Capt. W. McMickan,																	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Timmerman Havana, Cuba†*	30.11	764.8	77	25.0		se.	3								ene.	clear.	
S. S. City of Washington, Capt. J. W. Reyolds																	
S. S. Maas, Capt. T. H. Bonjer, N. 48° 43′ W. 38° 50′*	30.04	763.0	36	2.2		nnw.	1							high	wnw.		
S. S. New York, Capt. R. B. Quick, N. 38° 37′, W. 76° 25′*†	30.32	770.1	70	21.1		w.	4								se.	clear.	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers, N. 49° 33′, W. 17° 33′	29.93	760.2				nw.	6		10			4 h'r	4 h'r	mod.	w.	covered.	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander,																	G. H. Lose, 3d Off.
S. S. Leipzig, Capt. F. Pfeiffer, N. 49° 27′, W. 28° 38′	30.07	763.8	45.0	7.2	92	w.	5		5		w.	0	0	cross	var.	fair.	Sander & Waller.
S. S. Neckar, Capt. R. Bussius. N. 46° 56′, W. 35° 47′	30.03	762.7	40.1	4.5		nw.	5–6		6		nnw.	10 h'r and	snow hail	mod.	n.		Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger, N. 29° 03′, W. 16° 00′*	30.23	767.8	71.6	22.0	85	w.	2		5		se.	0	0	1	s.	fair.	Montz & Kohlenbeck.
S. S. Oder, Capt. Undeutsch, N. 46° 19′, W. 47° 58′*	29.87	758.7	31.1	—0.5		s.	5		10		wsw.	rain	rain	very h'vy	w.	sleeting.	
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany			37.4	3.0		wnw.	5		10		w.	0	0			foggy.	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 37° 50′, W. 124° 48′†	30.23	767.8	55	12.8	80	nw.	4		5		w.	0	0	mod.	nw.	fair.	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 42° 28′, E. 156° 04′*†	28.67?	728.2?	48	8.9	77	wsw.	7		6?		wsw.			r'gh	wsw.	clear?	
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.21	767.3	62	16.7	77	nw.	4		8		sw.					overcast.	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.84	757.9				nw.	7		0							clear.	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Boston, Mass*	29.52	749.8	48	8.9		w.	6		2		wnw.	4 h'r	4 h'r			fair.	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes,																	E. W. Holmes.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d officer
S. S. Columbia, Capt. F. Bolles,																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Astoria, Oregon†	30.09	764.3	34	1.1	90												G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, N. 33° 49′, W. 118° 40′.†	30.16	766.1	49	9.4	93	e.	3		10		e.			sm'h		rainy.	
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†	29.08	761.5	31	—0.6		var.	3		0			0	0	sm'h		clear.	
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	30.17	766.3	44	6.7	83	sw.	1		0							clear.	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 37° 12′, W. 122° 25′†	30.18	766.6	50	10.0	59	calm	0		8		se.	sh'rs	shr's	mod.	se.	drizzling.	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, N. 34° 24′, W. 119° 40′†	30.22	767.6	49	9.4	93	e.	1		4			1 h'r	light	sm'h		fair.	T. Wallace.
S. S. State of California, Capt. G. Debney Portland, Oregon†	30.13	765.3	31	—0.6	100	ese.	2		10		w.	0	0			cloudy.	
S. S. Victoria, Capt. H. M. Hayward, N. 48° 17′, W. 123° 32′†	30.14	765.5	24	—4.4	88	ne.	2		8					sm'h		cloudy.	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. ——																	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, S. 33° 57′, E. 157° 30′†	29.91	759.7	79	26.1	73	nnw.	4		8		nw.	0	0	mod.	ne.	fair.	W. H. Hawes, 2d Off
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 34° 55′, E. 178° 54′†	30.56	776.2	58	14.4	64	n.	3		5		ne.	0	0	mod. cross		fair.	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn, N. 6° 04′, W. 164° 21′†	29.87	758.7	80	26.7	86	ene	5		8		ne.			mod.	ene.	drizzling.	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 35° 49′, E. 139° 55′†	30.36	771.1	35	1.7	61	n.	5		8		n.	0	0			hazy.	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 17° 04′, W. 100° 44′.†	29.98	761.5	75	23.9	85	wnw.	3		2		calm	0	0	small	w.	clear.	
S. S. Grenada, Capt. M. Connolly, Panama, Panama.†	29.89	759.2	73	22.8	95	n.	2		2		n.	0	0			clear.	
S. S. South Carolina, Capt. W. J. Russell, N. 31° 36′, W. 119° 24′*†	30.18	766.6	57	13.9	75	sw.	2		8		sw.	2h'r	2h'r	cross	w. to nw.	fine.	
S. S. Zealandia, Capt. H. Webber, Sydney, N. S. W.	29.92	760.0	64	17.8	100	ese.	2		5?		s.					clear?	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
								Amount and kind.		Direction.							
						Direction.	Force	Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke N. 18° 37′, W. 63° 35′						ene.	4		5			light	light	r'gh.	ene.	rainy	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, N. 48° 15′, W. 35° 22′*	30.02	762.5	38	3.3	71	nnw.	6		7		nw.	0.2	5.		nw.	hailing	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, Antwerp, Belgium			36	2.2	90	wsw.	1		5?		s.	0	0			cloudy?	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 41° 36′, W. 62° 31′*	29.42	747.3	48	8.9		ssw.	4		10		ssw.	rain	rain	sm'h	ssw.	foggy	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis N. 48° 57′, W. 23° 19′*	29.91	759.7	54.2	12.3	79	w.	3		2			6 h'r	6 h'r	high	w.		
THINGVALLA LINE *Funch, Edye & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub Copenhagen, Denmark†	30.36	771.1	33.8	1.0		wsw.	2		10		wsw.	0	0			covered	J. T. Ulberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters																	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 40° 26′, W. 69° 07′*†	29.67	753.6	42	5.6		ssw.	5		10		sw.	driz.	driz.	mod.	sw.	foggy	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 49° 47′, W. 27° 48′*†	29.87	758.7	44	6.7		nnw.	1		8		w.	0	0	sm'h		d. clouds	W. Thomas.
S. S. Celtic, Capt. B. Gleadell Liverpool, Eng.*†	30.26	768.6	44	6.7	100	var.	3		10		e.	0	0			overcast	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 42° 34′, W. 59° 50′*†	29.86	758.4	45	7.2		sw.	3		2		sw.	12 h'r	12 h'r	sm'h	wsw.	misty	H.D. Jay, 4th Officer.
S. S. Republic, Capt. P. J. Irving, N. 51° 21′, W. 22° 57′†	29.98	761.5	47	8.3	?	w.	5		5		w.	shr's	shr's	mod	w.	fair	H.Goulden, 4th Officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, Pensacola, Florida†	30.33	770.4	68	20.0	90	calm	0		8 k		w.	0	0			cloudy	J. Jorgensen.
S. S. Alfonso XII, Capt. Eugenio Bayona,																	
Bk. Alpha, Capt. Ole Grönn, N. 35° 47′, W. 8° 00′*†	30.32	770.1	68	20.0		e.	6		2		e.	0	0	mod	e.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis N. 17° 52′, W. 66° 05′*†	30.16	766.1	78	25.6		ne.	4		5		ene.	1 h'r	h'vy	sm'h	ene.	fair	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin S. 6° 34′ W. 34° 40′*†	29.70	754.4				se.					se.			light	se.	clear	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Liverpool, Eng*†	30.17	766.3				s.	3		8		sw.	0	0			cloudy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 18° 53′, W. 37° 23′†	30.10	764.5				e.	3		2		e.	0	0	sm'h	ese.		
S. Enoch Train, Capt. H. D. Chapman. Off Dungeness, Eng*.	30.44	773.2				s.	3		9		ssw.	0	0	sm'h		hazy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 49° 07′, W. 9° 12′*	30.29	769.4				ssw	5		6		sse.	0	0	long	nw	fair	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.12	765.0	50	10.0	78	ssw.	3		2		ssw.	0	0	sm'h		clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison, S 53° 33′, W. 80° 38′†	29.69	754.1	48	8.9		wnw.	5		10		wnw.	3 h'r	light	mod.	wnw.	misty	G. D. Morrison.
Bk. Freya, Capt. Blaauw, N. 47° 24′, W. 24° 30′			51	10.6		calm	0		2		wsw.	2 h'r	light	mod.	sw.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, S. 17° 21′, W. 35° 29′*†	29.06	738.1				e.	5		0			0	0	sm'h	ese.	clear	
Bk. Geo. Booth, Capt. D. Williams																	D. Williams.
S. Hedwig, Capt. T. Minssen																	T. Minssen.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 34° 45′, W. 20° 19′						wnw.	2		2		nw.	0	0	sm'h	nw.	fair	G. Kaswurm.
Bk. New York, Capt. J. E. Sorensen. Off Cape Spartel, Marocco, Africa*†	30.50	774.7				w.					sw.	0	0	sm'h		fair	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.42	772.7	64	17.8	57	calm	0		0		calm					clear	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly N. 14° 54′, W. 36° 55′*†	30.10	764.5				e.			2		e.	0	0			fair	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen																	J. Andersen.
Bk. Stella, Capt. H. N. T. Sommer, N. 3° 32′, W. 24° 35′*	29.82	757.4	80.6	27.0	97	se.	1		3		se.			sm'h			
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.41	772.4	56	13.3	87	ne.	5		0			0	0			clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 30° 40′, W. 18° 26′ *†	30.50	774.7				e.	2		3		e.			sm'h			I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton. N. 23° 03′, W. 41° 25′*†	30.05	763.3				ene.					ene.						N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

Heliotype Printing Co Boston

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 28, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.42	772.7	69.4	20.8	81	se.			4		0			0	0	clear	Motroud.
Algiers			30.45	773.4	56.8	13.8	76	s.			1		4			0	0	cloudy	Nicolas.
La Calle			30.49	774.4	57.2	14.0	71	ene.			2		1			0	0	fair	Fonfrède.
Tunis			30.52	775.3															Jacques.
Sfax																			Gau.
Saida			30.47	774.0	54.0	12.2	70	wsw.			2		2			0	0	fair	Perès.
Tebessa			30.51	774.9	50.7	10.4	42	nw.			1		1			0	0	pretty fair	Derché.
Geriville					50.7	10.4	80	s.			2		0			0	0	clear	Louchamp.
Laghouat			30.58	776.7	50.4	10.2	50	s.			2		0			0	0	clear	Herbin.
Biskra			30.53	775.5	62.6	17.0	36	nw.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.75	755.6	29.84	757.9	64.6	18.1	69	ssw.	4	1.8			0			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	30.00	762.1	30.60	777.2	28.4	— 2.0	88	se.			1		10			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.91	759.7	30.53	775.5	31.1	— 0.5	90	wnw.	8.1	3.6			10			0	0		Dr. Wierzbiski.
Eperies	29.57	751.0	30.51	774.9	30.2	— 1.0	85	calm			0		10			0	0	foggy	Julius Mikolik.
Gratz	29.25	742.9	30.60	777.1	27.9	— 2.3	77	se.			1		10			0	0		Andreas Rospini.
Hermannstadt	28.98	736.2	30.52	775.2	29.1	— 1.6	100	n.			3		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.17	741.0	30.61	777.6	28.6	— 1.9	98	sw.			1		5			0	0	foggy	The Staff.
Lemberg	29.39	746.6	30.44	773.2	32.0	0.0	85	nw.			2		10			0	0		Dr. T. Stanecki.
Pola	30.32	770.2	30.44	773.1	49.3	9.6	79	nw.			1		9			0	0		I. R. Hydrographic Office.
Szathmar	30.03	762.7	30.50	774.7	28.0	— 2.2	87	s.			2		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.30	769.5	30.50	777.2	30.4	— 0.9	90	calm			0		10			0	0		Karl Stancel.
Trieste	30.36	771.2	30.47	773.8	50.7	10.4	65	se.			1		10			0	0		Rieder.
Vienna	29.81	757.2	30.58	776.6	34.2	1.2	72	nw.			1		8			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.84	757.9	29.94	760.5	42.5	5.8	55	sw.	12	5.4			1			0	0	blue sky	W. Boswell.
Armagh, Observatory	29.93	760.2	30.18	766.6	41.0	5.0	85	sw.	11	4.9			10					overcast	S. Call.
Bidston, Liverpool Obs'y			30.19	766.8	43.8	6.6	78	wsw.	15	6 7			7					d. clouds	John Hartnup.
Bolton, Sharples	29.62	752.3	30.17	766.3	42.1	5.6	87	wsw.	12	5.4			9					overcast	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.71	754.6	30.11	764.8	45.5	7.5	84	sw.			3		8			0.25	6.3	d. clouds	J.McLandsborough, F. R.
Bridgetown, Barbadoes	30.04	763.0	30.07	763.8	80.0	26.7	74	ne.			2		2					d. clouds	Corpl. J. Surgenor.
Cardington			30.21	767.3	50.0	10.0	90	sw.			3.0		9					ov. rcast	John McLaren.
Chatham, School M. E.	30.20	767.1	30.34	770.6	47.3	8.5	89	sw.			4		10					gloomy	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.04	763.0	30.27	768.8	53.0	11.7	82	sw.			4		10					overcast	The Staff.
Fort Napier, Natal	27.57	700.3	29.79	756.7	89.3	31.8	43	calm			0		0					blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	88.0	31.1	66	sw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.14	765.5	44	6.7	75	sw.			2		10			0	0	overcast	J. O'Donnghue.
Gibraltar, Mediterranean	30.32	770.1	30.37	771.4	58.6	14.8	85	ne.			3		8					overcast	Cpl. O. Baldwin
Glasgow, Observatory	29.84	757.9	30.05	763.3	41.8	5.4	79	wsw.			4		3 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.13	765.3	30.31	769.9	47.7	8.7	88	ssw.			3		10					overcast	The Staff.
Guernsey	30.08	764.0	30.39	771.9	50.4	10.2	89	ssw.			2		5					d clouds	A. Collenette, F. M. S.
Kew, Observatory	30.27	768.8	30.31	769.9	48.5	9.2	87	sw.	27	12.1			10					threatening.	The Staff.
Leicester, Museum	29.96	761.0	30.22	767.6	45.0	7.2	100	w.			4		10					raining	J. C. Smith.
Malta, Mediterranean	30.37	771.4	30.44	773.2	60.0	15.6	68	ne.			2		0					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.24	768.1	30.28	769.1	72.0	22.2	74	e.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.68	753.9	30.22	767.6	43.0	6.1	94	calm			0		10					raining	John Mac Email.
Oxford, Radcliffe Obs'y	30.01	762.2	30.24	768.1	51.0	10.6	86	s.			6		9					squally	The Staff.
Plymouth	30.20	767.1	30.28	769.1	52.7	11.5	89	s.			3		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			29.73	755.1	40.1	4.5	73	wsw.	42	18.8			5					showery	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.40	772.1	30.47	773.9	47.4	8.6	74	ssw.			1		0					blue sky	W. H. Lyne
Sheffield	29.88	758.9	30.17	766.3	44.1	6.7	84	s.			1		10			0.15	3.8	overcast	W. F. Cooper.
Silloth Rectory	30.09	764.3	30.12	765.0	42.8	6.0	86	wnw.			3		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.18	766.6	43.0	6.1	87	wsw.	13	5.8			10					overcast	Rev. S. J. Perry.
Stratfield Turgiss					49.3	9.6	90	sw.			3		10					squally	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.18	765.6	30.24	768.1	56	13.3	80	sw.			6		6					d. clouds	W. Newcombe.
Valencia, Observatory	30.19	766.8	30.21	767.3	43.6	6.4	83	n.	3	1.3			10			blank	blank	misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.22	767.6	30.27	768.8	4	—15.6	92	nw.	5	2.2		0	0			0.600	15.2	clear	H. J. Cundall, C. E.
Chatham, N. B*	30.31	769.9	30.38	771.6	— 6	—21.1	100	w.	5	2.2		0	0			0.45	11.4	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.37	771.4	30.39	771.9	— 3	—19.4	79	calm	0	0		0	2 s		calm	0.40	10.2	clear	J. McWilliams.
Fort Garry, Manitoba*	29.46	748.3	30.44	773.2	—22	—30.0	100	calm	0	0		0	5 ks		w.	0.312	7.9	fair	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.13	765.3	30.27	768.8	15	— 9.4	56	w.	16	7.2		0	0			0	0	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.71	754.6	30.07	763.8	13	—10.6	91	ne.	8	3.6			10 s		w.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.02	762.5	30.25	768.3	3	—16.1	76	e.	10	4.5		5 ck	5 s	w.	w.	0	0	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.21	741.9	29.94	760.5	24	— 4.4	88	se.	15	6.7		5 k	5 ks	se.	se.	0	0	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.17	740 9	29.89	759.2	28	— 2.2	100	calm	0	0		8 ck	0	nw.		0	0	fair	H. Morgan.
Port Stanley, Ontario	29.25	742.9	29.92	760.0	29	— 1.7	92	e.	3	1.3			8 ks		w.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.98	761.5	30.35	770.9	— 4	—20.0	83	calm			0	0	hz.			0.20	5.1	hazy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.60	751.8	30.10	764 5	6	—14.4	87	se.	6	2.7		5 cs	0	se.		0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.12	739.6	29.87	758.7	25	— 3.9	96	se.	10	4.5			10 ks			0	0	cloudy	K. Stewart.
St. Andrews, N .B	30.31	769.9	30.37	771.4	7	—13.9	68	n.	8	3.6		0	0			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.96	761.0	30.03	762 7	7	—13.9	91	nw.	32	14.3		0	0			0.26	6.6	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.55	750.6	29.95	760.7	29	— 1.7	92	ne.	20	8.9			10 n		se.	0	0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.26	768.6	30.33	770.4	19	— 7.2	70	n.	3	1.3		5 cs	0	w.		0	0	clear	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.28	743 7	29.56	750.8	12	—11.1	100	nw.	6	2 7		fg.	fg.			0	0	stormy	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House.	29.90	759.4	29.93	760.2	70.0	26.1	85	sw.	8.1	3.6			8 s			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y.	29.83	757.7	29.86	758.4	86.8	30.4	58	s.	22	9.8		8	9			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow																		snowing	N. Titoushkin.
Zi-Ka-Wei, near Shanghai.	30.43	772.9	30.45	773.5	42.4	5.8	92	e.	4.7	2.1			10 n			0.232	5.9	raining	M. Marc Dechevrens, S J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.21	767.2	30.25	768.4	37.4	3.0	95	s.	16	7			10					foggy	Oversergent Fischer.
Fanöe	30.15	765.9	30.17	766.4	41.5	5.3	92	sw.			6		10						Overloerer Lauridsen.
Godthaab, Greenland	29.34	745.3	29.39	746.4	10.0	—12.2		sw.			6		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.86	758.5	29.91	759.6	15.1	—9.4		w.			2		8						A. O. Thorlacius.
Thorshavn	29.54	750.4	29.58	751.3	36.3	2.4	70	nw.	13	6			7						Overloerer Bergh.
Vestervig	29.89	759.1	29.98	761.4	43.2	6.2	93	ssw.			7		10					raining	Loerarer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.87	758.8	30.54	775.8	50.0	10	86	se.			1	2 c	0			0	0	slightly cl'dy	M. Labroue, Director.
Alençon, Normal School	29.96	760.9	30.51	774.9	39.9	4.4	97	s.			2		n		sw.	0	0		M. Nicot, Director.
Arras, Engineer School	30.19	766.7	30.46	773.6	41.0	5.0	85	sw.			0		fg			0	0	foggy	M. Klein, Commandant.
Avignon, Normal School	30.44	773.1	30.52	775.1	48.6	9.2	61	nne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.98	761.4	30.56	776.2	42.4	5.8	84	s.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.29	769.3	30.57	776.4	41.9	5.5	94	sw.			1		10			0.04	1.0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.56	776.2	37.4	3	83	sw.			1		8		sw.	0	0		M. Gobin, Director.
Bordeaux, Observatory	30.24	768.1	30.51	774.9	53.6	12.0	63	e.			1		0			0	0	clear	M. Rayet, Director.
Bourges, Normal School	29.97	761.3	30.54	775.7	51.8	11	48	se.			1		1		se.	0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.15	765.8	30.39	772.0	56.8	13.8	86	sw.			2		6		sw.	0	0		M. de Kennaree, Dir.
Caen, Normal School	30.37	771.5	30.45	773.5	47.8	8.8	78	s.			1		1		w.	0	0	clear	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.16	766.1	30.50	774.6	39.6	4.2	93	calm			0		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.01	762.3	30.56	776.2	30.7	2.6	79	s.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.17	740.9	30.56	776.2	50.9	10.5	51	w.			1		0			0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.73	755.1	30.63	777.9	31.1	—0.5	100	n.			1		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School.	29.69	754.2	30.61	777.6	41.0	5	90	se.			1		2 sn	se.	se.	0	0	slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.89	708.3	30.52	775.3	41.0	5	66	w.			2					0	0		M. Jeangirard, Director.
Gréasque, du, Rhone	29.31	744.5	30.07	763.7	52.7	11.5	50	sw.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.78	756.5	30.60	777.1	39.9	4.4	59	ese.			1		0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.91	734.3	30.53	775.5	50.0	10	21	sw.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.17	766.3	30.45	773.3	53.6	12	76	e.			1		8		e.	0	0	very cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.86	758.4	30.43	773.0	57.6	14.2	76	ne.			1	0	2 s			0	0	slightly cl'dy.	M. Chauvin, Director.
Lorient, Naval Observatory	30.37	771.7	30.47	773.9	53.6	12.0	100	s.			2		8		sw.	0	0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.50	749.3	30.63	778.0	30.9	—0.6	100	ne.			1		fg			0	0	dense fog	M. André, Director.
Mans, Normal School	30.22	767.7	30.55	775.9	41.4	5.2	99	s.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.22	767.5	30.49	774.5	52.9	11.6	60	w.			2		0			0	0		M. Stephan, Director.
Montlouis Pinstituteur	25.15	638.8	29.99	761.8	41.9	5.5	36	sw.	5.6	2.5			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.38	771.6	30.49	774.5	58.3	14.6	60	sw.			1		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.77	756.2	30.61	777.5	29.5	—1.4	84	n.			1	0	2 ks			0	0	slightly cl'dy	M. Hasse, Director
Nantes, Observatory	30.37	771.4	30.53	775.5	55.0	12.8	71	se.			0-1	8 ck	0			0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.41	772.5	30.53	775.4	54.9	12.7	58	sw.	1.8	0.8			1			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.49	545.8			31.8	—0.1		sw.			1		1		sw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.44	747.7	30.62	777.7	49.1	9.5	81									0	0		M. Taillen.
Puy de Dôme Obs'y, Summit	25.53	648.5			37.2	2.9	58	se.			2		0			0	0	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.52	775.2	30.55	776.0	51.3	10.7	82	s.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.30	769.5	30.52	775.1	49.3	9.6	59	se.			1		2			0	0	slightly cld'y	M. Mouillot, Director.
Rodez, Normal School	28.26	717.8	30.48	774.1	44.6	7	69	e.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.47	773.8	30.51	775.0	41.4	5.2	90	se.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.30	769.7	30.46	773.7	51.3	10.7	87	sw.			1		0			0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.37	771.4	30.54	775.6	38.3	3.5	100	s.			1		10			0.004	0.1	covered	M. Renou, Director.
Toulouse, Observatory	29.85	758.2	30.59	779.9	48.9	9.4	81	calm			0		fg	w.		0	0	foggy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.01	762.2	30.50	774.8	39.9	4.4	100	sw.			1					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.70	754.4	30.57	776.4	30.2	—1.0	77	se.			1	0	8 s			0	0	foggy	Prof. Dr. Hoh.
Berlin	30.27	768.8	30.45	773.5	36.0	2.2	84	sw.			1		10			0	0	foggy	Prof. Dr. Arndt.
Breslau	29.95	760.9	30.50	774.6	35.8	2.1	64	wsw.			1		6			0	0		Royal University Obs'y.
Carlsruhe	30.13	765.2	30.60	777.3	29.1	—1.6	95	s.			1		10			0	0	dense fog	Albert Senz.
Cassel	29.74	755.3	30.45	773.4	31.6	—0.2	94	s.			4		10			0	0		Dr. H. Möhl.
Frankfort on the Main	30.19	766.7	30.58	776.7	29.1	—1.6	94	ssw.			1		10			0	0		Physical Society.
Friedrichshafen	29.11	739.5	30.65	778.5	33.3	0.7	90	ssw.			1		10			0	0	foggy	Wilhelm, Chief Tel.
Hamburg	30.29	769.4	30.39	771.8	35.6	2.0	98	sw.			4		10			0.008	0.2	light fog	E. Preller.
Kiel	30.30	769.7	30.32	770.1	37.6	3.1	92	sw.			1		10			0.004	0.1		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.07	763.7	30.51	775.0	32.7	0.4	89	sw.			2		9			0	0		H. Leppig, Asst.
Magdeburg	30.28	769.0	30.48	774.2	34.9	1.6	94	w.			1		0			0	0	foggy	Dr. Assmann.
Memel	30.32	770.2	30.37	771.4	30.5	2.5	93	w.			4		10					dense fog	Issermann.
Munich	28.68	728.5	30.58	776.7	29.3	—1.5	67	calm			0		2	sw.		0	0		Central Station.
Neufahrwasser	30.37	771.4	30.39	771.8	37.8	3.2	82	sw.			1		0			0	0		A. Lother.
Neustadt, Palatinate	30.04	763.0	30.58	776.6	29.7	—1.3		se.			2		10			0	0	dense fog	Dicknether.
Stuttgart	29.57	751.0	30.51	774.9	39.2	4.0	88	e.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.34	770.5	30.36	771.1	34.5	1.4	100	ssw.			4		10			0	0	dense fog	Profs. Brandes & Reimer.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.02	762.6	30.42	772.6	59.5	15.5		n.			2.0		0			0	0	clear	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.98	761.5	30.03	762.8	74.9	23.8	77	wsw.	18	8.0			8	w.		0	0	gloomy	
Deesa	29.48	748.8	29.95	760.9	81.7	27.6	37	w.	7.4	3.3			4	sw.		0	0	d clouds	
Bombay	29.88	759.0	29.92	760.0	79.5	26.4	74	nnw.	20	8.9			0			0	0	blue sky	
Poona, Yarrowda.	28.05	712.6	29.88	758.9	89.0	31.7	23	e.	6	2.7			0			0	0	blue sky	
Belgaum	27.38	695.6	29.89	759.1	84.8	29.3	20	ne.	5	2.2			0			0	0	blue sky	
Lahore	29.25	742.8	30.02	762.4	65.1	18.4	42	n.	1.1	0.5			10			0	0	overcast	
Roorkee	29.06	738.1	29.99	761.7	66.8	19.3	55	nw.	2.5	1.1			8			0	0		
Agra	29.42	747.1	29.99	761.7	75.2	24.0	38	n.	1.2	0.5			3		nw.	0	0		
Nagpur	28.90	733.9	29.93	760.2	86.5	30.3	27	se.	3.0	1.3			1			0	0	blue sky	
Jubbulpore	28.61	726.6	29.99	761.6	72.8	22.7	25	calm	3.3	1.5			2			0	0	d. clouds	
Lucknow	29.59	751.5	29.97	761.2	77.2	25.1	37	w.	2.1	0.9			0			0	0	blue sky	
Allahabad	29.65	753.2	29.97	761.3	72.8	22.7	51	calm	0.6	0.3			0			0	0	blue sky	
Patna	29.76	755.9	29.95	760.7	74.1	23.4	44	w.	4.5	2.0			0			0	0	blue sky	
Hazaribagh	27.92	709.3	29.96	761.0	72.8	22.7	33	nw.	7.0	3.1			0			0	0	blue sky	
Cuttack	29.87	758.6	29.95	760.7	80.2	26.8	53	calm					0			0	0	blue sky	
Calcutta, Alipore	29.92	759.8	29.94	760.4	77.3	25.2	52	nw.	3.0	1.3			0			0	0	blue sky	
Dhubri	29.81	757.2	29.94	760.4	69.5	20.8	62	calm	9.0	4.0			0			0	0	blue sky	
Chittagong	29.89	759.2	29.98	761.5	72.8	22.7	86	sw.	4.3	1.9			0			0	0	blue sky	
Sibsagar	29.65	753.1	30.00	762.0	62.2	16.8	94	ene.	1.9	0.8			10	w.	w.	0	0	overcast	
Jeypore	28.52	724.4	29.98	761.5	76.7	24.8	33	calm	3.0	1.3			7	n.		0	0	d. clouds	
Zanzibar, Africa	29.82	757.4			85.2	29.6	68	ne.	8.2	3.7		ck	7k;fk		nne.	0	0	d. clouds	
Trichinopoly	29.70	754.4			84.0	28.9	44	ese.	2	0.9			0			0	0	blue sky	
Bellary	28.45	722.6			87.3	30.7	15	e.	3.0	1.3			0			0	0	blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.04	763.0	30.47	773.8	49.1	9.5	41	e.	0.7	0.3			4			0	0		Prof. Giovanni Clodig.
Milan	29.94	760.5	30.49	774.5	44.2	6.8	63	w.	1.8	0.8			1			0.028	0.7		Prof. Schiaparelli.
Padua	30.36	771.2	30.48	774.1	45.7	7.6	63	nw.	0.7	0.3			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.54	750.3	30.50	774.6	43.0	6.1	55	ne.	1.8	0.8			0			0	0		Prof. P. F. Denza.
Genoa	30.29	769.4	30.49	774.4	54.7	12.6	66	sw.	1.3	0.6			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.50	724.0	30.51	774.9	48.0	8.9	22	e.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.41	772.3	30.46	773.7	46.8	8.2	44	n.	9.4	4.2			8			0	0		Prof. Luigi Guidi.
Florence	30.24	768.1	30.51	774.9	43.7	6.5	61	nne.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.41	772.3	30.50	774.6	52.9	11.6	77	nne.	1.8	0.8			4			0	0		Prof. P. Monte.
Rome	30.30	769.5	30.48	774.1	52.2	11.2	46	n.	0	0			8			0	0		Prof. P. S. Ferrari.
Lecce	30.17	766.4	30.44	773.1	56.7	13.7	81	nw.	7.4	3.3			2	nw.		0	0		Prof. C. de Giorgi.
Cosenza	29.54	750.2	30.46	773.6	55.8	13.2	75	ssw.	1.3	0.6			0			0	0		Prof. D. Conti.
Cagliari	30.27	768.8	30.47	773.9	56.5	13.6	59	nw.			2		5	w.		0	0		Prof. A. Pacinotti.
Palermo	30.22	767.7	30.48	774.3	56.1	13.4	69	e.	2.5	1.1			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.40	772.2	30.45	773.4	55.8	13.2	70	nne.	4.9	2.2			2	nne.		0	0		Prof. Vincenzo Guiliano
Sub-Series.																			
Naples, S. R	29.90	759.5	30.05	763.2	55.0	12.8	73	e.	0	0			1	se.		0	0		Prof. T. Brioschi.
Stelvio	22.40	569.0			22.8	— 5.1	46	e.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.45	570.2			26.2	— 3.2	50	n.			2		0			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.36	771.1	30.39	771.9	29.8	— 1.2	84	w.	9.4	4.2			10ks;s			0.006	0.2	overcast	
Hakodate	30.33	770.4	30.34	770.6	29.3	— 1.5	76	n.	12.0	5.4			8		n.	0.075	1.9	cloudy	
Hiroshima, I. M. Obs'y	30.55	776.0	30.57	776.5	39.3	4.1	67	ne.	4.1	1.8		10 ck;cs	0	n.		0	0	very cloudy	K. Sasaki.
Kanazawa	30.34	770.6	30.45	773.4	33.1	0.6	81	s.	3.1	1.4		ck	10 n		nne.			snowing	S. Endo.
Kioto	30.37	771.4	30.56	776.2	33.9	1.1	91	w.	0.5	0.2			10 s			0.006	0.2	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.31	769.9	30.53	775.4	42.4	5.8	63	ne.	10.8	4.8		0	0			0	0	clear	S. Takehayashi.
Niigata	30.48	774.2	30.51	774.9	33.2	0.7	87	wnw.	11.8	5.3		0	8 n		nw.	0.115	2.9	snowing	
Nobiru	30.39	771.9	30.41	772.4	30.3	— 0.9	90	nnw.	11.4	5.1		0	0			0	0	clear	H. Midzushina.
Sapporo					25.3	— 3.7	62	wnw.	18.0	8.0			10			0.285	7.2	covered	
Tokei Obs'y, Yeddo	30.36	771.1	30.43	772.9	34.8	1.6	58	nnw.	10.2	4.6		0	0			0	0	clear	The Staff.
Wakayama	30.52	775.2	30.58	776.7	38.3	3.5	62	n.	6.7	3.0		ck	10 ks	n.	n.	0	0	cloudy	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.76	755.9	29.95	760.7	76.8	24.9	88	e.	19.5	8.7			10 n			0.02	0.5	raining	Oliver & Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.75	603.3	29.97	761.3	53.6	12.0	62	calm	0	0		0	0			0	0		Vicente Fernandez.
Leon	24.49	622.0	30.24	768.0	55.0	12.8	80	nw.			2	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.76	756.0	30.03	762.7	63.5	17.5	94	nne.			1	4 cs	0	w.		0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.14	587.9	30.32	770.1	47.1	8.4	74	calm	0	0		0	0			0	0		The Staff.
Morelia	24.27	616.5	30.50	774.9	49.8	9.9	80	se.			4	3 c		se.	s.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.01	609.8	30.12	765.1	49.5	9.7	62	calm			0	0	0			0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.45	595.5	30.39	771.8	41.0	5.0	61	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.27	616.7	30.28	769.0	50.5	10.3	53	se.			1	0	3		w.	0	0	hazy	G. Barroeta, M. D
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.61	574.4	30.35	771.0	49.0	9.4	59					0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.44	773.2	30.44	773.2	35.6	2.0		ssw.			4					0.008	0.2		
Groningen	30.29	769.3	30.34	770.7	37.4	3.0		sw.			4					0	0		
Helder	30.31	769.8	30.31	769.8	40.3	4.6		ssw.			5					0.028	0.7		
Hellevoetsluis	30.41	772.3	30.41	772.3	35.6	2.1	99	sw.			3					0	0		
Utrecht	30.37	771.4	30.42	772.6	35.8	2.1	96	ssw.			3		bz.			0.004	0.1	hazy	H. van der Brink.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Amount and kind. Lo'er 0—10	Direction. Upper. From.	Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.62	752.4	29.69	754.0	36.7	2.6	96	se.	9	4			10			0.827	21.0	raining	
Brono	29.21	742.0	29.25	743.0	40.6	4.8	78	sw.	27	12			10			0.091	2.3	raining	
Christiania	29.59	751.6	29.74	755.4	40.1	4.5	92	ssw.	13	6			10			0	0		
Gjæsvær	28.86	733.0	28.88	733.6	34.9	1.6		ssw.			4		10						
Lodingen	28.90	734.0	28.95	735.2	38.1	3.4	92	sw.			8		10			0.748	19.0	rain & snow	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					56.8	13.8	62	n.	5.6	2.5			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.43	747.4	30.45	773.5	52.2	11.2	68	e.	0.9	3.1			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.18	765.6	30.27	768.9	63.1	17.3	78	sw.	3.8	1.7			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.08	764.1	30.45	773.5	52.9	11.6	76	ene.	8.1	3.6			4	ssw.		0	0		The Staff.
Ponta Delgada, Azores	30.11	764.8	30.18	766.6	54.3	12.4	72	calm	0	0			10			0.205	5.2		
Saint Paul de Loando	29.62	752.4	29.82	757.5	79.5	26.4	92	ene.	0.7	0.3			1	e.		0	0		
Serra da Estrella	25.61	650.5	30.52	775.2	37.6	3.1	81	se.	21.0	9.4			1			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.80	731.4	29.95	760.7	17.1	— 8.3		s.	22	10			10 n			0.008	0.2		Major K. Lasarew.
Archangel	29.69	754.2	29.71	754.7	24.4	— 4.2	98	s.	4	2			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.24	768.0	30.15	765.9	25.5	— 3.6	69	wnw.	11	5		10 cp	0			blank	blank		Capt. Wisganow.
Barnaul	29.80	757.0	30.37	771.3	— 0.6	—18.1	84	calm	0	0			7			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.85	758.2	30.10	764.6	36.0	2.2	87	w.	11	5			10 n			0.031	0.8		Observatory.
Ekaterinburg	28.91	734.4	29.94	760.4	10.4	—12.0	91	nnw.	4	2			10			0.008	0.2	snowing	Meteorological Obs'y.
Kasan	29.77	756.2	30.06	763.6	16.9	— 8.4	79	calm	0	0			8			0	0		Observatory.
Kertch	30.32	770.2	30.34	770.7	44.4	6.9	76	w.	4	2		1 c	0			0	0		Lagorio & Sastyrex.
Kieff	29.63	752.6	30.31	769.8	28.6	— 1.9	98	nw.	2	1			10 ks			0	0		Observatory.
Lugan	30.00	762.0	30.22	767.5	28.9	— 1.7	92	wsw.	9	4			10			0	0		Meteorological Obs'y.
Moscow	29.52	749.9	30.02	762.6	31.1	— 0.5	73	n.	7.8	3.5			10 s			0.016	0.4		Meteorological Obs'y.
Nikolaiev	30.34	770.7	30.41	772.5	30.6	— 0.8	92	sw.	9	4			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.04	763.0	30.13	765.2	9.3	—12.6	68	w.	11	5			0			0	0		Lieut. Iwanow.
Pekin, China	30.53	775.5	30.67	779.1	28.6	— 1.9	66	calm	0	0		0	7 n			0	0		Physical Observatory.
St. Petersburg	29.91	759.6	29.92	760.0	33.8	1.0	92	wnw.	13	6			10 n			0.016	0.4		Central Physical Obs'y.
Tashkend, Laboratory	28.46	722.9	30.13	765.3	27.7	— 2.4	96	calm	0	0			10			0.146	3.7		Teich, A. M.
Tiflis	28.86	733.1	30.34	770.7	39.4	4.1	55	nw.	45	20			1 k			0	0		Physical Observatory.
Warsaw	30.02	762.6	30.48	774.1	29.1	— 1.6	94	wsw.	4	2			10 ks					heavy cl'ds.	Astronomical Obs'y.
Wilna	29.90	759.5	30.35	770.9	32.7	0.4	90	w.	4	2			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.29	769.4	30.61	777.6	4.6	—15.2	82	calm	0	0			0			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park											7	5	5	w.		0.2	5.	heavy cl'ds.	Andrew Gibb.
Monach Lt. House, Hebrides			29.92	760.0	43	6.1	91	w.											J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.41	772.4	30.51	774.9	54.0	12.3	70	s	2.0	0.9			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.43	772.8	30.48	774.3	61.2	16.2	51	se.	2.7	1.2		0	0			0	0	clear	Prof. Manuel de Naverau.
Burgos, Met. Obs'y	27.46	697.5	30.51	774.9	50.7	10.4	47	sw.	2.2	1.0		0	1			0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.23	717.1	30.53	775.4	51.6	10.9	57	ne.	9.6	4.3		0	9			0	0	almost cov'd	The Staff.
Murcia, Met. Obs'y	30.37	771.3	30.52	775.2	57.9	14.4	75	wsw.	2.7	1.2		4	4	wsw.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.47	748.4	30.37	771.4	58.5	14.7	53	se.	5.6	2.5		0	1			0.004	0.1	almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.11	764.8	30.18	766.5	68.9	20.5	89	e.	1.1	0.5		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.97	761.3	30.03	762.7	77.5	25.3	77	ne.	3.5	1.6		0	3 ck		ene.	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.32	770.1	30.42	772.6	61.2	16.2	61	ese.	14.3	6.4		0	2		se.	0	0		Capt. O. Pujazon, R. N.
San Juan de Porto Rico, W.I.	30.15	765.8	30.24	768.1	72.3	22.4	77	calm	0	0		3 c	4 k	se.	se.	0.008	0.2	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.97	761.2	30.11	764.8	77.9	25.5	74	se.	1.1	0.5			8 ck		se.	0.02	0.5	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.44	747.8	29.48	748.8	31.6	— 0.2	89	sw.			2		8			0.165	4.2	snowing	
Umea	29.50	749.2	29.55	750.5	32.7	0.4	92	sw.			2		8			0	0		
Hernosand	29.55	750.6	29.60	751.9	37.2	2.9	71	s.			4		10			0	0		
Stockholm	29.80	757.0	29.98	761.5	38.8	3.8	73	wsw.			6		10			0	0		
Wisby	30.11	764.7	30.17	766.2	36.7	2.6	89	wsw.			4		10			0	0		
Sub Series.																			
Upsala	29.83	757.6	29.91	759.8	37.9	3.3	78	sw.	19.2	8.6			10		sw.	0.047	1.2		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.15	740.5	30.66	778.8	28.6	— 1.9	100	sw.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.52	775.3	45.9	7.7	61	ne.	8	3.5			0			0	0		The Observatory.
Valona			30.43	772.8	59.4	15.2		w.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.18	766.6	62.4	16.9	50	sw.			1	0	0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind. Up'er	Lo'er	Direction, Upper.	Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES.																			
By authority of the Secretary of War.																			
Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.14	765.5	30.23	767.8	27	— 2.8	77	calm	0	0			10 s			0	0	cloudy	
Alpena, Michigan	29.16	740.7	29.87	758.7	27.5	— 2.5	88	s.	9	4.0			10 s			0.05	1.3	cloudy	
Atlanta, Georgia	28.89	733.8	30.12	765.0	62.0	16.7	93	sw.	16	7.2			10 s		sw.	0.04	1.0	cloudy	
Atlantic City, New Jersey	30.21	767.3	30.22	767.6	38.8	3.8	86	e.	6	2.7			10 n			0.04	1.0	light rain	
Augusta, Georgia	29.94	760.5	30.14	765.5	60.0	15.6	87	s.	4	1.8		0	5 s			inap.	inap.	fair	
Baltimore, Maryland	30.17	766.3	30.22	767.6	37	2.8	72	ne.	4	1.8			10 n			0.01	0.3	sleeting	
Barnegat, New Jersey	30.19	766.8	30.21	767.3	39.0	3.9	86	se.	9	4.0			10 s			0	0	threatening	
Bismarck, Dakota	28.51	724.1	30.51	774 9	—19	—28.3	100	nw.	3	1.3		0	0			inap.	inap.	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.54	699.5	30.47	773.9	9	—12.8	91	w.	1	0.4		0	0			0	0	clear	
Boston, Massachusetts	30.15	765.8	30.32	770.1	25.0	— 3.9	64	ne.	3	1.3		10 cs	hz.			0	0	cloudy	
Brownsville, Texas	29.96	761.0	30.01	762.2	70	21.1	94	s.	12	5.4			10 s		s.	0.29	7.4	cloudy	
Buffalo, New York	29.15	740.4	29.95	760.7	36.9	2.7	83	ne.	3	1.3		1 ck	3 s	sw.	sw.	0	0	fair	
Burlington, Vermont	29.93	760.2	30.24	768.1	18.0	— 7.8	76	se.	1	0.4		0	5 s		w.	0	0	fair	
Cairo, Illinois	29.67	753.6	30.09	764.3	44.8	7.1	94	sw.	2	0.9			10 n		calm	0.35	8.9	light rain	
Campo, California																			
Camp Thomas, Arizona	27.37	695.2	30.20	767.1	22.5	— 5.3	78	calm			0	3 cs	0			0	0	clear	
Cape Henry, Virginia	30.10	764.5	30.12	765.0	44	6.7	100	e.	19	8.5			10 n		e.	0.83	21.1	heavy rain	
Cape May, New Jersey	30.13	765.3	30.16	766.1	38	3.3	89	e.	9	4.0			10 n		e.	0.07	1.8	light rain	
Castroville, Texas	29.22	742.2	30.08	764.0	68	20.0	93	s.	2	0.9			10 s			0.01	0.3	threatening	
Cedar Keys Florida	30.21	767.3	30.23	767.8	66	18.9	90	s.	4	1.8		0	8 s		e.	0	0	cloudy	
Champaign, Illinois	29.20	741.7	30.08	764.0	33.6	0.9	83	w.	9	4.0		0	7 s		nw.	0	0	fair	
Charleston, S. Carolina	30.10	764.5	30.16	766.1	63	17.2	100	sw.	10	4.5			fg.			0	0	dense fog	
Charlotte, N. Carolina	29.17	740.9	30.06	763.5	46.0	7.8	93	ne.	6	2.7			10 s		e.	1.27	32.3	cloudy	
Chattanooga, Tennessee	29.18	741.2	30.04	763.0	65.5	18.6	86	sw.	16	7.2			10 n		sw.	0.44	11.2	light rain	
Cheyenne, Wyoming	23.98	609.1	30.23	767.8	13.1	—10.5	70	w.	20	8.9		0	0			0	0	clear	
Chicago, Illinois	29.18	741.2	29.93	760.2	33.9	1.1	96	w.	8	3.6		0	0			0	0	clear	
Chincoteague, Virginia	30.14	765.5	30.16	766.1	42	5.6	100	e.	4	1.8			10 n			0.18	4.6	heavy rain	
Cincinnati, Ohio	29.30	744.2	29.99	761.7	45.2	7.3	83	w.	4	1.8			10 s			0.26	6.6	cloudy	
Cleveland, Ohio	29.16	740.7	29.94	760.5	36	2.2	79	s.	7	3.1			10 s		sw.	0	0	cloudy	
Coleman City, Texas	28.20	716 3			46	7.8	86	n.	8	3.6			10 s			0	0	clo dy	
Columbus, Ohio	29.05	737.9	29.95	760 7	41	5.0	73	nw.	2	0.9			10 n			0.04	1.0	light rain	
Concho, Texas	28.17	715.5	30.19	766.8	50	10.0	93	nw.	10	4.5		3 ck	5 s	sw.		0	0	cloudy	
Davenport, Iowa	29.43	747.5	30.14	765.5	22	— 5.6	73	nw.	18	8.0		0	4 ks		nw.	0	0	fair	
Dayton, Washington T'y	28.72	729.5	30.52	775.2	16	— 8.9	87	calm	0	0			10 s		sw.	inap.	inap.	cloudy	
Deadwood, Dakota	25.41	645.4	30.36	771.1	7.2	—13.8	80	sw.	8	3.6		0	0			0.01	0.3	clear	
Decatur, Texas					40	4.4	73	nw.	7	3.1			10 s			0.02	0.5	cloudy	
Delaware Breakwater, Del.	30.15	765.8	30.17	766.3	39	3.9	100	ne.	9	4.0			10 n		ne.	0.10	2.5	light rain	
Denison, Texas	29.26	743.2	30.10	764.5	42.0	5.6	92	calm	0	0			10 s			0.29	7.4	cloudy	
Denver, Colorado	24.79	629.6	30.31	769.9	18.0	— 7.8	73	s.	2	0.9		0	0			0	0	clear	
Des Moines, Iowa	29.37	746.0	30.34	770.6	6	—14.4	76	n.	20	8.9		3 c	0	w.		0	0	clear	
Detroit, Michigan	29.16	740.7	29.92	760.0	37.0	2.8	82	e.	4	1.8			10 s		calm	0	0	cloudy	
Dodge City, Kansas	27.62	701.5	30.36	771.1	12	—11.1	83	n.	15	6.7		0	0			0	0	clear	
Dubuque, Iowa	29.34	745.2	30.12	765.0	14.2	— 9.9	46	nw.	14	6.3		0	1 ks		n.	0	0	clear	
Duluth, Minnesota	29.31	744.5	30.07	763.8	— 1	—18.3	100	w.	9	4.0			10 s		w.	0.10	2.5	cloudy	
Eagle Pass, Texas	29.25	742.9	30.09	764.3	59.0	15.0	100	nw.	6	2.7			10 n			inap.	inap.	light rain	
Eagle Rock, Idaho	25.40	645.1	30.36	771.1	—22	—30.0	100	n.	3	1.3		0	0			0.04	1.0	clear	
Eastport, Maine	30.30	769.6	30.37	771.4	10.5	—11.9	48	nw.	17	7.6		2 cs	0			inap.	inap.	clear	
El Paso, Texas	26.40	670.5	30.28	769.1	28.5	— 1.9	67	w.	5	2.2		1 cs	0	w.		0	0	clear	
Erie, Pennsylvania	29.15	740.4	29.92	760.0	39	3.9	82	s.	10	4.5		10 cs	0	s.		0	0	cloudy	
Escanaba, Michigan	29.03	737.3	29.75	755.6	29	— 1.7	88	sw.	6	2.7			10 s		sw.	0	0	threatening	
Florence, Arizona																			
Fort Apache, Arizona	25.07	636.8	30.19	766.8	20	— 6.7	64	ne.	4	1.8		0	0			0	0	clear	
Fort Assinnaboine, Montana	27.36	694.9	30.40	772.1	—23	—30.6	24	sw.	17	7.6		0	0			0	0	clear	
Fort Bennett, Dakota	28.81	731.8	30.55	776.0	— 7	—21.7	58	w.	2	0.9		0	0			inap.	inap.	clear	
Fort Benton, Montana	27.43	696.7	30.41	772.4	—29	—33.9	14	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	28.36	720.3	30.56	776.2	—23	—30.6		calm	0	0		0	0			0	0	clear	
Fort Custer, Montana	27.13	689.1	30.51	774 9	—20	—28.9	100	calm	0	0		0	0			inap.	inap.	clear	
Fort Davis, Texas	25.22	640.6	30.20	767.1	39	3.9	82	calm	0	0		0	0			0	0	clear	
Fort Elliott, Texas	27.29	693 2	30.22	767.6	32	0.0	52	nw.	12	5.4		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.52	749.8	30.12	765.0	45.3	7.4	93	w.	3	1.3			10 s			0.37	9.4	cloudy	
Fort Grant, Arizona	25.30	642.6	30.20	767.1	28	— 2.2	61	n.	3	1.3		0	0			0	0	clear	
Fort Griffin, Texas	28.80	731.5	30.18	766.6	44	6.7	93	s.	5	2.2		0	3 k		nw.	0.06	1.5	clear	
Fort Keogh, Montana	27.76	705.1	30.45	773.4	—20	—28.9	100	calm	0	0		0	0		calm	0.02	0.5	clear	
Fort Macon, North Carolina	30.08	764.0	30.09	764.3	57	13.9	100	sw.	7	3.1			hz.		calm	0	0	dense haze	
Fort McKavett, Texas	27.86	707.6	30.25	768.3	51.8	11.0	93	ne.	6	2.7		0	6 ks		s.	inap.	inap.	fair	
Fort Missoula, Montana	27.01	686.0	30.47	773 9	—16	—26.7	100	se.	1	0.4		0	fg.			0	0	dense fog	
Fort St. Michaels, Alaska	29.49	749.0	29.53	750.0	0	—17.8	100	ne.	5	2.2			10 s			0.45	11.4	cloudy	
Fort Shaw, Montana	26.50	673.1	30.36	771.1	— 9	—22.8	61	calm	0	0		0	0			0	0	clear	
Fort Sill, Indian Territory	28.82	732.0	30.15	765.8	42.8	6.0	61	n.	3	1.3		0	0			0.03	0.8	clear	
Fort Stevenson, Dakota	28.44	722.4	30.50	774.7	—25	—31.7	100	nw.	4	1.8		0	0			0.05	1.3	clear	
Fort Verde, Arizona					29	— 1.7	80	sw.			1		10 s		s.	0	0	cloudy	
Fredericksburg, Texas	28.30	718.8	30.12	765.0	61	16.1	93	calm	0	0			fg.			0	0	dense fog	
Galveston, Texas	30.04	763.0	30.08	764.0	66.5	19.2	100	sw.	7	3.1			10 ks		se.	0.05	1.3	cloudy	
Grand Haven, Michigan	29.17	740.9	29.88	758.9	35.0	1.7	84	sw.	18	8.0		7 k	0	w.		0	0	fair	
Hatteras, North Carolina	30.06	763.5	30.08	764.0	61	16.1	93	s.	20	8.9		9 k	fg.	sw.		0.06	1.5	cloudy	
Helena, Montana	25.86	656.8	30.29	769.4	— 6	—21.1	33	calm	0	0			10 s			0	0	cloudy	
Henrietta, Texas	29.11	739.4	30.18	766.6	.40	4.4	82	w.	6	2.7		0	0			0.03	0.8	clear	
Huron, Dakota	28.98	736.1	30.52	775.2	—10	—23.3	50	nw.	18	8.0		0	0			inap.	inap.	clear	
Indianapolis, Indiana	29.12	739.6	29.96	761.0	42	5.6	82	w.	2	0.9		0	6 s; fg		w; c	inap.	inap.	fair	
Indianola, Texas	30.04	763.0	30.07	763.8	68.5	20.3	100	s.	9	4.0			10 s			0	0	cloudy	
Jacksboro, Texas	28.90	734.0	30.14	765.5	44	6.7	83	n.	4	1.8		0	0			0.07	1.8	clear	
Jacksonville, Florida	30.18	766.6	30.23	767.8	64	17.8	90	se.	3	1.3			10 s		s.	0	0	cloudy	
Keokuk, Iowa	29.45	748.0	30.15	765.8	24.0	— 4.4	80	nw.	12	5.4			10 s		nw.	0	0	cloudy	
Key West, Florida	30.16	766.1	30.19	766.8	73.0	22.8	82	e.	8	3.6		0	2 k		e.	0	0	clear	
Kittyhawk, North Carolina	30.05	763.3	30.07	763.8	49	9.4	96	e.	11	4.9			10 n			0.84	21.3	light rain	
Knoxville, Tennessee	28.96	735.6	30.04	763.0	59.2	15.1	94	sw.	10	4.5			10 n		sw.	2.87	72.9	light rain	
La Crosse, Wisconsin	29.28	743.7	30.12	765.0	6	—14.4	76	w.	16	7.2		0	0			0	0	clear	
La Mesilla, New Mexico	26.19	665.2	30.22	767.6	27.0	— 2.8	47	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.37	746.0	30.33	770.4	14	—10.0	64	n.	20	8.9		0	0			0	0	clear	
Lewiston, Idaho	29.72	754.9	30.59	777.0	18	— 7.8	58	e.	4	1.8			10 s		calm	0	0	cloudy	
Little Rock, Arkansas	29.73	735.1	30.06	763.5	47	8.3	93	nw.	2	0.9			10 s			0.27	6.9	cloudy	
Los Angeles, California	29.86	758.4	30.26	768.6	39.1	3.9	82	nw.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	29.41	747.0	30.00	762.0	45.0	7.2	93	w.	4	1.8			10 n		calm	0.33	8.4	light rain	
Lynchburg, Virginia	29.39	746.5	30.11	764.8	41.5	5.3	88	ne.	2	0.9			10 n			0.31	7.9	light rain	
Mackinac City, Michigan																			
Madison, Wisconsin	28.87	733.3	29.96	761.0	33	0.6	78	w.	12	5.4			10 s		w.	0	0	cloudy	
Marquette, Michigan	28.90	734.0	29.68	753.9	32	0.0	88	sw.	3	1.3			10 s		sw.	0	0	cloudy	
Mason, Texas	28.43	722.1	30.17	766.3	53	11.7	93	w.	6	2.7		0	0			0	0	clear	
Memphis, Tennessee	29.72	754.9	30.08	764 0	44	6.7	100	w.	3	1.3			10 s			2.00	50.8	cloudy	
Milwaukee, Wisconsin	29.10	739.1	29.90	759.4	34	1.1	78	sw.	8	3.6			10 s		w.	0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.10	764.5	30.14	765.5	62.0	16.7	93	s.	5	2.2	.....	9 cs	0	.....	.....	0	0	cloudy	
Montgomery, Alabama	29.89	759.2	30.13	765.3	64.5	18.1	89	sw.	3	1.3	.....	2 cs	1 k	.....	sw.	inap.	inap.	clear	
Moorhead, Minnesota	29.32	744.7	30.43	772.9	—23	—30.6	100	nw.	14	6.3	.....	0	0	.....	.....	0.13	3.3	clear	
Morgantown, W. Virginia	28.91	734.3	29.97	761.2	44.0	6.7	86	se.	4	1.8	.....	.....	10 n	.....	sw.	0.02	0.5	light rain	
Mt. Washington, N. H	23.71	602.2	30.34	770.6	12.0	—11.1	70	nw.	28	12.5	.....	6 cs	0	nw.	.....	0	0	fair	
Nashville, Tennessee	29.46	748.3	30.02	762.5	47.4	8.6	97	w.	3	1.3	.....	.....	10n;fg	.....	.....	1.58	40.1	light rain	
New Haven, Connecticut	30.12	765.0	30.24	768.1	29	— 1.7	77	ne.	2	0.9	.....	.....	10 s	.....	w.	0	0	cloudy	
New London, Connecticut	30.24	768.1	30.30	769.6	31	— 0.6	68	ne.	6	2.7	.....	.....	10 s	.....	calm	0	0	cloudy	
New Orleans, Louisiana	30.06	763.5	30.12	765.0	67.0	19.4	90	s.	3	1.3	.....	1 c	hz	.....	.....	0	0	clear	
Newport, Rhode Island	30.25	768.3	30.30	769.6	31.5	— 0.3	61	ne.	4	1.8	.....	.....	10 s	.....	calm	0	0	cloudy	
New River, N. Carolina	.....	.....	.....	.....	53	11.7	93	sw.	.....	.....	1	.....	fg	.....	.....	0	0	dense fog	
New Shoreham, Rhode I'd	30.26	768.6	30.29	769.4	35.5	1.9	64	se.	12	5.4	.....	10 cs	0	sw.	.....	0	0	cloudy	
New York, New York	30.07	763.8	30.26	768.6	32	0.0	78	e.	10	4.5	.....	.....	10s;fg	.....	sw.	0	0	cloudy	
Norfolk, Virginia	30.08	764.0	30.11	764.8	46	7.8	100	e.	5	2.2	.....	.....	10 n	.....	.....	1.08	27.4	light rain	
North Platte, Nebraska	27.34	694.4	30.46	773.7	2.6	—16.3	70	w.	4	1.8	.....	0	2 s	.....	.....	0	0	clear	
Olympia, Washington T'y	30.46	773.7	30.50	774.7	21.0	— 6.1	84	n.	2	0.9	.....	5 cs	0	calm	.....	0	0	fair	
Omaha, Nebraska	29.18	741.2	30.45	773.4	3.1	—16.1	69	n.	28	12.5	.....	0	0	.....	.....	0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	30.01	762.2	30.03	762.7	—25.5	—31.9	100	wnw.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	29.68	753.9	30.03	762.7	30.0	— 1.1	77	se.	12	5.4	.....	.....	10 s	.....	sw.	0	0	cloudy	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	30.13	765.3	30.16	766.1	64.2	17.9	93	s.	4	1.8	.....	4 cs	0	w.	.....	0	0	fair	
Philadelphia, Pa	30.18	766.6	30.24	768.1	37	2.8	82	calm	0	0	.....	.....	10 n	.....	e.	inap.	inap.	light snow	
Pike's Peak, Colorado	17.39	441.7	30.09	764.3	— 7	—21.7	74	sw.	24	10.7	.....	0	0	.....	.....	0	0	clear	
Pioche, Nevada	24.13	612.9	30.33	770.4	18	— 7.8	61	s.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.12	739.6	29.96	761.0	42.5	5.8	87	e.	3	1.3	.....	.....	10n;fg	.....	.....	0.12	3.0	light rain	
Port Eads, Louisiana	30.14	765.5	30.15	765.8	62.6	17.0	100	s.	3	1.3	.....	0	5 s;fg	.....	s.; c.	0	0	fair	
Port Huron, Michigan	29.17	740.9	29.90	759.4	29.7	— 1.3	86	s.	4	1.8	.....	.....	10 s	.....	calm	0	0	cloudy	
Portland, Maine	30.27	768.8	30.32	770.1	24	— 4.4	88	ne.	7	3.1	.....	0	4 s	.....	calm	0	0	fair	
Portland, Oregon	30.38	771.6	30.45	773.4	29.0	— 1.7	88	e.	4	1.8	.....	2 cs	0	calm	.....	inap.	inap.	clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	58	14.4	86	sw.	18	8.0	.....	.....	10ks;fg	.....	sw.; c	0.02	0.5	cloudy	
Prescott, Arizona	24.81	630.2	30.19	766.8	13	—10.6	53	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Punta Rassa, Florida	30.19	766.8	30.20	767.1	65	18.3	90	e.	5	2.2	.....	0	0	.....	.....	inap.	inap.	clear	
Red Bluff, California	29.93	760.2	30.31	769.9	33.0	0.6	92	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Rio Grande City, Texas	29.76	755.9	30.01	762.2	66	18.9	93	se.	1	0.4	.....	3 c	0	calm	.....	0	0	fair	
Rochester, New York	29.27	743.4	29.98	761.5	32	0.0	68	se.	24	10.7	.....	10 cs	0	w.	.....	0	0	cloudy	
Roseburg, Oregon	29.81	757.2	30.38	771.6	34	1.1	89	w.	1	0.4	.....	.....	10 s	.....	.....	inap.	inap	cloudy	
Sacramento, California	30.20	767.1	30.28	769.1	38.4	3.6	89	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.44	747.8	30.08	764.0	40.1	4.5	89	w.	13	5.8	.....	2 c	0	.....	.....	0.12	3.0	clear	
St. Paul, Minnesota	29.27	743.4	30.22	767.6	0.0	—17.8	68	w.	12	5.4	.....	0	0	.....	.....	0.01	0.3	clear	
St. Vincent, Minnesota	29.41	747.0	30.39	771.9	—25	—31.7	100	nw.	10	4.5	.....	0	0	.....	.....	0.10	2.5	clear	
Salt Lake City, Utah	25.83	656.1	30.40	772.1	22	— 5.6	48	calm	0	0	.....	0	6 s	.....	.....	0.04	1.0	fair	
San Antonio, Texas	29.32	744.7	30.05	763.3	67.5	19.7	100	calm	0	0	.....	.....	10 ks	.....	.....	0	0	cloudy	
San Diego, California	30.03	762.7	30.10	764.5	45.2	7.3	89	ne.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	
Sandusky, Ohio	29.21	741.9	29.93	760.2	36	2.2	79	se.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
Sandy Hook, New Jersey	30.20	767.1	30.24	768.1	39.0	3.9	73	se.	13	5.8	.....	.....	10 ks	.....	calm	0	0	cloudy	
San Francisco, California	30.20	767.1	30.26	768.6	44	6.7	70	se.	4	1.8	.....	0	7 s	.....	.....	0	0	fair	
Santa Fé, New Mexico	23.28	591.3	30.29	769.4	16	— 8.9	70	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Savannah, Georgia	30.10	764.5	30.20	767.1	62	16.7	87	sw.	5	2.2	.....	0	2 ks	.....	s.	0	0	clear	
Shreveport, Louisiana	29.82	757.4	30.07	763.8	59	15.0	93	n.	1	0.4	.....	.....	10 s	.....	n.	0.10	2.5	threatening	
Silver City, New Mexico	24.28	616.7	30.14	765.5	28	— 2.2	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Sitka, Alaska	29.96	761.0	30.03	762.7	34.6	1.4	65	e.	34	15.2	.....	.....	10 ks	.....	e.	0.09	2.3	cloudy	
Smithville, North Carolina	30.10	764.5	30.14	765.5	53	11.7	100	sw.	5	2.2	.....	.....	fg	.....	.....	0	0	dense fog	
Spokane Falls, Wash. Ter.	28.45	722.6	30.59	777.0	—17	—27.2	73	w.	1	0.4	.....	0	fg	.....	.....	0.01	0.3	clear	
Springfield, Illinois	29.31	744.5	30.04	763.0	39.8	4.3	75	w	10	4.5	.....	0	0	.....	.....	0	0	clear	
Springfield, Massachusetts	30.14	765.5	30.28	769.1	29.2	— 1.6	67	nw.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	
Springfield, Mo	28.60	726.4	30.18	766.6	43	6.1	93	n.	7	3.1	.....	.....	fg	.....	.....	0.88	22.4	dense fog	
Stockton, Texas	27.06	687.3	30.20	767.1	47.5	8.6	100	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	
Thatcher's Island, Mass	30.26	768.6	30.32	770.1	33.0	0.6	68	e.	1	0.4	.....	0	7 s	.....	w.	0	0	fair	
Toledo, Ohio	29.20	741.7	29.94	760.5	34	1.1	78	e.	4	1.8	.....	6 ck	1 s	sw.	.....	0	0	fair	
Tucson, Arizona	27.63	701.8	30.13	765.3	35	1.7	89	s.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Umatilla, Oregon	30.26	768.6	30.65	778.5	16.5	— 8.6	60	n.	6	2.7	.....	.....	10 s	.....	calm	0	0	cloudy	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.76	755.9	30.03	762.7	67	19.4	93	sw.	12	5.4	.....	.....	10 n	.....	sw.	0.27	6.9	light rain	
Visalia, California	29.83	757.7	30.22	767.6	33.5	0.8	88	nw.	3	1.3	.....	0	6 s	.....	.....	0	0	fair	
Washington, D. C	30.10	764.5	30.22	767.6	35.5	1.9	94	ne.	2	0.9	.....	.....	10 n	.....	.....	0.24	6.1	heavy rain	
West Los Animas, Colorado	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wickenburg, Arizona	.....	.....	.....	.....	34	1.1	77	calm	.....	.....	0	.....	10 ks	.....	nw.	‖0.35	8.9‖	cloudy	
Williamsport, Pa	29.52	749.8	30.15	765.8	34	1.1	71	se.	3	1.3	.....	.....	10 s	.....	calm	0	0	threatening	
Wilmington, N. Carolina	30.05	763.3	30.11	764.8	54	12.2	93	sw.	5	2.2	.....	.....	fg	.....	calm	0	0	dense fog	
Winnemucca, Nevada	25.79	655.1	30.33	770.4	13	—10.6	60	ne.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Yankton, Dakota	29.10	739.1	30.52	775.2	— 2	—18.9	65	nw.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	30.00	762.0	30.15	765.8	45.4	7.4	75	n.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.03	559.6	.....	.....	51.0	10.6	76	e.	2	0.9	.....	4 ck;k	1 s	ne.	.....	0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.09	764.3	30.10	764.5	77	25.0	70	e.	.....	.....	.....	5 k	2 ks	e.	e.	0.08	2.0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.94	760.5	29.96	761.0	78	25.6	80	sw.	4	1.8	.....	2 ck	6 ks	calm	sw.	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	30 06	763.5	30.08	764.0	75	23.9	95	e.	.....	.....	.....	3 k	2 ks	.....	ese.	0.1	3.	.....	B. Bigar.
Havana, Cuba, W. I.	30.16	766.1	30.21	767.3	72	22.2	90	calm	0	0	.....	0	2 ks	.....	calm	0	0	fair	A. Van Ganeghem, Ass't
Kingston, Jamaica, W. I.	30.10	764.5	30.11	764.8	71.3	21.8	83	n.	2	0.9	.....	0	1 s	.....	e.	0.02	0.5	.....	Robert Johnstone
Navassa, W. I.	30.01	762.2	30.09	764.3	77	25.0	65	ne.	10	4.5	.....	2 ck	5 s	se.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.06	763.5	30.07	763.8	75	23.9	95	e.	.....	.....	3	.....	10 n	e.	e.	2.000	50.8	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.42	747.3	29.97	761.2	80	26.7	70	calm	.....	.....	0	3 ck	3 s	calm	calm	0	0	fair	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	.....	23.0	92	ne.	.....	.....	4	0	3 ks	.....	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.11	764.8	30.14	765.5	73.4	24.4	69	n.	12	5.4	.....	2 c	1 s	.....	n	inap.	inap.	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	76	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.96	761.0	30.02	762.5	—28.0	—33.3	.....	w.	10	4.5	.....	6 k	4 s	w.	w.	0.01	0.3	snowing	J. Fortescue & W. Wood.

‖ Total for past three days.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 21° 29′, E. 109° 05′	30.15	765.8	65	18.3		nne.			4		10					3		showery	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads. India	29.88	758.9	80.8	27.1	82	ne.			2		2							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.51	774.9	61	16.1	82	calm			0		0							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.83	757.7	74.5	23.6	57	ese.			6–7		2	calm						squally	Com. Sir F. W. Richards
H. M. S. Champion, Chimbote, Peru	29.92	760.0	70	21.1	100	calm			0		7	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, N. 36° 43′, E. 18° 03′	30.40	772.1	62	16.7		calm			0		3					2		d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.41	772.4	59	15.0		ene.			5		4	ene.				1	wsw.	squally	Lieut. J. L. Burr
H. M. S. Cormorant, S. 27° 40′, E. 154° 42′	29.99	761.7	78	25.6		ne.			3		3	ne.				2	ne	d. clouds	Capt. Bruce.
H. M. S. Curacoa, N. 32° 13′, E. 119° 27′	30.34	770.6	40.5	4.7	100	ene.			3–5		10							raining	Capt. S. Long.
H. M. S. Diamond, S. 36° 05′, E. 9° 53′			71	21.7	80	wnw.			1		1	wnw.				2	c'fd	blue sky	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	30.21	767.3	65.5	18.6	92	nne.			1		9	nne.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 20° 56′, W. 73° 41′	30.19	766.8	74	23.3	98	ene.			2		4	e.				1	se.	d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 37′, W. 59° 32′	29.31	744.5	51	10.6	78	wsw.			4–5		5					4–5	wsw.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.82	757.4	83	28.3		n.			1		5	nnw.						d. clouds	Capt. E. St. J. Garforth
H. M. S. Emerald, S. 42° 53′, E. 147° 22′	29.64	752.8	65	18.3	78	n.			2		3	nw.				2		d. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.43	772.9	37	2.8		n.			5–6		8	w.						squally	Capt. G. Robinson.
H. M. S. Espiegle, S. 30° 50′, W. 24° 25′	30.27	768.8	71	21.7	85	ne.			3		8					1	ne.	d. clouds	Capt. C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′ E. 43° 12′	29.80	756.9	80.5	26 9	70	s.			4		3					3	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.56	776.2	44	6.7	60	w.			1		6	w.						misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 28° 30′, W. 72° 20′	29.99	761.7	64	17.8	89	s.			4		10					1 2	s. ssw.	drizzling	Comm. E. G. Bourke.
H. M. S. Garnet, S. 52° 00′, W. 58° 35′	29.28	743.7	50	10.0	71	wsw.			6		7							squally	Capt. L. Jones.
H. M. S. Iris, Off Larnaka, Cyprus	30.26	768.6	60	15.6	48	nne.			4–5		0					4	nne.	blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.17	766.3	62	16.7	94	e.			1		8	e.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark, S. 34° 38′, E. 172° 09′	30.02	762.5	66.3	19.1	?	n.			2		0					1	ssw.	blue sky	Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.97	761.2	61.5	16.4		calm			0		10							overcast	Capt. J. Aylen.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.17	766.3	62	16.7	88	e.			1		10							misty	Capt. A. Carpenter.
H. M. S. Malabar, N. 26° 24′, E. 35° 00′	29.98	761.5	69	20.6	90	nnw.			4		5	nnw.				4	nnw.	d. clouds	Capt. H. Hand.
H. M. S. Mutine, Callao, Peru	29.96	761.0	68	20.0	94	calm			0		0?							overcast?	Comm. F. Edwards.
H. M. S Northampton, St. Vincent, W. I.	30.00	762.0	77	25.0	82	ene.			3–6		5	ene.						d. clouds	Capt. E. Drummond
H. M. S. Orontes																			Capt. R. J. Kinahan.
H. M. S. Pelican, S. 0° 53′, W. 22° 28′	29.89	759.2	82	27.8	100	se.			2		3					2	se.	misty	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.19	766.8	55.1	12.8		wnw.			2		0							blue sky	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.51	774.9	22	—5.6	?	nnw.			2		2							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Colombo, Ceylon, India	29.85	758.2	83.5	28.6	75	n.			2		3	n.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull																			Comm. M. Byles.
H. M. S. Serapis																			Capt. G. O. Twiss.
H. M. S. Tenedos, N. 16° 55′, W. 84° 20′	30.08	764.0	78	25.6	82	ene.			3		2					3	e.	d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, N. 4° 00′, W. 80° 15′	29.94	760.5	77	25.0	90	ne.			1		7	n.				1	n.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.10	764.5	75	23.9	90	ne.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, N. 26° 22′, E. 50° 53′	30.08	764.0	61.5	16.4	71	wnw.			4–5		5	nw.				3	wnw.	d. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr, Nagasaki, Japan	30.53	775.4	44	6.7	75	ne.			2									blue sky	Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Brava, C. Verd Ids	29.99	761.7	78.4	25.8	78	ne.			3		2					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder																			Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
UNITED STATES NAVAL SERIES.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
By authority of the Secretary of the Navy.																			
N. Yard, Pensacola, Fla	30.14	765.5	66	18.9	89	ssw.	3	1.3	.....	.....	8	.....	sw.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	30.28	769.1	21	— 6.1	.....	ne.	3	1.3	.....	.....	10	.....	ne.	0	0	.....	.....	cloudy	
Naval Hospital Yokohama, Japan	30.23	767.8	37	2.8	51	n.	.....	.....	5	.....	2	.....	nw.	0	0	.....	.....	clear	
Adams, Callao, Peru	29.74	755.4	70	21.1	95	sse.	.....	.....	0–1	.....	10	.....	.....	.....	.....	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	29.90	759.4	61	16.1	94	calm	.....	.....	0	.....	10	.....	.....	0	0	sm'h	.....	cloudy	
Alert, N. 9° 41′, E. 102° 43′*	29.81	757.2	83	28.3	79	ese.	.....	.....	1	.....	2	.....	calm	0	0	sm'h	.....	clear	
Alliance, Boston, Mass.*†	30.30	769.6	30	— 1.1	68	n.	.....	.....	1	.....	2	.....	.....	0	0	.....	.....	fair	
Ashuelot, Tientsin, China	30.68	779.3	30	— 1.1	89	sw.	.....	.....	2	.....	8	.....	.....	.....	.....	.....	.....	overcast	
Brooklyn, Montevideo, Uruguay	29.81	757.2	74	23.3	86	n.	12	5.4	.....	.....	2	.....	n.	0	0	sm'h	.....	fair	
Colorado, New York, N. Y.	30.24	768.1	32	0.0	90	ese.	3	1.3	.....	.....	10	.....	wsw.	0	0	.....	.....	overcast	
Essex, N. 33° 23′, W. 31° 09′	30.19	766.8	60	15.6	71	e.	.....	.....	2	.....	2	.....	e.	.....	.....	sm'h	.....	clear	
Franklin, Norfolk, Va.	30.14	765.5	47	8.3	92	ene.	18	8.0	.....	.....	10	.....	calm	0.16	4.1	.....	.....	cloudy	
Galena, N. 30° 51′, W. 16° 07′	30.31	769.9	65	18.3	94	se.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Independence, N. Yard, Mare I'd, Cal.	30.10	764.5	41	5.0	82	e.	2.4	1.1	.....	.....	5?	.....	e.	0	0	.....	.....	cloudy ?	
Kearsarge, New Orleans, La.	30.13	765.3	66	18.9	89	s.	.....	.....	1	.....	8	.....	s.	.....	.....	.....	.....	fair	
Lackawanna, Valparaiso, Chili†	30.06	763.5	62	16.7	?	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	.....	misty	
Lancaster, N. 43° 10′, E. 10° 22′	30.45	773.4	54	12.2	87	w.	.....	.....	2	.....	5	.....	.....	.....	.....	.....	.....	fair	
Michigan, Erie, Pa.	30.22	767.6	39	3.9	73	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I.	30.27	768.8	30	— 1.1	.....	e.	2	0.9	.....	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Monocacy, Yokohama, Japan	30.41	772.4	40	4.4	73	nnw.	.....	.....	4–5	.....	5	.....	wnw.	.....	.....	.....	.....	fair	
Nipsic, N. 43° 30,′ E. 9° 39′	30.48	774.2	58	14.4	70	wnw.	.....	.....	1	.....	2	.....	w.	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.05	763.3	68	20.0	95	sse.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.18	766.6	62	16.7	88	e.	.....	.....	2	.....	10	.....	calm	.....	.....	.....	.....	cloudy	
Passaic, Washington, D. C.	30.23	767.8	35	1.7	90	n.	.....	.....	2	.....	10	.....	n.	.....	.....	.....	.....	rainy	
Pensacola, Valparaiso, Chili	29.98	761.5	60	15.6	87	calm	0	0	.....	.....	10	.....	se.	0	0	sm'h	.....	cloudy	
Powhatan, Hampton Roads, Va.	30.11	764.8	44	6.7	100	ene.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	rainy	
Quinnebaug, N. 43′, 10° E. 10° 41′	30.49	774.4	57	13.9	63	ssw.	.....	.....	3	.....	5	.....	calm	.....	.....	sm'h	.....	fair	
Ranger, N. 19° 06′, W. 104° 23′*	29.91	759.7	74	23.3	90	nne.	.....	.....	2	.....	8	.....	calm	0	0	sm'h	.....	fair	
Richmond, N. 7° 27′, W. 175° 35′*	29.72	754.9	81	27.2	91	ene.	.....	.....	4	.....	10	.....	ne.	0.15	3.8	sm'h	e.	cloudy	
Shenandoah, Montevideo, Uruguay*	29.88	758.9	74	23.3	72	n.	.....	.....	3	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
St. Louis, League Island, Pa.	30.48	774.2	32	0.0	90	calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	.....	snowing	
Swatara, Kobe, Japan*	30.41	772.4	43	6.1	59	nnw.	.....	.....	1	.....	8	.....	nnw.	.....	.....	sm'h	.....	fair	
Tennessee, New York, N. Y.	30.26	768.6	35	1.7	63	ene.	3.5	1.6	.....	.....	10	.....	.....	0	0	.....	.....	cloudy	
Vandalia, Santa Anna, Curacao, W. I.	30.03	762.7	77	25.0	82	e.	.....	.....	3	.....	8	.....	e.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass.	30.30	769.6	24	— 4.4	.....	calm	0	0	.....	.....	5	.....	nw.	0	0	.....	.....	fair	
Wachusetts, San Francisco, Cal.	30.28	769.1	45	7.2	92	sse.	.....	.....	1	.....	2	.....	calm	.....	.....	.....	.....	clear	
Wyoming, Port Royal, S. C.	30.15	765.8	56	14.4	100	sw.	6	2.7	.....	.....	10	.....	.....	0	0	.....	.....	foggy	
Yantic, Aspinwall, Panama*	29.88	758.9	77	25.0	91	nne.	.....	.....	4	.....	5	.....	nne.	.....	.....	mod.	n.	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Polynesian, Capt. Robt. Brown, N. 55° 02′, W. 14° 41′*..	29.93	760.2	46	7.8	.....	wnw.	5	.....	6	.....	nw.	2 h'r	hail	mod.	wnw.	fair.....	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. N. 42° 54′, W. 59° 00′*	30.17	766.3	29	—1.7	.....	nw.	7	.....	8	.....	nw.	.....	.....	h'vy	nw.	fair.....	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.07	763.8	40	4.4	.....	w.	2	.....	.....	.....	.....	2 h'r	2 h'r	.....	.....	clear.....	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, N. 40° 51′, W. 62° 23′	30.14	765.5	45	7.2	54	sw.	6	.....	1	.....	n.	.....	.....	r'gh	n.	very fine.....	Chauffman & Morse.
S. S. Ohio, Capt. Henry Morrison, N. 46° 32′, W. 48° 50*†	28.69	728.7	36	2.2	70	w.	9	.....	10	.....	nw.	.....	.....	h'vy	sw.	snowing.....	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 51° —′, W. 21° —′.†	29.96	761.0	48	8.9	77	ese.	6	.....	.....	.....	sw.	.....	.....	sm'h	n.	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown, N. 55° 29′, W. 14° 44′*†	30.19	766.8	44	6.7	.....	wnw	6	.....	1	.....	wnw.	.....	.....	r'gh	wnw.	clear.....	J. Brown.
Utopia, Capt. A. McRitchie,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 18° 33′, W. 72° 20*†	30.22	767.6	73	22.8	85	ene.	4	.....	4	.....	calm	½h'r	light	sm'h	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Colon, U. S. C.*	29.99	761.7	80	26.7	.....	n.	4	.....	3	.....	nne.	0	0	.....	.....	squally.....	J. Sandberg.
S. S. Andes, Capt. W. P. Gladiom, N. 27° 50′, W. 73° 56′*†	30.02	762.5	69	20.6	.....	s.	3	.....	5	.....	.....	light	light	light	sw.	fine.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Porto Rico, W. I.	.....	.....	74	23.3	.....	e.	1	.....	2	.....	ene.	0	0	.....	.....	squally.....	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Fisher & Welden.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russel, N. 22° 39′, W. 75° 28′	30.14	765.5	69.5	20.8	90	se.	4	.....	10	.....	.....	.....	.....	.....	.....	misty.....	.....
Caldew, Capt. W. Peterson, S. 49° 15′, W. 81° 48′	29.93	760.2	49	9.4	.....	w.	5	.....	10	.....	.....	.....	.....	.....	.....	misty.....	.....
S. S. Cipero, Capt. W. N. Lailey, N. 17° 15′, W. 48° 54′	30.16	766.1	75.1	23.9	76	ne.	4	.....	4	.....	.....	.....	.....	3	ne.	d. clouds.....	.....
S. City of Agra, Capt. Thos. Young, N. 19° 45′, W. 38° 20′	30.08	764.0	73.0	22.8	.....	n.	4	.....	6	.....	.....	.....	.....	.....	.....	d. clouds.....	.....
Bk. Glaramara, Capt. R. Morton, N. 42° 08′, W. 26° 13′	30.22	767.6	51	10.6	78	sw.	3	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.....	.....
Glencairn, Capt. R. S. Tannock, S 38° 00′, E. 73° 10′	29.36	745.7	59	15.0	97	ssw.	7	.....	10	.....	.....	.....	.....	.....	.....	drizzling.....	.....
Bg. Hermine, Capt. G. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery, S. 32° 00′, W. 50° 25′	29.89	759.2	66	18.9	52	calm	0	.....	1	.....	.....	.....	.....	.....	.....	blue sky.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 27° 56′, E. 44° 18′	30.13	765.3	77	25.0	82	e.	4	.....	5	.....	.....	.....	.....	...	.....	d. clouds.....	.....
May Hulse, Capt. H. Youlden, S. 39° 46′, W. 47° 40′	29.82	757.4	70	21.1	75	w.	2	.....	1	.....	.....	.....	.....	.....	.....	blue sky.....	.....
Bk. Mertola, Capt. E. W. Turner, N. 41° 11′, W. 11° 23′	30.36	771.1	57.9	14.4	96	sse.	5	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.....	.....
Minho, Capt. J. Lawson, S. 25° 27′, W. 45° 15′	29.92	760.0	79	26.1	82	s.	2	.....	10	.....	.....	.....	.....	.....	.....	overcast.....	.....
Naiad, Capt. John Smith. N. 6° 48′, W. 35° 24′	29.98	761.5	77.5	25.3	90	n.	4	.....	5	.....	.....	.....	.....	.....	.....	misty.....	.....
Pole Star, Capt. F. Norman, S. 48° 17′, W. 80° 00′	29.96	761.0	50	10.0	86	wnw.	5	.....	10	.....	.....	.....	.....	.....	.....	overcast.....	.....
Queen of Cambria, Capt. M. Parry. S. 43° 00′, E. 52° 14′	30.10	764.5	44.2	6.8	67	ese.	5	.....	7	.....	.....	.....	.....	.....	.....	d. clouds.....	.....
S. S. Strathleven, Capt. C. W. Pearson, N. 39° 40′, W. 61° 04′	30.14	765.5	47.0	8.3	77	nw.	6	.....	6	.....	.....	.....	.....	.....	.....	d. clouds.....	.....
S. Superb, Capt. Berridge N. 26° 28′, W. 42° 48′	30.27	768.8	66.3	19.1	68	n.	1	.....	5	.....	.....	.....	.....	.....	.....	d. clouds.....	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO.																	
J. Birmingham, Agent, San Francisco																	
S. S. Newbern, Capt. E. Y. Rogers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. J. Henry, 1st Off.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul, Havre, France	30.35	771.0	46.4	8.0	.....	s.	2	.....	8	.....	s.	0	0	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Servan, N. 46° 18′, W. 49° 57′*†	28.82	732.0	32.0	0.0	.....	nw.	9	.....	.....	.....	.....	snow	&hail	very large	nw.	.....	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York.																	
S. S. Gellert, Capt. Kuhlewein, N. 41° 56′, W. 62° 20′*	30.21	767.3	38	3.3	.....	nnw.	4	.....	1	.....	nw.	0	0	long	nw.	fair.....	P. Froehlich, 3d Off.
S. S. Silesia, Capt. A. Albers, N. 49° 47′, W. 17° 18′*†	30.10	764.5	50.0	10.0	.....	ese.	5	.....	10	.....	e.	0	0	4	ese.	overcast.....	.....
S. S. Wieland, Capt. C. Hebich, N. 48° 42′, W. 37° 20′*	29.73	755.1	45	7.2	.....	sse.	9	.....	10	.....	sse.	2 h'r	2 h'r	7	sse.	.....	C. Jorgensen.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, Montevideo, Uruguay*†	30.02	762.5	74	23.3	.....	ne.	3	.....	0	.....	.....	0	0	.....	.....	clear.....	J. Carroll

MERCHANT-MARINE SERIES.

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Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.28	769.1				se.	2		8		sw.	5 h'r	5 h'r			cloudy	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Alisa, Capt. J. W. Sansom, Savanilla, U. S. C.†	29.91	759.7	78	25.6		ne.	5									hazy	
S. S. Bothnia, Capt. MacMackan, [man																	E.F.Stembridge, 3d off
S. S. City of Alexandria, Capt. L. F. Timmer-Havana, Cuba, W. I*† [nolds	30.17	766.3	76	24.4		nne.	3								ne.	clear	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Maas, Capt. T. N. Bonjer, N. 47° 23, W. 44° 00'*	28.59	726.2	37	2.8		wsw.	1							very high	nw. sw.	snow and hail	
S. S. New York, Capt. R. B. Quick, N. 37° 36', W. 74° 40'†*	30.26	768.6	50	10.0		se.	3								e.	rainy	
S. S. Olbers, Capt. J. Clarke N. 41° 10', W. 64° 00'*†	30.43	772.9	45	7.2		nw.	2-4								sw. nw.	foggy	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers, N. 49° 13', W. 24° 06'	29.88	758.9				sw.	6		2?		w.	2 h'r	2h'r	mod.	nw.	cloudy.†	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander,																	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer, N. 48° 40', W. 34° 57'	29.72	754.9	45.0	7.2	84	ssw.	7		10		s.	1 h'r	1 h'r	r'gh	ssw.	raining	Sander & Waller.
S. S. Neckar, Capt. R. Bussius, N. 48° 07', W. 28° 39'	29.97	761.2	45.0	7.2		e.	2		2		se.	½ hr	½ hr	mod.	ne.	fair	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger,																	
S. S. Oder, Capt. C. Undeutsch, N. 44° 40', W. 53° 20'*	29.05	737.9	29.3	−1.5		n.	9		10		nw.	0	0	very hv'y	nw.	hazy	Moutz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany*	30.57	776.5	39.2	4.0		sw.	2		10			0	0			foggy	E. Hattenauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 37° 19', W. 130° 06'†	30.23	767.8	58	14.4	81	wnw.	3		5		w.	0	0	mod.	nw.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 44° 26', E. 162° 45'†*	29.86	758.4	44	6.7	75	w.	6		10		w.			r'gh	w.	cloudy	
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.11	704.8	62	16.7	88	ese.	3		7							hazy	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.58	751.3				sw.	1		10		w.					smoky	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 40° 20', W. 72° 30'†	30.32	770.1	42	5.6		ese.	3		8		sw.	0	0	sm'h	ese.	threatening.	H. K. Hallett.
OREGON IMROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes,																	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d Off.
S. S. Oregon, Capt. E. Polemann, N. 42° 29', W. 124° 25'†	30.29	769.4	46	7.8	92	e.	2		2		s.			light	w.	clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 32° 39', W. 117° 14'†	30.09	704.3	49	9.4	77	ne.	2		10		ne.			sm'h		cloudy	
S. S. Geo. W. Elder, Capt. H. G. Morse, Puget Sound†	30.08	704.0	30	−1.1		se.	2		1		se.	0	0	sm'h		clear	
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	30.21	707.3	45	7.2	76	[illegible]	2		0							clear	
S. S. Orizaba, Capt. Chas. B. Johnson,																	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace. N. 35° 02', W. 120° 52'†	30.25	768.3	48	8.9	63	n.	1		0			0	0	sm'h		clear	T. Wallace.
S. S. State of California, Capt. G. Dobney, Portland, Oregon†	30.47	773.9	30	−1.1	78	e.	2		4		sw.	0	0			fair	
S. S. Victoria, H. M. Hayward, N. 45° 54', W. 124° 40'†	30.45	773.3	34	1.1	100	se.	2		5					mod.	nw.	fair	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulloy, Supt. New York.*																	
S. S. Australia, Capt. ———																	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, S. 33° 59', E. 162° —'†	30.05	703.3	75	23.9	85	var.	2		8		nw.	0	0	mod.	ne	cloudy	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 35° 07', W. 175° 24'†	30.68	779.3	59	15.0	64	ese.	4		2		se.	0	0	mod.	se.	fair	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn, N. 1° 11', W. 165° 41'†	29.84	757.9	80	26.7	78	e.	4		5		ene.	0	0	mod.	ene.	fair	E. Le Saik.
S. S. City of Tokio, Com. J. Maury N. 35° 49', E. 139° 55'†	30.59	777.0	39	3.9	80	n.	2		10		n.	0	0			hazy	W. Thaxter
S. S. Colima, Capt. R. R. Searle, N. 18° 53', W. 104° 10'†	30.00	702.0	76	24.4	81	nnw.	2		3		nw.	0	0	small	w.	clear	
S. S. Grenada, Capt. M. Connolly, Panama, Panama†	29.88	758.9	74	23.3	90	calm	0		5?		n.	0	0			clear?	
S. S. South Carolina, Capt. W. J. Russell, N. 28° 41', W. 116° 28'*†	30.08	764.0	57	13.9	69	n.	2		10		nw.	0	0	small	nw.	overcast	
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	29.92	760.0	66	18.9	95	ese.	3		2		se.					clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO.																	
E. A. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke, N. 21° 48′, W. 64° 20′	.....	.....	.....	.....	.....	ene.	4	.....	0	.....	.....	0	0	mod.	.....	fair	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen.
S. S. Rhyniand, Capt. W. G. Randle, N. 47° 14′, W. 42° 00′*	28.95	735.3	44	6.7	75	sw.	6	.....	10	.....	sw.	0.3	8.	.....	sw.	stormy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, Antwerp, Belgium	.....	.....	40	4.4	91	ssw.	3	.....	5?	.....	sw.	0	0	.....	.....	cloudy?	M. Eymond.
S. S. Waesland, Capt. H. Nickels. N. 42° 25′ W. 55° 35′*	29.67	753.6	32	0.0	.....	nw.	10	.....	10	.....	n.	sh'rs	shr's	very hv'y	wnw.	cloudy	.....
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W A. Scholten, Capt. G. J. Vis. N. 48° 24′, W. 29° 39′*	29.82	757.4	49.2	9.6	77	e.	5	.....	5	.....	ne. sw.	5 h'r	5 h'r	mod.	nw.	.....	.....
THINGVALLA LINE.																	
Funch, Edye, & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub, Copenhagen, Denmark†	30.18	766.6	37.4	3.0	.....	s.	1	.....	10	.....	s.	0	0	.....	.....	covered	J. T. Ulberling.
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent, New York.																	
S. S. Adriatic, Capt. J. W. Jennings, N. 41° 07′, W. 61° 14′*†	30.22	767.6	42	5.6	.....	nw.	7	.....	2	.....	nw.	0	0	cross	nw.	d. clouds	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 51° 06′, W. 18° 58′*†	29.95	760.7	48	8.9	.....	ese.	5	.....	10	.....	se.	0	0	mod.	s.	d. clouds	W. Thomas.
S. S. Celtic, Capt. B. Gleadell Liverpool, England†*	30.16	766.1	46	7.8	85	n.	4	.....	10	.....	.....	3 h'r	driz.	.....	.....	overcast	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy. N. 41° 28′, W. 63° 59′*†	30.30	769.6	45	7.2	.....	nnw.	2	.....	8	.....	nw.	0	0	sm'h	wnw.	d. clouds	H. D. Jay, 4th Officer.
S. S. Republic, Capt. P. J. Irving, N. 50° 33′, W. 30° 48′†	30.09	764.3	40	4.4	7	ese.	3	.....	2	.....	se.	0	0	sm'h	se.	clear	H. Goulden, 4th Officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell, Hull, Eng.*	30.21	767.3	48	8.9	.....	ene.	2	.....	2	.....	e.	0	0	.....	.....	fine	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.28	769.1	68	20.0	90	calm	0	5 cs	0	w.	.....	0	0	.....	.....	fair	I. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Alpha, Capt. Ole Grönn, N 35° 37′, W. 8° 37′.*†	30.35	770.9	64	17.8	.....	se.	2	.....	8	.....	sw.	0	0	sm'h	ne.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis. Ponce, Porto Rico, W. I †*	30.18	766.6	78	25.6	.....	n.	1	.....	2	.....	ene.	2 h'r	2 h'r	.....	.....	clear	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin, S. 3° 53′, W. 35° 55′*†	29.60	751.8	.....	.....	.....	se.	.....	.....	.....	.....	se.	.....	.....	light	se.	cloudy	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, Off Holyhead, England*†	30.04	763.0	.....	.....	.....	wnw.	1	.....	.....	.....	nw.	4 h'r	4 h'r	mod.	sw.	cloudy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill, S. 20° 11′, W. 37° 40′†	30.10	764.5	.....	.....	.....	ne.	3	.....	2	.....	ene.	0	0	sm'h	e.	.....	.....
S. Enoch Train, Capt. H. D. Chapman. N. 53° 04′, E. 4° 02′*	30.24	768.1	.....	.....	.....	wsw.	6	.....	10	.....	wsw.	0	0	sm'h	.....	hazy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 50° 33′, W. 4° 00′*	30.31	769.9	.....	.....	.....	ssw.	6	.....	3	.....	sw.	0	0	long	w.	hazy	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.27	768.8	40	4.4	73	ese.	3	.....	10	.....	s.	0.40	10.2	sm'h	.....	rainy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 51° 01′, W. 81° 09′†	29.84	757.9	50	10.0	.....	w.	4	.....	10	.....	w.	3 h'r	light	mod.	nnw.	cloudy	G. D. Morrison.
Bk. Freya, Capt. Blaauw, N. 45° 58′, W. 23° 55′	.....	.....	50	10.0	.....	wsw.	5	.....	5	.....	sw.	1 h'r	hail	mod.	sw.	fair	.....
Bk. Gamaliel, Capt. D. J. Anthony, S. 15° 14′, W. 35° 25′*†	29.06	738.1	.....	.....	.....	e.	3	.....	0	.....	.....	0	0	sm'h	ese.	clear	.....
Bk. Geo. Booth, Capt. D. Williams, Boston, Mass*†	30.20	767.1	40	4.4	.....	calm	0	.....	.....	.....	.....	h'vy	snow	.....	se.	overcast	D. Williams.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 35° 29′, W. 18° 44′*	30.11	764.8	.....	.....	.....	nne.	3	.....	0	.....	.....	0	0	sm'h	ne.	clear	T. Minssen.
Bk. New York, Capt. J. E. Sorensen. Off Cape Spartel, Marocco, Africa*†	30.53	775.4	.....	.....	.....	e.	6	.....	.....	.....	e.	0	0	hv'y	e.	cloudy	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.35	770.9	53	11.7	73	calm	0	.....	5	.....	sw.	.....	.....	.....	.....	fair	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 12° 40′. W. 35° 30′*†	30.00	762.0	.....	.....	.....	ene.	.....	.....	5	.....	ene.	0	0	.....	.....	fair	J. Connolly.
Bk. Prinsessen, Capt. J. Andersen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen.
Bk. Stella, Capt. H. N. T. Somer, N. 3° 20′, W. 21° 30′*.	29.82	757.4	81.0	27.2	96	calm	0	.....	7	.....	se.	.....	.....	sm'h	.....	.....	.....
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.41	772.4	54	12.2	86	ne.	5	.....	8	.....	s.	0	0	.....	.....	cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 31° 34′, W. 18° 20′*†	30.50	774.7	.....	.....	.....	se.	2	.....	2	.....	se.	.....	.....	sm'h	.....	.....	I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton, N. 22° 16′, W. 39° 15′*†	30.10	764.5	.....	.....	.....	ene. ne.	.....	.....	.....	.....	.....	.....	.....	.....	.....	squally	N. P. Dutton.

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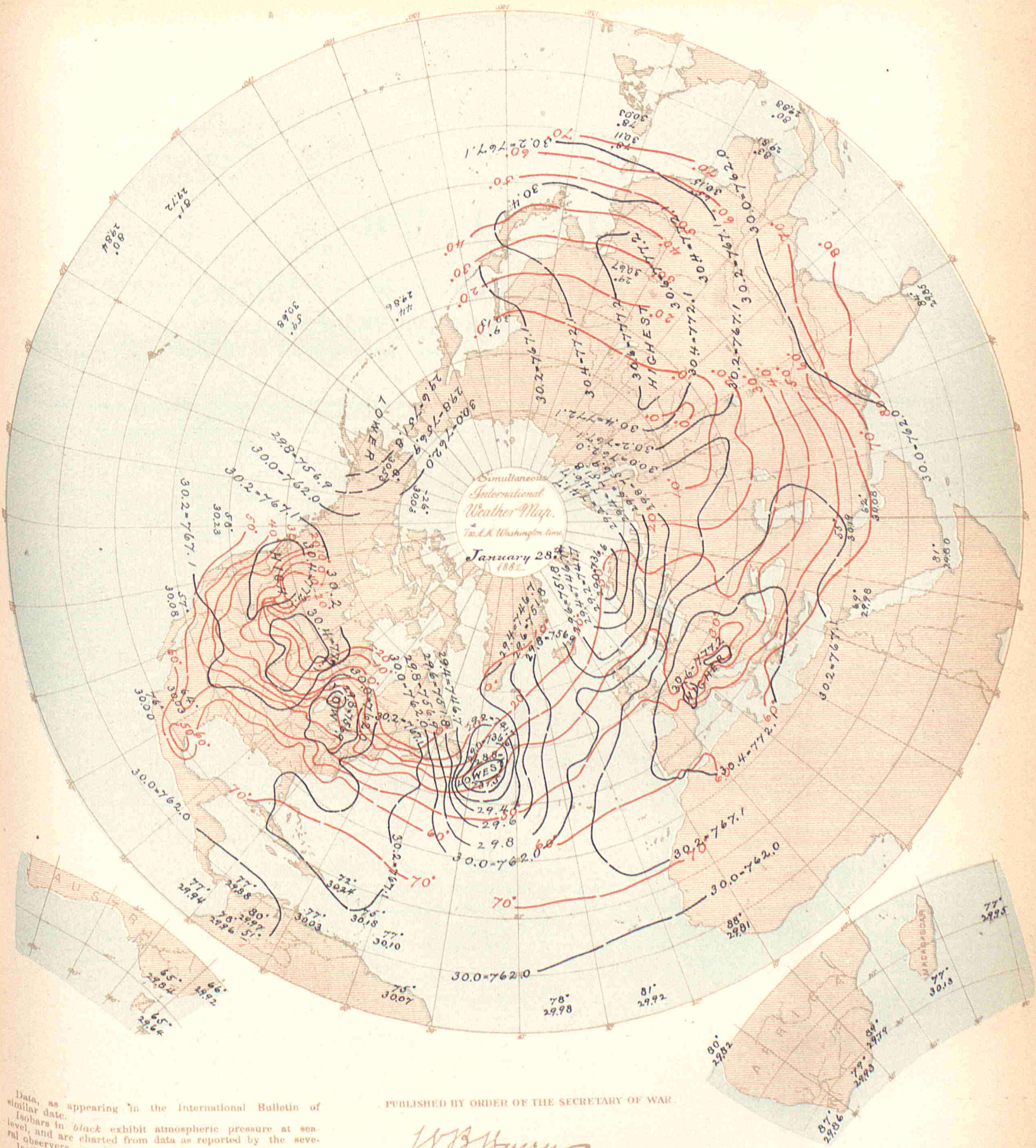
W. B. HAZEN,

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Chief Signal Officer, U. S. A.

Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 29, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.39	771.8	68.0	20.0	78	w.			2		0			0	0	clear	Moiroud.
Algiers			30.41	772.4	55.8	13.2	73	ene.			1		0			0	0	clear	Nicolas.
La Calle			30.47	774.0	56.8	13.8	71	sw.			3		3			0	0	pretty fair	Fonfréde.
Tunis			30.50	774.7															Jacques.
Sfax																			Gau.
Saida			30.45	773.5	58.3	14.6	46	sw.			2		1			0	0	fair	Perès.
Tebessa			30.48	774.2	52.7	11.6	42	nne.			1		0			0	0	clear	Derché.
Geriville					47.8	8.8	77	s.			2		0			0	0	clear	Louchamp.
Laghouat			30.53	775.4	50.4	10.2	79	sw.			1		0			0	0	clear	Herbin.
Biskra			30.52	775.2	61.5	16.4	35	nw.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.61	752.1	29.70	754.4	71.0	21.7	50	w.	4	1.8			7			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.96	761.0	30.55	775.9	33.8	1.0	74	se.			1		2			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.60	751.7	30.40	772.1	38.1	3.4	76	w.	8.7	3.9			3			0	0		Dr. Wierzbiski.
Eperies	29.54	750.3	30.48	774.1	31.5	— 0.3	81	s.			2		10			0	0	foggy	Julius Mikolik.
Gratz	29.20	741.7	30.52	775.3	34.5	1.4	66	sw.			1		10			0	0		Andreas Rospini.
Hermannstadt	28.98	736.0	30.52	775.3	25.7	— 3.5	100	n.			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.08	738.6	30.50	774.8	31.5	— 0.3	92	ssw.			1		0			0	0	clear	The Staff.
Lemberg	29.30	744.1	30.33	770.4	36.5	2.5	74	nw.			2		0			0.083	2.1		Dr. T. Stanecki.
Pola	30.33	770.4	30.45	773.4	50.9	10.5	67	wnw.			1		0			0	0		I. R. Hydrographic Office.
Szathmar	30.02	762.4	30.49	774.5	29.3	— 1.5	82	s.			2		10			0.024	0.6		Joseph Midlinszky, S. J.
Szegedin	30.22	767.5						calm			0		10			0	0		Karl Stancel.
Trieste	30.39	771.8	30.49	774.4	57.2	14.0	26	calm			0		0			0	0		Rieder.
Vienna	29.77	756.1	30.54	775.6	28.0	—2.2	100	calm			0		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.32	770.1	30.42	772.7	35.1	1.7	85	nw.	10	4.5			7			0.025	0.6	d. clouds	W. Boswell.
Armagh, Observatory	30.05	763.3	30.30	769.6	38.4	3.6	79	nne.	12	5.4									S. Call.
Bidston, Liverpool Obs'y			30.08	764.0	33.8	1.0	97	ene.	26	11.6			10					snowing	John Hartnup.
Bolton, Sharples	29.55	750.6	30.10	764.5	34.2	1.2	96	ene.	30	13.4			10					snowing	Thomas Mackereth [A.S.
Bradford, Yorkshire																1.05	26.7	snowing	J.McLandsborough, F.R.
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	80.0	26.7	58	ne.			3		3					d. clouds	Corpl. J. Surgenor.
Cardington			30.14	765.5	45.0	7.2	92	e.			0.4		10					overcast	John McLaren.
Chatham, School M. E.	30.08	764.0	30.21	767.3	47.1	8.4	87	s.			1		10					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.84	757.9	30.07	763.8	47.7	8.7	83	wnw.			4		10					overcast	The Staff.
Fort Napier, Natal	27.52	699.0	29.74	758.4	94.0	34.4	27	calm			0		2					blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	89.0	31.7	66	nw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College					42	5.6	58	ne.			2		6			0	0	d. clouds	J. O'Donnghue.
Gibraltar, Mediterranean	30.31	769.0	30.37	771.4	58.6	14.8	84	e.			4		10					overcast	Cpl. O. Baldwin.
Glasgow, Observatory	30.11	764.8	30.32	770.1	35.2	1.8	75	ene.			3							foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.00	762.0	30.18	766.6	47.1	8.4	83	s.			1		10					overcast	The Staff.
Guernsey	29.86	758.4	30.17	766.3	49.0	9.4	92	ssw.			2		10			0.05	1.3	raining	A. Collenette, F. M. S.
Kew, Observatory	30.13	765.3	30.16	766.1	48.1	8.9	79	s.	18	8.0			10					threatening	The Staff.
Leicester, Museum	29.86	758.4	30.12	765.0	42.2	5.7	100	se.			5		10					raining	J. C. Smith.
Malta, Mediterranean	30.28	769.1	30.36	771.1	60.8	16.0	67	n.			1		4					d clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.15	765.8	30.20	767.1	68.0	20.0	100	se.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.52	749.8	30.05	763.5	40.4	4.7	98	ene.			2		10					raining	John Mac Email.
Oxford, Radcliffe Obs'y	29.86	758.4	30.09	764.3	45.3	7.4	88	sse.			3		10					raining	The Staff.
Plymouth	29.95	760.7	30.03	762.7	49.8	9.9	88	sw.			5		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.48	774.2	33.5	0.8	77	nne.	11	4.9			0					blue sky	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.26	768.6	30.33	770.4	50.6	10.3	71	ne.			2		0					blue sky	W. H. Lyne
Sheffield	29.90	759.4	30.20	767.1	33.6	0.9	99	calm			0		10			1.44	36.6	snowing	W. F. Cooper.
Silloth Rectory	30.22	767.6	30.25	768.3	38.1	3.4	83	e.			5		10			0.025	0.6	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.18	766.6	33.2	0.7	97	ne.	11	4.9			10					snowing	Rev. S. J. Perry.
Stratfield Turgiss					47.4	8.6	83	s.			2		10					drizzling	Rev.C.H.Griffiths, F.M.S.
Truro, Royal Institution	30.04	763.0	30.10	764.5	52	11.1	86	nw.			6		10					gloomy	W. Newcombe.
Valencia, Observatory	30.26	768.6	30.28	769.1	42.7	5.9	77	ne.	8	3.6			4					d. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.60	751.8	29.65	753.1	11	—11.7	100	se.	6	2.7			10 n			0.200	5.1	light snow	H. J. Cundall, C. E.
Chatham, N. B.*	29.52	749.8	29.59	751.6	9	—12.8	91	ne.	3	1.3			10 n		ne.	0.17	4.3	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.40	746.7	29.43	747.5	12	—11.1	91	s.	15	6.7			10 n		calm	0.50	12.7	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.18	741.2	30.14	765.5	—18	—27.8	100	sw.	8	3.6		0	0			0	0	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.48	748.8	29.62	752.3	27	— 2.8	100	se.	15	6.7			10 n			0.10	2.5	heavy snow	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.49	749.0	29.85	758.2	16	— 8.9	91	nw.	14	6.3			10 ks		nw.	0.02	0.5	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.40	746.7	29.61	752.1	16	— 8.9	64	w.	24	10.7		0	0			0.05	1.3	clear	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.39	746.5	30.17	766.3	— 3	—19.4	65	nw.	18	8.0		0	0			0.12	3.0	clear	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.42	747.3	30.18	766.6	15	— 9.4	98	nw.	16	7.2			8 n			inap.	inap.	threatening	H. Morgan.
Port Stanley, Ontario	29.52	749.8	30.23	767.8	15	— 9.4	87	nw.	28	12.5			10 n		nw	inap.	inap.	cloudy	M. Payne.
Quebec, Quebec*	29.13	739.9	29.47	748.5	16	— 8.9	100	sw.			1		10 n		sw.	0.50	12.7	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.47	748.5	29.98	761.5	— 2	—18.9	79	nw.	12	5.4		0	0			0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.42	747.3	30.21	767.3	11	—11.7	80	nw.	33	14.8			10 ks		n.	0.05	1.3	cloudy	K. Stewart.
St. Andrews, N. B.	29.44	747.8	29.49	749.0	29	— 1.7	90	se.	4	1.8			10 n			0.20	5.1	heavy snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.74	755.4	29.80	756.9	4	—15.6	96	calm	0	0			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.70	754.4	30.08	764.0	10	—12.2	91	nw.	30	13.4		0	0			0	0	clear	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.42	747.3	29.50	749.3	31	— 0.6	96	e.	4	1.8			10 s		s.	0.25	6.3	light rain	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.67	753.6	29.95	760.7	3	—16.1		w.	3	1.3		0	0			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.76	755.9	29.79	756.7	80.5	26.9	88	e.	7.2	3.2		0	3 k			0	0	light haze	John Duthie.
Cape Town, C. G. H. Obs'y	29.82	757.4	29.86	758.4	82.0	27.8	68	s.	17	7.6		10	10			0.050	1.3		The Staff, for D. Gill
Worcester*†																			C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.34	770.6	30.54	775.7	31.1	— 0.5		nne.			2		10					snowing	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.28	769.2	30.31	769.9	45.3	7.4	95	nw.	0.8	1.8			10 n			0.575	14.6	raining	M. Marc Dechevrens, S J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.15	765.9	30.20	767.1	41.4	5.2	75	w.	25	11			1						Oversergent Fischer.
Fanöe	30.28	769.2	30.30	769.7	41.2	5.1	85	w.			4		5						Overloerer Lauridsen.
Godthaab, Greenland	29.25	742.9	29.29	744.0	—2.9	—19.4		n.			6		10						S. Kleinschmidt.
Stykkisholm, Iceland	30.20	767.0	30.24	768.1	33.1	0.6		s.			6		10					raining	A. O. Thorlacius.
Thorshavn	30.49	774.4	30.52	775.3	28.0	—2.2	81	sw.	7	3			3						Overloerer Bergh.
Vestervig	30.16	766.0	30.25	768.3	39.7	4.3	62	nw.			4		0						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.73	755.2	30.40	772.1	51.1	10.6	77	sse.			1	0	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.78	756.5	30.34	770.5	37.4	3	95	s.			2		n		s.	0.059	1.5		M. Nicot, Director.
Arras, Engineer School	30.04	762.9	30.30	769.7	41.7	5.4	87	sw.			2		10 n			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.40	772.2	30.48	774.2	53.1	11.7	57	nne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.82	757.4	30.40	772.1	43.3	6.3	73	s.			1		3		sw.	0	0	slightly cl'dy	M. Saillard, Director.
Beauvais, Normal School	30.06	763.6	30.34	770.6	42.8	6	82	sse.			1		5			0	0	cloudy	M. Frère Eugène Marié.
Besançon, Normal School			30.45	773.4	34.2	1.2	93	ne.			1		fg			0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.13	765.3	30.40	772.1	52.3	11.3	62	s.			1		5			0	0	cloudy	M. Rayet, Director.
Bourges, Normal School	29.79	756.7	30.35	771.0	51.8	11	95	se.			1		1		se.	0	0	clear	M. Postel, Director.
Brest, Naval Observatory	29.97	761.3	30.21	767.4	52.2	11.2	97	sw.			2		10		sw.	0	0		M. de Kennaree, Dir.
Caen, Normal School	30.15	765.9	30.23	767.9	48.2	9	78	s.			1		5		w.	0	0	cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.01	762.3	30.34	770.7	42.8	6.0	81	calm			0		5			0	0	cloudy	M. Jadot, Director.
Charleville, Normal School	29.88	758.9	30.41	772.5	42.4	5.8	56	ese.			1		10	s.		0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.01	736.9	30.39	771.8	53.6	12.0	44	wsw.			1	2 c	0			0	0	¼ covered	M. Allnard, Director.
Cluny, Normal School	29.61	752.0	30.50	774.6	27.7	—2.4	98	n.			1		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.56	750.9	30.48	774.2	39.6	4.2	90	sw.			1		2 s	sw.	sw.	0	0	slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.93	709.4	30.57	776.5	42.8	6	73									0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.31	744.5	30.46	773.7	52.7	11.5	59	n.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.70	754.3	30.50	774.7	41.9	5.5	51	ese.			1		0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.71	729.3	30.42	772.0	50.9	10.5	46	sw.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	29.95	760.7	30.22	767.7	49.1	9.5	83	s.			1		2		s.	0	0	slightly cl'dy	M. Ollitrault, Director.
Lescar, Normal School	29.85	758.2	30.42	772.0	62.6	17	61	ne.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.18	766.5	30.28	769.1	53.6	12.0	100	ssw.			3		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.39	746.4	30.51	774.9	34.3	1.3	85	ese.			1		0			0	0	clear	M. André, Director.
Mans, Normal School	30.02	762.4	30.34	770.6	41.2	5.1	88	s.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.22	767.6	30.49	774.5	56.7	13.7	58	wsw.			0.1		2		se.	0	0		M. Stephan, Director.
Montlouis Pinstituteur	25.12	637.9	29.95	760.9	42.8	6.0	38	w.	3.8	1.7			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.41	772.3	30.52	775.2	50.4	10.2	65	calm			0		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.63	752.6	30.45	773.4	35.2	1.8	82	n.			1	0	0			0	0	clear	M. Hasse, Director
Nantes, Observatory	30.19	766.8	30.35	770.9	50.5	10.3	84	s			1–2	9 ck	0	wsw.		0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.38	771.6	30.49	774.5	49.1	9.5	75	ne.	5.6	2.5			10		se.	0.020	0.5	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.43	544.3			28.6	—1.9		s.			1		1		s.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.39	746.6	30.50	774.6	47.8	8.8	86									0	0		M. Tallieu.
Puy de Dôme Obs'y, Summit	25.42	645.6			38.8	3.8	44	wsw.			3		2			0	0	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.34	770.7	30.37	771.5	52.9	11.6	85	s.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.17	766.2	30.39	771.9	48.2	9	74	sse.			2		5			0	0	cloudy	M. Monillot, Director.
Rodez, Normal School	28.24	717.4	30.45	773.3	48.9	9.4	61	e.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.26	768.6	30.31	769.8	41.4	5.2	84	s.			3		8			0	0	very cloudy.	M. Platrier, Director.
Saint Lô, Normal School	30.10	764.4	30.25	768.4	50.0	10	68	wsw.			1		10		wsw.	0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.19	766.7	30.35	770.9	42.3	5.7	77	sse.			1		5			0.008	0.2	cloudy	M. Renou, Director.
Toulouse, Observatory	29.74	755.3	30.47	773.9	53.1	11.7	84	sse.			3		0			0	0	clear	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.83	757.7	30.32	770.2	41.4	5.2	78	sw.			1					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.58	751.3	30.45	773.3	36.0	2.2	80	w.			2	2 cs	0	wnw.		0	0	foggy	Prof. Dr. Hoh.
Berlin	30.15	765.9	30.34	770.6	40.3	4.6	84	sw.			1		10			0.031	0.8	light rain	Prof. Dr. Arndt.
Breslau	29.85	758.3	30.39	772.0	40.8	4.9	70	wsw.			2		9	wnw.		0	0		Royal University Obs'y.
Carlsruhe	30.01	762.3	30.48	774.3	28.4	—2.0	100	se.			1		10			0	0	dense fog	Albert Senz.
Cassel	29.64	752.9	30.36	771.1	33.4	0.8	89	s.			4		7	s.		0	0		Dr. H. Möhl.
Frankfort on the Main	30.08	764.0	30.47	773.9	31.1	—0.5	95	s.			1		10			0	0		Physical Society.
Friedrichshafen	29.02	737.1	30.55	775.9	30.9	—0.6	94	se.			1		10			0	0	light fog	Wilhelm, Chief Tel.
Hamburg	30.26	768.7	30.36	771.1	37.8	3.2	100	wsw.			2		10			0.091	2.3	foggy	E. Preller.
Kiel	30.28	769.1	30.30	769.5	41.5	5.3	84	nw.			2		4			0.024	0.6		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.96	761.0	30.40	772.1	42.6	5.9	77	ssw.			3		9			0	0		H. Leppig, Asst.
Magdeburg	30.17	766.3	30.37	771.4	39.4	4.1	84	s.			1		10 ks			0	0		Dr. Assmann.
Memel	30.03	762.8	30.08	764.0	39.7	4.3	85	wnw.			6		10 s						Isermann.
Munich	28.59	725.1	30.48	774.1	39.0	3.9	57	n.			1		1			0	0		Central Station.
Neufahrwasser	30.18	765.6	30.20	767.0	40.5	4.7	78	w.			3		8			0	0		A. Lothes.
Neustadt, Palatinate	29.92	759.9	30.45	773.5	27.9	—2.3		calm			0		10			0	0	dense fog	Dickmether.
Stuttgart	29.47	748.6	30.41	772.3	40.1	4.5	68	n.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.28	769.0	30.30	769.6	37.9	3.3	100	wsw.			4		10 s			0	0		Profs. Brandes & Reimer.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.98	761.5	30.38	771.6	56.1	13.4		ne.			0.5		0					clear	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the last 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.97	761.2	30.02	762.5	74.9	23.8	72	wsw.	12	5.4	.....	.....	6	w.	.....	0	0	d. clouds	
Deesa	29.44	747.9	29.92	759.9	85.9	29.9	28	wnw.	6.0	2.7	.....	.....	4	wnw.	.....	0	0	d. clouds	
Bombay	29.88	758.9	29.92	759.8	79.8	26.6	73	nnw.	18	8.0	.....	.....	9	nw.	.....	0	0	d. clouds	
Poona, Yarrowda.	28.05	712.4	29.87	758.6	90.0	32.2	18	w.	2	0.9	.....	.....	4	w.	.....	0	0	d. clouds	
Belgaum	27.38	695.4	29.88	758.8	85.8	29.9	12	ne.	7	3.1	.....	.....	0	.....	.....	0	0	blue sky	
Lahore	29.22	742.2	29.99	761.8	62.6	17.0	52	nw.	0.7	0.3	.....	.....	10	.....	.....	0	0	overcast	
Roorkee	29.03	737.2	29.95	760.7	68.0	20.0	42	nw.	2.4	1.1	.....	.....	8	.....	.....	0	0	.....	
Agra	29.41	747.1	29.99	761.7	75.2	24.0	41	w.	2.6	1.2	.....	.....	3	.....	w.	0	0	.....	
Nagpur	28.88	733.6	29.92	759.9	85.7	29.8	31	s.	3.6	1.6	.....	.....	7	w.	.....	0	0	d. clouds	
Jubbulpore	28.61	726.6	29.99	761.7	73.0	22.8	48	calm	1.3	0.6	.....	.....	4	.....	.....	0	0	d. clouds	
Lucknow	29.56	750.7	29.94	760.4	74.2	23.4	31	wnw.	4.8	2.2	.....	.....	0	.....	.....	0	0	blue sky	
Allahabad	29.63	752.7	29.95	760.8	73.8	23.2	49	sw.	2.5	1.1	.....	.....	5	sw.	.....	0	0	d. clouds	
Patna	29.74	755.4	29.93	760.2	72.1	22.3	58	w.	4.0	1.8	.....	.....	6	w.	w.	0	0	d. clouds	
Hazaribagh	27.92	709.1	29.95	760.8	73.3	22.9	32	nw.	7.2	3.2	.....	.....	6	.....	.....	0	0	.....	
Cuttack	29.86	758.5	29.94	760.6	82.8	28.2	42	calm	0.1	0.04	.....	.....	2	.....	.....	0	0	d. clouds	
Calcutta, Alipore	29.91	759.8	29.94	760.4	75.7	24.3	53	wsw.	3.0	1.3	.....	.....	6	w.	.....	0	0	d. clouds	
Dhubri	29.81	757.2	29.93	760.3	70.1	21.2	57	calm	3.3	1.5	.....	.....	0	.....	.....	0	0	blue sky	
Chittagong	29.89	759.1	29.98	761.5	73.8	23.2	85	s.	3.1	1.4	.....	.....	3	.....	.....	0	0	blue sky	
Sibsagar	29.65	753.2	30.00	762.1	61.9	16.6	89	ne.	3.4	1.5	.....	.....	10	w.	w.	0.02	0.5	d. clouds	
Jeypore	28.50	724.0	29.96	761.0	76.7	24.8	33	w.	3.9	1.7	.....	.....	6	w.	.....	0	0	d. clouds	
Zanzibar, Africa	29.89	759.2	.....	.....	85.5	29.7	68	ssw.	5.3	2.4	.....	.....	7k;fk	.....	ese.	0.09	2.3	d. clouds	
Trichinopoly	29.70	754.4	.....	.....	84.7	29.3	41	ene.	1	0.4	.....	.....	0	.....	.....	0	0	blue sky	
Bellary	28.46	722.9	.....	.....	86.8	30.4	10	e.	2.7	1.2	.....	.....	0	.....	.....	0	0	blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	30.05	763.3	30.48	774.1	50.5	10.3	30	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.98	761.5	30.53	775.5	45.9	7.7	52	sw.	1.3	0.6	.....	.....	2	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	30.39	771.9	30.50	774.8	48.9	9.4	43	w.	0.7	0.3	.....	.....	0	.....	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.56	750.9	30.52	775.2	41.4	5.2	76	ne.	3.1	1.4	.....	.....	0	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	30.29	769.4	30.49	774.4	54.0	12.2	63	sw.	2.5	1.1	.....	.....	0	.....	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.52	724.5	30.53	775.4	45.3	7.4	28	w.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	30.43	772.8	30.48	774.2	46.4	8.0	62	n.	12.5	5.6	.....	.....	0	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	30.24	768.0	30.50	774.8	37.4	3.0	88	nnw.	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	30.39	771.8	30.48	774.1	53.4	11.9	75	ne.	2.5	1.1	.....	.....	0	.....	.....	0	0	.....	Prof. P. Monte.
Rome	30.27	768.8	30.45	773.4	49.6	9.8	47	wnw.	0	0	.....	.....	0	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	30.16	766.1	30.43	772.8	54.7	12.6	68	wnw.	7.4	3.3	.....	.....	1	nw.	.....	0.028	0.7	.....	Prof. C. de Giorgi.
Cosenza	29.51	749.6	30.43	773.0	54.7	12.6	75	se.	1.8	0.8	.....	.....	0	.....	.....	0	0	.....	Prof. D. Conti.
Cagliari	30.25	768.4	30.45	773.5	54.7	12.6	67	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	30.18	766.6	30.44	773.2	56.3	13.5	58	ne.	2.5	1.1	.....	.....	2	.....	.....	0	0	.....	Prof. G. Ciacciatore.
Syracuse	30.37	771.4	30.42	772.6	55.2	12.9	73	w.	8.0	3.6	.....	.....	1	wnw.	.....	0	0	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.88	758.9	30.42	772.6	55.9	13.3	76	ene.	0	0	.....	.....	4	ene.	.....	0	0	.....	Prof. T. Brioschi.
Stelvio	22.42	569.4	.....	.....	24.3	— 4.3	34	sw.	.....	.....	2	.....	0	.....	.....	0	0	clear	Prof. P. F. Denza.
Valdobbia	22.43	569.8	.....	.....	26.6	— 3.0	46	se.	.....	.....	2	.....	0	.....	.....	0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.52	775.2	30.56	776.2	27.0	— 2.8	79	s.	12.7	5.7	.....	0	9 s	.....	.....	0	0	cloudy	
Hakodate	30.50	774.7	30.51	774.9	32.5	0.3	65	wnw.	8.4	3.8	.....	.....	10	.....	nw.	0	0	overcast	
Hiroshima, I. M. Obs'y	30.47	773.9	30.49	774.4	41.5	5.3	79	nne.	0.5	0.2	.....	ck	10 s	.....	w.	0.036	0.9	overcast	K. Sasaki.
Kanazawa	30.42	772.6	30.53	775.4	35.5	1.9	75	ese.	2.5	1.1	.....	9ck;cs	0	wnw.	.....	.....	.....	cloudy	S. Endo.
Kioto	30.35	770.9	30.53	775.4	39.0	3.9	79	nnw.	2.7	1.2	.....	ck;cs	10 s	.....	.....	0	0	cloudy	M. Tojima.
Kochi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Nagasaki, I. M. Obs'y	30.21	767.3	30.42	772.6	45.8	7.7	75	ne.	4.0	1.8	.....	.....	10 s	.....	.....	0.008	0.2	overcast	S. Takehayashi
Niigata	30.53	775.4	30.57	776.5	34.5	1.4	82	s.	2.0	0.9	.....	10 ck	0	.....	.....	0	0	covered	
Nobiru	30.55	776.0	30.57	776.5	32.0	0.0	70	nnw.	3.4	1.5	.....	cs	8 s	.....	.....	0	0	fair	H. Midzushina.
Sapporo	.....	.....	.....	.....	15.1	— 9.4	92	calm	0	0	.....	.....	1	.....	.....	0.095	2.4	clear	
Tokei Obs'y, Yeddo	30.52	775.2	30.59	777.0	34.7	1.5	78	nne.	1.8	0.8	.....	.....	10 s	.....	.....	0	0	foggy	The Staff.
Wakayama	30.48	774.2	30.53	775.4	40.8	4.9	76	ssw.	0.4	0.2	.....	10 ck	.....	w.	w.	0	0	cloudy	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.78	756.4	29.97	761.2	76.0	24.4	90	ese.	13.5	6.0	.....	.....	10ks;n	.....	e.	4.4	111.8	drizzling	Oliver & Figor.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	23.70	602.1	29.92	760.1	52.7	11.5	53	calm	0	0	.....	0	0	.....	.....	0	0	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	24.42	620.2	30.27	768.9	46.0	7.8	78	s.	.....	.....	1	1 c	0	w.	.....	0	0	foggy	Prof. M. Leal.
Mazatlan	29.77	756.2	30.03	762.9	63.5	17.5	97	e.	.....	.....	1	0	0	.....	.....	0	0	fair	F. Quijano, C. E.
Mexico, Central Obs'y	23.14	587.9	30.33	770.5	45.1	7.3	61	calm	0	0	.....	0	0	.....	.....	0	0	.....	The Staff.
Morelia	24.28	616.7	30.51	775.1	50.0	10.0	79	s.	.....	.....	3	2 c	4 k	s.	se.	0	0	.....	M. Tena, M. D.
Pabellon, Aguascalientes	23.98	609.1	30.09	764.2	50.5	10.3	73	calm	.....	.....	0	5 c	0	.....	.....	0	0	½ cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.1	30.38	771.6	41.9	5.5	60	calm	0	0	.....	0	0	.....	.....	0	0	.....	Prof. P. Spina.
San Luis Potosi	24.13	613.0	30.14	765.6	58.5	14.8	54	e.	.....	.....	1	0	0	.....	.....	0	0	fine	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	22.58	573.6	30.19	766.9	54.3	12.4	55	.....	.....	.....	.....	0	0	.....	.....	0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.33	770.3	30.33	770.3	42.6	5.9	.....	s.	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Groningen	30.30	769.6	30.35	771.0	40.1	4.5	.....	e.	.....	.....	1	.....	.....	.....	.....	0.071	1.8	.....	
Helder	30.33	770.4	30.33	770.4	40.6	4.8	.....	ene.	.....	.....	1	.....	.....	.....	.....	0.094	2.4	.....	
Hellevoetsluis	30.33	770.4	30.33	770.4	42.8	6.0	93	sse.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	30.30	769.6	30.35	770.8	43.0	6.1	88	ssw.	.....	.....	1	.....	8	.....	.....	0.008	0.2	very cloudy.	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.25	768.3	30.31	769.9	29.1	— 1.6	56	n.	18	8			3			0	0		
Brono	29.90	759.4	29.94	760.4	25.5	— 3.6	82	n.	25	11			10			0	0		
Christiania	30.04	762.9	30.18	766.5	32.2	0.1	29	nne.	9	4			0			0	0		
Gjæsvær	29.04	737.7	29.07	738.3	16.5	— 8.6		wnw.			7		10						
Lodingen	29.55	750.5	29.60	751.7	18.1	— 7.7	80	w.			2		10			0.110	2.8		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					56.5	13.6	91	s.	20.6	9.2			7			0.165	4.2		Dr. J. A. Sampaio.
Campo Major	29.37	746.1	30.39	771.8	59.7	15.4	51	e.	3.1	1.4			8			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.18	766.5	30.26	768.7	63.7	17.6	74	calm	0	0			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.06	763.6	30.43	773.0	53.6	12.0	85	ene.	8.1	3.6			4	sw.		0	0		The Staff.
Ponta Delgada, Azores	29.78	756.5	29.85	758.3	58.3	14.6	76	ssw.	18.6	8.3			10			0	0		
Saint Paul de Loando	29.68	753.9	29.88	759.0	77.4	25.2	98	sw.	1.8	0.8			10			0	0		
Serra da Estrella	25.55	649.0	30.43	773.0	39.2	4.0	93	se.	8.7	3.9			8			0	0	foggy	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.82	732.0	29.97	761.1	19.9	— 6.7		sw.	16	7			10 n			0.012	0.3		Major K. Lasarew.
Archangel	29.03	737.4	29.05	737.9	31.8	— 0.1	98	ssw.	13	6			10			0.079	2.0	snowing	Capt. Sselliweratow.
Astrakhan	30.23	767.9	30.15	765.8	30.7	— 0.7	98	calm	0	0		10 cp	0			0.016	0.4	heavy cld's	Capt. Wisganow.
Barnaul	29.74	755.3	30.29	769.4	5.0	—15.0	74	calm	0	0			7			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.47	748.4	29.71	754.7	36.0	2.2	91	w.	13	6			10 s					rain & sleet	Observatory.
Ekaterinburg	29.04	737.7	30.09	764.2	5.5	—14.7	90	n.	2	1			10			0	0		Meteorological Obs'y.
Kasan	29.71	754.5	30.00	762.1	1.6	—16.9	91	s.	4	2			10			0.016	0.4		Observatory.
Kertch	30.23	767.9	30.25	768.4	33.6	0.9	90	wnw.	7	3			10 n			0	0		Lagorio & Sastyrez.
Kieff	29.55	750.5	30.22	767.6	30.7	— 0.7	86	w.	7	3		c;cs	10 ks			0	0		Observatory.
Lugan	30.01	762.3	30.23	767.8	28.4	— 2.0	84	wnw.	13	6			10			0	0		Meteorological Obs'y.
Moscow	29.31	744.5	29.81	757.1	31.1	— 0.5	81	s.	7.8	3.5			10 s			0.024	0.6		Meteorological Obs'y.
Nikolaiev	30.29	769.4	30.36	771.2	32.7	0.4	83	n.	4	2			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.13	765.4	30.22	767.6	3.6	—15.8	68	w.	2	1			0			0	0		Lieut. Iwanow.
Pekin, China	30.33	770.3	30.47	773.9	23.4	— 4.8	93	calm	0	0		0	4 ks			0.043	1.1		Physical Observatory.
St. Petersburg	29.48	748.7	29.49	749.1	35.6	2.0	85	wsw.	18	8			9 n			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.74	730.0	30.42	772.6	30.2	— 1.0	80	calm	0	0			2			0.173	4.4		Teich, A. M.
Tiflis	28.84	732.6	30.31	769.8	43.0	6.1	40	nw.	22	10		8 c	0			0	0	light clouds	Physical Observatory.
Warsaw	29.84	757.9	30.28	769.2	34.3	1.3	89	w.	18	8			10 ks						Astronomical Obs'y.
Wilna	29.64	752.9	30.08	764.1	34.3	1.3	94	wsw.	7	3			10			0	0	heavy cl'ds	Berg, Assistant.
Yeniseisk	30.24	768.1	30.57	776.5	— 8.3	—22.4	82	calm	0	0			2			0	0	lunar co'na	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.45	773.4	42	5.6	91	e.			4	5	0	e.		0.2	5.		J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.34	770.6	30.44	773.1	55.4	13	71	sw.	2.0	0.9			1			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.37	771.4	30.43	772.9	63.7	17.6	48	se.	3.1	1.4		2	0	se.		0	0	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.42	696.4	30.49	774.5	46.4	8.0	52	sw.	2.5	1.1		0	9			0	0	almost cov'd	Domingo Martin.
Madrid, Royal Obs'y	28.18	715.8	30.46	773.6	53.8	12.1	67	e.	2.7	1.2		0	9			0	0	almost cov'd	The Staff.
Murcia, Met. Obs'y	30.32	770.2	30.48	774.1	60.8	16.0	68	s.	2.5	1.1		3	3	wnw.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.38	746.3	30.29	769.4	55.9	13.3	72	se.	5.6	2.5			10			0	0	covered	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.06	763.5	30.13	765.2	68.2	20.1	85	calm	0	0		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	30.00	762.1	30.06	763.6	76.9	24.9	67	ene.	2.2	1.0		0	k			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.30	769.6	30.40	772.1	60.8	16.0	63	e.	15.9	7.1		0	0			0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.08	764.0	30.17	766.3	73.4	23.0	79	se.	8.1	3.6		2 cs	2 k	se.	se.	0	0		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.00	762.0	30.13	765.3	74.0	23.3	68	se.	0	0		0	1 k		se.	inap.	inap.	clear	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.44	747.8	29.48	748.8	16.9	— 8.4	88	nw.			6		5			0	0		
Umea	29.65	753.0	29.70	754.3	22.3	— 5.4	56	nw.			7		2			0	0		
Hernosand	29.81	757.2	29.86	758.5	25.3	— 3.7	40	nw.			6		2			0	0		
Stockholm	29.77	756.1	29.95	760.6	33.8	1.0	37	nnw.			6		9			0	0		
Wisby	29.89	759.3	29.95	760.8	39.2	4.0	73	wnw.			6		10			0	0		
Sub-Series.																			
Upsala	29.85	758.1	29.93	760.3	32.4	0.2	47	nnw.	19.7	8.8			3			0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.07	738.4	30.58	776.7	27.7	— 2.4	100	ese.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.39	771.9	48.2	9.0	64	nw.	8	3.5			0			0	0		The Observatory.
Valona			30.40	772.2	57.6	14.2		w.			1		2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.28	769.0	62.1	16.7	56	w.			1	0	4 k		w.	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	29.73	755.1	29.82	757.4	27	— 2.8	74	nw.	19	8.5			10 s		nw.	0.31	7.9	cloudy	
Alpena, Michigan	29.56	750.8	30.27	768.8	8	—13.3	76	w.	14	6.3			10 s		nw.	0.02	0.5	cloudy	
Atlanta, Georgia	29.00	736.6	30.23	767.8	43.0	6.1	71	nw.	16	7.2			10 s		nw.	0.19	4.8	cloudy	
Atlantic City, New Jersey	29.92	760.0	29.93	760.2	35.8	2.1	79	nw.	13	5.8			10 s			0.47	11.9	cloudy	
Augusta, Georgia	29.94	760.5	30.14	765.5	58.4	14.7	70	w.	7	3.1			10 s		w.	0	0	cloudy	
Baltimore, Maryland	29.94	760.5	29.99	761.7	36	2.2	30	nw.	20	8.9			10 s		nw.	0.45	11.4	cloudy	
Barnegat, New Jersey	29.87	758.7	29.89	759.2	35.2	1.8	64	nw.	18	8.0			10 s			0.60	15.2	cloudy	
Bismarck, Dakota	28.39	721.1	30.39	771.9	— 6	—21.1	65	e.	2	0.9		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.61	701.3	30.54	775.7	6	—14.4	91	calm	0	0			10 s		calm	0	0	cloudy	
Boston, Massachusetts	29.50	749.3	29.67	753.6	32.0	0.0	88	sw.	11	4.9			10 s		sw.	0.11	2.8	cloudy	
Brownsville, Texas	30.10	764.5	30.15	765.8	71	21.7	94	calm	0	0			10 s			0	0	cloudy	
Buffalo, New York	29.33	745.0	30.13	765.3	14.5	— 9.7	90	w.	28	12.5			10 s		w.	0	0	cloudy	
Burlington, Vermont	29.37	746.0	29.68	753.9	22.0	— 5.6	73	nw.	13	5.8			10 s		nw.	inap.	inap.	cloudy	
Cairo, Illinois	30.20	767.1	30.62	777.7	22.5	— 5.3	66	n.	18	8.0		5 cs	2 s	w.	calm	0.01	0.3	fair	
Campo, California	27.47	697.7	30.10	764.5	31.2	— 0.4	88	nw.	2	0.9		0	4 s		w.	0	0	fair	
Camp Thomas, Arizona	27.30	693.4	30.13	765.3	38	3.3	92	calm			0		10 n			inap.	inap.	light rain	
Cape Henry, Virginia	29.96	761.0	29.98	761.5	43	6.1	93	nw.	6	2.7			10 s		sw.	0.76	19.3	cloudy	
Cape May, New Jersey	29.87	758.7	29.90	759.4	39	3.9	71	nw.	25	11.2			10 s		nw.	0.74	18.8	cloudy	
Castroville, Texas	29.42	747.3	30.27	768.8	45	7.2	83	n.	12	5.4			10 s			0	0	cloudy	
Cedar Keys Florida	30.11	764.8	30.13	765.3	66	18.9	93	sw.	3	1.3			fg.			0	0	dense fog	
Champaign, Illinois	29.75	755.6	30.62	777.7	4.6	—15.2	46	nw.	15	6.7		0	0			0	0	clear	
Charleston, S. Carolina	29.99	761.7	30.05	763.3	62	16.7	87	w.	8	3.6			10 s		w.	0	0	threatening	
Charlotte, N. Carolina	29.19	741.4	30.08	764.0	47.0	8.3	56	nw.	13	5.8			10 s		w.	0.08	2.0	cloudy	
Chattanooga, Tennessee	29.52	749.8	30.38	771.6	35.0	1.7	53	n.	17	7.6		6 ck	3 s	w.	calm	0.41	10.4	cloudy	
Cheyenne, Wyoming	24.12	612.6	30.37	771.4	5.5	—14.7	67	w.	4	1.8		0	0			0	0	clear	
Chicago, Illinois	29.79	756.7	30.54	775.7	8.0	—13.3	76	nw.	8	3.6		0	0			0	0	clear	
Chincoteague, Virginia	29.91	759.7	29.93	760.2	39	3.9	100	nw.	6	2.7			10 s		nw.	0.12	3.0	cloudy	
Cincinnati, Ohio	29.78	756.4	30.48	774.2	19	— 7.2	70	nw.	12	5.4			10 ks		nw.	0	0	cloudy	
Cleveland, Ohio	29.55	750.6	30.33	770.4	15.5	— 9.2	83	nw.	20	8.9			10 s		nw.	0	0	cloudy	
Coleman City, Texas	28.52	724.4			28	— 2.2	100	n.	16	7.2			10 n			0.21	5.3	sleeting	
Columbus, Ohio	29.48	748.8	30.38	771.6	17	— 8.3	67	nw.	21	9.4		5 k	3 ks	w.	nw.	0.03	0.8	cloudy	
Concho, Texas	28.35	720.1	30.37	771.4	31	— 0.6	88	n.	16	7.2			10 n			0.05	1.3	light rain	
Davenport, Iowa	29.95	760.7	30.66	778.7	7	—13.9	52	nw.	7	3.1		0	0			0	0	clear	
Dayton, Washington T'y	28.80	731.5	30.60	777.2	3	—16.1	69	calm	0	0		0	0			0	0	clear	
Deadwood, Dakota	25.49	647.4	30.44	773.2	7.7	—13.5	63	sw.	2	0.9		0	0			0	0	clear	
Decatur, Texas					29	— 1.7	78	ne.	12	5.4			10 s			0	0	cloudy	
Delaware Breakwater, Del.	29.90	759.4	29.92	760.0	39	3.9	73	nw.	36	16.1			9 s		w.	0.63	16.0	cloudy	
Denison, Texas	29.68	753.9	30.52	775.2	29.8	— 1.2	78	n.	13	5.8			10 s			0	0	cloudy	
Denver, Colorado	24.91	632.7	30.43	772.9	15.6	— 9.1	64	s.	2	0.9		0	0			0	0	clear	
Des Moines, Iowa	29.71	754.6	30.68	779.3	2	—16.7	79	n.	1	0.4		0	0			0	0	clear	
Detroit, Michigan	29.62	752.3	30.38	771.6	15.5	— 9.2	83	nw.	20	8.9		0	0			0	0	clear	
Dodge City, Kansas	27.86	707.6	30.60	777.2	19.5	— 6.9	86	se.	3	1.3		8 cs	0			0	0	cloudy	
Dubuque, Iowa	29.86	758.4	30.63	778.0	1.2	—17.1	54	w.	3	1.3		0	0			0	0	clear	
Duluth, Minnesota	29.67	753.6	30.43	772.9	—13	—25.0	70	sw.	6	2.7		0	0			0	0	clear	
Eagle Pass, Texas	29.50	749.3	30.34	770.6	46.1	7.8	83	nw.	12	5.4			10 s			inap.	inap.	cloudy	
Eagle Rock, Idaho	25.46	646.7	30.42	772.7	—18	—27.8	48	n.	7	3.1		0	0			0	0	clear	
Eastport, Maine	29.43	747.5	29.50	749.3	30	— 1.1	88	se.	8	3.6			10 s; fg		se.	0.23	5.8	cloudy	
El Paso, Texas	26.31	668.3	30.19	766.8	42.9	6.1	92	ne.	6	2.7			10 s		calm	0.07	1.8	threatening.	
Erie, Pennsylvania	29.46	748.3	30.23	767.8	18	— 7.8	84	nw.	29	13.0			10 s			0	0	threatening.	
Escanaba, Michigan	29.66	753.4	30.38	771.6	0	—17.8	39	w.	10	4.5		0	0			inap.	inap.	clear	
Florence, Arizona																			
Fort Apache, Arizona	24.99	634.7	30.11	764.8	40	4.4	86	sw.	10	4.5			10 s		calm	0	0	cloudy	
Fort Assinnaboine, Montana	27.32	693.9	30.36	771.1	— 5	—20.6	65	sw.	16	7.2		0	0			0	0	clear	
Fort Bennett, Dakota	28.77	730.7	30.51	774.9	—12.5	—24.7	68	calm	0	0		0	0			0	0	clear	
Fort Benton, Montana	27.37	695.2	30.35	770.9	8	—13.3	40	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	28.22	716.8	30.42	772.7	—20	—28.9		nw.	3	1.3		0	0			0	0	clear	
Fort Custer, Montana	27.17	690.1	30.55	776.0	—12	—24.4	54	se.	4	1.8		0	0			0	0	clear	
Fort Davis, Texas	25.25	641.3	30.23	767.8	30	— 1.1	100	ne.	8	3.6			fg			0	0	dense fog	
Fort Elliott, Texas	27.61	701.3	30.54	775.7	20	— 6.7	46	ne.	1	0.4			10 s		ne.	0	0	cloudy	
Fort Gibson, Indian T'y	30.00	762.0	30.60	777.2	27.0	— 2.8	88	n.	6	2.7		0	0			0	0	clear	
Fort Grant, Arizona	25.20	640.1	30.10	764.5	34	1.1	52	ne.	3	1.3			10 n			0.22	5.6	light rain	
Fort Griffin, Texas	29.16	740.7	30.54	775.7	30	— 1.1	47	ne.	11	4.9			10 s			0	0	cloudy	
Fort Keogh, Montana	27.75	704.8	30.44	773.2	—11	—23.9	55	sw.	4	1.8		0	0			0	0	clear	
Fort Macon, North Carolina	29.96	761.0	29.96	761.0	54	12.2	93	nw.	12	5.4		10 k	0	nw.		0.01	0.3	cloudy	
Fort McKavett, Texas	28.04	712.2	30.42	772.7	32.8	0.4	71	ne.	13	5.8			10 n			inap.	inap.	light rain	
Fort Missoula, Montana	27.09	688.1	30.55	776.0	—22	—30.0	100	calm	0	0		0	fg.			0	0	dense fog	
Fort St. Michaels, Alaska	29.43	747.5	29.46	748.3	— 2	—18.9	100	w.	9	4.0		0	0			0	0	clear	
Fort Shaw, Montana	26.48	672.6	30.34	770.6	14	—10.0	66	sw.	23	10.3		0	0			0	0	clear	
Fort Sill, Indian Territory	29.28	743.7	30.61	777.5	25	— 3.9	73	n.	24	10.7			10 s			0	0	cloudy	
Fort Stevenson, Dakota	28.31	719.1	30.37	771.4	— 7	—21.7	61	sw.	5	2.2		0	0			0	0	clear	
Fort Verde, Arizona					33.8	1.0	81	w.			1		10 s			0	0	cloudy	
Fredericksburg, Texas	28.52	724.4	30.34	770.6	37	2.8	100	n.	12	5.4			10 s			0	0	cloudy	
Galveston, Texas	30.18	766.6	30.22	767.6	59	15.0	94	ne.	19	8.5			10 ks		n.	0.01	0.3	cloudy	
Grand Haven, Michigan	29.72	754.9	30.43	772.9	16.0	— 8.9	83	w.	18	8.0			10 s		w.	0.10	2.5	cloudy	
Hatteras, North Carolina	29.94	760.5	29.96	761.0	50	10.0	100	nw.	8	3.6			10 s		nw.	0.02	0.5	cloudy	
Helena, Montana	25.93	658.6	30.36	771.1	— 5	—20.6	68	w.	2	0.9		4 k	0			0	0	fair	
Henrietta, Texas	29.53	750.0	30.60	777.2	28	— 2.2	77	n.	16	7.2			10 s			0	0	cloudy	
Huron, Dakota	29.02	737.1	30.56	776.2	— 9.8	—23.2	64	se.	6	2.7		0	0			0	0	clear	
Indianapolis, Indiana	29.65	753.1	30.49	774.4	10	—12.2	66	nw.	8	3.6		0	8 ks		nw.	inap.	inap.	cloudy	
Indianola, Texas	30.16	766.1	30.19	766.8	53.5	11.9	93	n.	31	13.9			10 s		n.	0	0	cloudy	
Jacksboro, Texas	29.28	743.7	30.52	775.2	29	— 1.7	88	n.	12	5.4			10 s		n.	0	0	cloudy	
Jacksonville, Florida	30.06	763.5	30.11	764.8	67	19.4	90	sw.	3	1.3		3 cs	2 s			0	0	fair	
Keokuk, Iowa	29.96	761.0	30.66	778.7	6.0	—14.4	63	nw.	6	2.7		0	0			0	0	clear	
Key West, Florida	30.12	765.0	30.14	765.5	71.0	21.7	84	e.	4	1.8		0	2 k		e.	0	0	clear	
Kittyhawk, North Carolina	29.94	760.5	29.96	761.0	47	8.3	100	w.	14	6.3			10 s		nw.	0.34	8.6	cloudy	
Knoxville, Tennessee	29.29	744.0	30.37	771.4	33.2	0.7	62	n.	12	5.4		10 cs	0	w.		0.10	2.5	cloudy	
La Crosse, Wisconsin	29.75	755.6	30.59	777.0	— 3	—19.4	65	sw.	3	1.3		0	0			0	0	clear	
La Mesilla, New Mexico	26.14	663.9	30.17	766.3	44.5	6.9	85	se.	2	0.9			10 n			0.15	3.8	light rain	
Leavenworth, Kansas	29.76	755.9	30.72	780.3	13	—10.6	61	calm	0	0		6 cs	0			0	0	fair	
Lewiston, Idaho	29.82	757.4	30.69	779.5	13.5	—10.3	60	e.	1	0.4		0	0			0	0	clear	
Little Rock, Arkansas	30.20	767.1	30.52	775.2	35	1.7	53	n.	10	4.5			10 ks			0	0	cloudy	
Los Angeles, California	29.78	756.4	30.18	766.6	38.3	3.5	82	nw.	2	0.9		3 c	0	calm		0	0	clear	
Louisville, Kentucky	29.91	759.7	30.50	774.7	17.0	— 8.3	70	nw.	20	8.9		0	3 s		calm	inap.	inap.	clear	
Lynchburg, Virginia	29.33	745.0	30.05	763.3	41.0	5.0	57	nw.	10	4.5			10 s		w.	0.10	2.5	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.47	748.5	30.56	776.2	— 1	—18.3	68	nw.	7	3.1		0	0			0	0	clear	
Marquette, Michigan	29.54	750.3	30.32	770.1	5	—15.0	76	w.	7	3.1		0	0			0.08	2.0	clear	
Mason, Texas	28.68	728.5	30.42	772.7	33.5	0.8	83	ne.	12	5.4			10 n		ne.	0.18	4.6	light rain	
Memphis, Tennessee	30.18	766.6	30.54	775.7	32	0.0	68	nw.	12	5.4			10 s			0.03	0.8	cloudy	
Milwaukee, Wisconsin	29.72	754.9	30.52	775.2	1	—17.2	72	w.	14	6.3		0	1 s			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level,		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction, Upper.	Clouds. Direction, Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.19	766.8	30.23	767.8	54.0	12.2	86	n.	13	5.8			10 n		n.	0.62	15.7	light rain	
Montgomery, Alabama	30.01	762.2	30.25	768.3	51	10.6	77	n.	12	5.4			10 n		n.	0.40	10.2	light rain	
Moorhead, Minnesota	29.30	744.2	30.40	772.1	—18	—27.8	100	s.	10	4.5		0	0			0	0	clear	
Morgantown, W. Virginia	29.23	742.4	30.29	769.4	23.5	— 4.7	71	n.	23	10.3		0	8 s		n.	inap.	inap.	cloudy	
Mt. Washington, N. H	23.00	584 2	29.63	752.6	3.0	—16.1	94	nw.	54	24.1			10n; fg		nw.	0.52	13.2	light snow	
Nashville, Tennessee	29.93	760.2	30.49	774.4	29.6	— 1.3	73	nw.	10	4.5		10 cs	0	nw.		0.02	0.5	cloudy	
New Haven, Connecticut	29.61	752.1	29.73	755.1	34	1.1	52	w.	16	7.2		9 c	0	sw.		0.35	8.9	cloudy	
New London, Connecticut	29.67	753.6	29.72	754.9	36	2.2	79	w.	12	5.4			10 s		w.	0.28	7.1	cloudy	
New Orleans, Louisiana	30.04	763.0	30.10	764.5	60.5	15.8	87	n.	11	4.9			10 s			0	0	cloudy	
Newport, Rhode Island	29.64	752.8	29.69	754.1	36.3	2.4	84	w.	24	10.7			10 ks		w.	0.44	11.2	threatening	
New River, N. Carolina					55	12.8	71	n.			1	5 ck	5 s	w.		0	0	cloudy	
New Shoreham, Rhode I'd	29.68	753.9	29.71	754.6	37.0	2.8	82	w.	19	8.5			10 s		w.	0.78	19.8	cloudy	
New York, New York	29.64	752.8	29.83	757.7	35	1.7	69	w.	22	9.8			10 s		w.	0.44	11.2	cloudy	
Norfolk, Virginia	29.94	760.5	29.97	761.2	47	8.3	77	n.	5	2.2			10 ks			0.37	9.4	cloudy	
North Platte, Nebraska	27.45	697.2	30.57	776.5	8.6	—13.0	66	calm	0	0		0	0			0	0	clear	
Olympia, Washington T'y	30.42	772.7	30.46	773.7	19.0	— 7.2	84	n.	3	1.3		0	0			0	0	clear	
Omaha, Nebraska	29.42	747.3	30.69	779.5	7.4	—13.7	85	sw.	3	1.3		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.98	761.5	30.01	762.2	—36.4	—38.0	76	nne.	8	3.6		0	0			0	0	clear	
Oswego, New York	29.56	750.8	29.91	759.7	20.0	— 6.7	73	nw.	28	12.5			10 s		nw.	0.10	2.5	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.17	766.3	30.20	767.1	59.7	15.4	90	n.	13	5.8			10 s		n.	0.04	1.0	cloudy	
Philadelphia, Pa	29.87	758.7	29.93	760.2	35	1.7	69	nw.	23	10.3			10 s		w.	0.35	8.9	cloudy	
Pike's Peak, Colorado	17.53	445.3	30.23	767.8	— 3.5	—19.7	89	w.	18	8.0		0	5 s			0	0	fair	
Pioche, Nevada	24.08	611.6	30.28	769.1	11	—11.7	66	nw.	10	4.5		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.41	747.0	30.26	768.6	20.1	— 6.6	80	nw.	14	6.3			10 s		nw.	0.25	6.3	cloudy	
Port Eads, Louisiana	30.16	766.1	30.17	766.3	61.2	16.2	100	n.	13	5.8		0	8 s		n.	0	0	cloudy	
Port Huron, Michigan	29.59	751.6	30.32	770.1	13.4	—10.3	88	nw.	18	8.0		0	8 ks		nw.	0	0	cloudy	
Portland, Maine	29.50	749.3	29.55	750.6	28	— 2.2	88	w.	7	3.1			10 s		calm	0.31	7.9	cloudy	
Portland, Oregon	30.43	772.9	30.50	774.7	22.0	— 5.6	87	e.	6	2.7		0	0			0	0	clear	
Portsmouth, N. Carolina					51	10.6	72	nw.	13	5.8			10 ks		nw.	0.01	0.3	cloudy	
Prescott, Arizona	24.72	627.9	30.10	764.5	25	— 3.9	76	calm	0	0			10 s		calm	0	0	cloudy	
Punta Rassa, Florida	30.12	765.0	30.13	765.3	69.5	20.8	81	sw.	4	1.8		0	0			0	0	clear	
Red Bluff, California	29.86	758.4	30.24	768.1	35.4	1.9	84	n.	4	1.8		0	0			0	0	clear	
Rio Grande City, Texas	29.93	760.2	30.18	766.6	58	14.4	93	ne.	4	1.8			10 s		ne.	0	0	cloudy	
Rochester, New York	29.27	743.4	29.98	761.5	15	— 9.4	83	w.	41	18.3			10 n		w.	0.05	1.3	light snow	
Roseburg, Oregon	29.80	756.9	30.37	771.4	32	0.0	92	nw.	2	0.9			10 s			0	0	cloudy	
Sacramento, California	30.14	765.5	30.22	767.6	36.2	2.3	89	n.	4	1.8		0	0			0	0	clear	
St. Louis, Missouri	30.02	762.5	30.66	778.7	11.9	—11.2	61	n.	13	5.8		0	0			0	0	clear	
St. Paul, Minnesota	29.58	751.3	30.53	775.4	— 8.0	—22.2	71	se.	2	0.9		0	0			0	0	clear	
St. Vincent, Minnesota	29.25	742.9	30.23	767.8	—17	—27.2	100	s.	12	5.4		0	0			0	0	clear	
Salt Lake City, Utah	25.79	655.1	30.36	771.1	12	—11.1	64	calm	0	0		0	0			0	0	clear	
San Antonio, Texas	29.53	750.0	30.26	768.6	40.7	4.8	82	n.	14	6.3			10 s		n.	0.03	0.8	cloudy	
San Diego, California	30.08	764.0	30.15	765.8	46.5	8.1	82	ne.	4	1.8		0	2 s			0	0	clear	
Sandusky, Ohio	29.66	753.4	30.38	771.6	16	— 8.9	83	n.	32	14.3			10 s		nw.	0	0	cloudy	
Sandy Hook, New Jersey	29.81	757.2	29.85	758.2	36.0	2.2	46	nw.	28	12.5		6 ck	0	nw.		0.54	13.7	fair	
San Francisco, California	30.16	766.1	30.23	767.8	42	5.6	87	w.	4	1.8		0	0			0	0	clear	
Santa Fé, New Mexico	23.27	591.0	30.28	769.1	26	— 3.3	80	se.	2	0.9			10 n			inap.	inap.	light snow	
Savannah, Georgia	30.00	762.0	30.10	764.5	64	17.8	84	nw.	13	5.8			10 ks		sw.	0	0	threatening	
Shreveport, Louisiana	30.18	766.6	30.43	772.9	43	6.1	43	ne.	15	6.7			10 s		n.	0.07	1.8	cloudy	
Silver City, New Mexico	24.23	615.4	30.09	764.3	34	1.1	92	ne.	3	1.3			10 n		calm	0.02	0.5	heavy snow	
Sitka, Alaska	29.41	747.0	29.48	748.8	37.6	3.1	84	se.	14	6.3			10 n		se.	2.57	65.3	light rain	
Smithville, North Carolina	29.94	760.5	29.98	761.5	59	15.0	87	n.	4	1.8			10 s		w.	0	0	cloudy	
Spokane Falls, Wash. Ter.	28.51	724.1	30.65	778.5	—11	—23.9	100	calm	0	0			fg		calm	0	0	dense fog	
Springfield, Illinois	29.94	760.5	30.67	779.0	12	—11.1	64	nw.	8	3.6		0	0			0.01	0.3	clear	
Springfield, Massachusetts	29.58	751.3	29.72	754.9	31.0	— 0.6	74	nw.	14	6.3		1 cs	1 ks	sw.	sw.	0.28	7.1	clear	
Springfield, Mo	29.10	739.1	30.68	779.3	17	— 8.3	83	n.	7	3.1		hz.	3 s			0	0	clear	
Stockton, Texas	27.26	692.4	30.40	772.1	30.0	— 1.1	100	n.	12	5.4			10 n		n.	0.04	1.0	light rain	
Thatcher's Island, Mass	29.57	751 1	29.63	752.6	32.0	0.0	100	w.	18	8.0		5 k	0	w.		0.26	6.6	fair	
Toledo, Ohio	29.65	753.1	30.39	771.9	15	— 9.4	67	nw.	14	6.3		0	1 s		nw.	0	0	clear	
Tucson, Arizona	27.59	700.8	30.09	764.3	49	9.4	80	sw.	3	1.3			10 s			0	0	threatening	
Umatilla, Oregon	30.39	771.9	30.78	781.8	5.5	—14.7	85	se.	4	1.8		0	0			0	0	clear	
Uvalde, Texas																			
Vicksburg, Mississippi	30.13	765.3	30.40	772.1	47	8.3	63	ne.	15	6.7			10 s		n.	1.87	47.5	cloudy	
Visalia, California	29.80	756.9	30.18	766.6	32.4	0.2	89	nw.	2	0.9		0	3 s			0	0	clear	
Washington, D. C	29.91	759.7	30.03	762.7	37	2.8	39	nw.	15	6.7			10 s		nw.	0.57	14.5	cloudy	
West Los Animas, Colorado																			
Wickenburg, Arizona					35	1.7	67	calm			0	8 ck	1 ks	w.	nw.	0	0	cloudy	
Williamsport, Pa	29.37	746.0	30.00	762.0	23.5	— 4.7	65	nw.	23	10.3		hz	3 k		nw.	0.14	3.6	fair	
Wilmington, N. Carolina	29.93	760.2	29.99	761.7	58	14.4	70	n.	8	3.6		10 k	0	nw.		0	0	cloudy	
Winnemucca, Nevada	25.76	654.3	30.30	769.6	8	—13.3	58	ne.	12	5.4		0	0			0	0	clear	
Wood's Holl, Mass																			
Yankton, Dakota	29.16	740.7	30.58	776.7	— 2	—18.9	65	calm	0	0		0	0			0	0	clear	
Yuma, Arizona	29.92	760.0	30.07	763.8	48.2	9.0	63	n.	4	1.8		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.03	559.6			50.0	10.0	70	calm	0	0		0	2 s			0	0	clear	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.07	763.8	30.08	764.0	78	25.6	73	e.				5 k	2 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C	29.95	760.7	29.97	762.2	78	25.6	86	s.	4	1.8			10 n		s.			raining	J. I. Plume.
Guadeloupe, W. I	29.98	761.5	30.00	762.0	76	24.4	90	ese.				2 k	0			0	0	clear	B. Bigar.
Havana, Cuba, W. I	30.13	765.3	30.18	766.6	72	22.2	82	calm	0	0		0	2 ks		calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I	30.09	764.3	30.10	764.5	73.0	22.8	85	calm	0	0		1 cs	8 s	e.	e.	0	0	fair	Robert Johnstone
Navassa, W. I	30.00	762.0	30.08	764.0	76	24.4	72	ne.	10	4.5		5 ck	5 s	e.	ne.	1.20	30.5	fair	F. M. Everett.
Paramaribo, S. A	30.05	763.3	30.05	763.3	76	24.4	91	e.			2		8 ps	e.		0.050	1.3	cloudy	Dr. C. J. Hering
Puerto Berrio, U. S. Col'mba	29.41	747.0	29.96	761.0	83	28.3	76	calm			0		10 ks		calm	c	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua					73.7	23.2	90	ne.			2	0	1 ks		ne.	0	0		Earl Flint.
Santiago de Cuba, W. I	30.08	764.0	30.10	764.5	75	23.9	72	calm	0	0		0	0			0	0	fair	Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	29.48	748.8	29.54	750.3	—26.0	—32.2		sw.	21	9.4			9 s		sw.	0.01	0.3	threatening	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 21° 00′, E. 109° 00′	30.14	765.5	62	16.7		ene.			3		10					1		drizzling	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads, India.	29.88	758.9	82	27.8	76	ne.			1		5							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.40	772.1	59	15.0	67	e.			1		4							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.79	756.7	77.5	25.3	67	ese.			3		3	se.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Chimbote, Peru	29.90	759.4	70	21.1	100	calm			0		5	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. Y. Grenfell.
H. M. S. Condor, N. 35° 55′, E. 14° 44′	30.44	773.2	60.5	15.8		calm			0							1		d. clouds	Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean.	30.40	772.1	63	17.2		ene.			4		6	ene.				2	wsw.	squally	Lieut. J. L. Burr.
H. M. S. Cormorant, S. 28° 12′, E. 155° 50′	30.03	762 7	77	25.0		ne.			3		2	ne.				1	ne.	d. clouds	Capt. Bruce.
H. M. S. Curacoa, N. 32° 13′, E. 119° 27′	30.23	767.8	41.5	5.3	100	nw.			1-2		10							misty	Capt. S. Long.
H. M. S. Diamond, S. 36° 16′, E. 12° 51′			70	21.1	75	wnw.			2-3		9					2	wnw.	d. clouds	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.04	763.0	65	18.3	89	wnw.			2-3		4	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 20° 56′, W. 73° 41′	30.12	765.0	73	22.8	100	e.			1		3	e.				1	se.	d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 37′, W. 59° 03′	29.51	749.5	55.5	13.1	90	wnw.			2-3		5					2	wsw.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.92	760.0	81	27.2		ene.			1-2		5							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald, S. 42° 53′, E. 147° 22′	29.66	753.4	62	16.7	83	se.			3-4		10	se.						misty	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.67	779.0	30	— 1.1		calm			0		7							d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, S. 31° 40′, W. 22° 10′	30.23	767.8	70	21.1	90	ne.			4		3					1	ene.	d. clouds	Capt. C. A. P Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.52	775.2	46	7.8	69	calm			0		8							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 26° 15′, W. 73° 20′	29.98	761.5	65	18.3	73	sse.			3		10					2	s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Seal Cove, Falkland Ids	29.54	750.3	52	11.1	79	w.			4		5							squally	Capt. L. Jones.
H. M. S. Iris, Off Larnaka, Cyprus	30.29	769.4	62	16.7	61	se.			1		0						s.	blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.23	767.8	66	18.9	94	ene.			1		6	ne.						drizzling	Capt. R. E. Tracey.
H. M. S. Lark, S. 34° 47′, E. 173° 52′	30.06	763.5	66.3	19.1	93	sse.			4		1					3	ssw.	blue sky	Lieut. C. F. Oldham
H. M. S. Liffey, Coquimbo, Chili	29.94	760.5	62.5	16.9		calm			0		10							overcast	Capt. J. T. R. Aylen.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.14	765.5	65.7	18.7	89	calm			0		10							drizzling	Capt. A. Carpenter.
H. M. S. Malabar, N. 29° 45′, E. 32° 32′	30.21	767.3	60	15.6	88	nnw.			3		3	nnw.				1	nnw.	d. clouds	Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Northampton, N. 13° 52′, W. 61° 37′	30.05	763.3	78	25.6	77	ene.			5-6		3	ene.				2	ene.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. Kinahan.
H. M. S. Pelican, N. 0° 35′, W. 23° 48′	29.90	759.4	85	29.4	96	se.			1		5					3	se.	misty	Capt. F. R. Dickens.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.18	766.6	58.1	14.5		nnw.			1		0							blue sky	Capt. W. H Edwards.
H. M. S. Rocket, N. 48° 27′, W. 123° 27′	30.49	774.4	25	—3.9	88	nnw.			2		3							d. clouds	Lieut. V. B. Oriebar.
H. M. S. Ruby, Colombo, Ceylon, India	29.87	758.7	79.5	26.4	91	n.			1		8	n.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull, S. 5° 24′, E. 39° 39′	29.29	744.0	84	28.9	91	ne.			1-2		0					3	ne.	blue sky	Comm. M. Byles.
H. M. S. Serapis																			Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 00′, W. 82° 50′	30.06	763.5	78	25.6	82	e.			3		4					2	e.	d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, N. 1° 19′, W. 80° 52′	29.93	760.2	79	26.1	86	calm			0		9	s.				1	n.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica W. I.	30.07	763.8	75	23.9		n.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, N. 25° 17′, E. 51° 42′	30.11	764.8	61.5	16.4	82	nw.			5-6		10	nw.				2	nw.	raining	Capt. T. P. Nesham.
H. M. S. Zephyr, Nagasaki, Japan	30.44	773.2	47	8.3	?	n.			1		5							showery	Capt. G. N. A. Pollard.
PORTUGESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Brava, Cape Verd Ids	30.02	762.6	75.6	24.2	74	ne.			2		5		sw.			2	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 11° 31′, W. 67° 16′	30.00	762.1	77.0	25.0	82	ene.			5		5							misty	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				

UNITED STATES NAVAL SERIES.

Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.

By authority of the SECRETARY OF THE NAVY.

N. Yard, Pensacola, Fla	30.16	766.1	60	15.6	82	n.	12	5.4			10			0	0			cloudy	
N. Yard, Portsmouth, N. H.	29.60	751.8	30	— 1.1		wnw.	14	6.3			9		nw.	0	0			cloudy	
Naval Hospital Yokohama, Japan	30.37	771.4	40	4.4	64	calm			0		10		w.	0	0			covered	
Adams, Callao, Peru	29.74	755.4	70	21.1	95	se.			0-1		10					gr'd		cloudy	
Alaska, Valparaiso, Chili	29.90	759.4	59	15.0	70	ene.			1		10			0	0	sm'h		cloudy	
Alert, N. 11° 28′, E. 101° 22′*	29.82	757.4	83	28.3	79	w.			1		2		calm	0	0	sm'h		hazy	
Alliance, Boston, Mass.*†	29.72	754.9	36	2.2	80	nw.			2		10			snow	snow			cloudy	
Ashuelot, Tientsin, China	30.47	773.9	30	— 1.1	100	s.			2		5?		calm					cloudy?	
Brooklyn, Montevideo, Uruguay	29.85	758.2	72	22.2	95	sse.	13	5.8			8		sse.	0	0	r'gh	sse.	fair	
Colorado, New York, N. Y	29.83	757.7	36	2.2	46	wnw.	5	2.2			10		calm	0.03	0.8			cloudy	
Essex, N. 33° 36′, W. 29° 07′	30.01	762.2	64	17.8	73	sw.			5		8		sw.			sm'h	sw.	misty	
Franklin, Norfolk, Va	29.97	761.2	48	8.9	85	nw.	9	4.0			10		w.	0.13	3.3			cloudy	
Galena, Funchal, Maderia Island	30.29	769.4	66	18.9	84	ne.			1		10					long	s.	cloudy	
Independence, N. Yard, Mare I'd, Cal	30.17	766.3	34	1.1	71	calm	0	0			0			0	0			clear	
Kearsarge, New Orleans, La	30.20	767.1	63	17.2	78	nne.			3		10		calm					cloudy	
Lackawanna, Valparaiso, Chili†	30.04	763.0	61	16.1	94	ne.			1		10		ne.					cloudy	
Lancaster, N. 41° 07′, E. 12° 18′	30.39	771.9	54	12.2	87	ene.			0-1		2							fair	
Michigan, Erie, Pa	30.29	769.4	20	— 6.7	84	nw.			6		10							cloudy	
Minnesota, Newport, R. I	29.68	753.9	38	3.3	100	w.	5	2.2			10		w.					misty	
Monocacy, Yokohama, Japan	30.60	777.2	42	5.6	83	wnw.			1		8		calm					fair	
Nipsic, Villafranca, France	30.49	774.4	60	15.6	65	ssw.			1		2					sm'h		clear	
Onward, Callao, Peru†	30.05	763.3	68	20.0	100	se.			1		10					long	w.	cloudy	
Palos, Hong Kong, China	30.14	765.5	66	18.9	94	calm			0		10		n;e.					cloudy	
Passaic, Washington, D. C	30.03	762.7	36	2.2	90	w.			4		10		w.					cloudy	
Pensacola, Valparaiso, Chili	29.95	760.7	59	15.0	82	w.	1	0.4			10		w	0	0	sm'h		cloudy	
Powhatan, Norfolk, Va	29.98	761.5	46	7.8	92	w.			1		10		wsw.					misty	
Quinnebaug, N. 42′, 33° E. 9° 48′	30.46	773.7	59	15.0	70	nnw.			1		2		calm			sm'h		fair	
Ranger, N. 19° 08′, W. 104° 39′*	29.94	760.5	72	22.2	90	nnw.			1		2		calm	0	0	sm'h		fair	
Richmond, N. 9° 22′, W. 177° 48′*	29.75	755.6	79	26.1	86	ene.			4		2		ne.	0	0	mod.	e.	fair	
Shenandoah, Montevideo, Uruguay*.	29.94	760.5	73	22.8	81	sse.			4		8		sse.			mod.	se.	fair	
St. Louis, League Island, Pa	30.07	763.8	34	1.1	90	nw.	12	5.4			10		w.	0.37	9.4			cloudy	
Swatara, Kobe, Japan*	30.37	771.4	48	8.9	56	ene.			3		10		w.			sm'h		cloudy	
Tennessee, New York, N. Y	29.78	756.4	36	2.2	90	wnw.	15	6.7			10		w.	0.03	0.8			cloudy	
Vandalia, Santa Anna, Curacoa, W. I.	30.02	762.5	77	25.0	82	e.			5		2		e.					clear	
Wabash, Boston, Mass	29.65	753.1	33	0.6	80	w.	6	2.7			10		w.	0	0			overcast	
Wachusetts, San Francisco, Cal	30.22	767.6	44	6.7	92	n.			1		0			0	0	sm'h		clear	
Wyoming, Port Royal, S. C	30.08	764.0	60	15.6	71	nnw.	10	4.5			10		nw.	0	0			cloudy	
Yantic, Aspinwall, Panama*	29.92	760.0	76	24.4	86	n.			4		5					mod.	n.	hazy	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Polynesian, Capt. Robt. Brown, N. 55° 13′, W. 6° 56′*	30.10	764.5	40	4.4	.....	e.	5	.....	7	.....	e.	0	0	r'gh	ese.	cloudy	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens, N. 44° 35′, W. 53° 55′*	29.98	761.5	23	—5.0	.....	var.	1	.....	10	.....	wsw.	.....	.....	long	nw.	overcast	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.31	769.9	39	3.9	.....	n.	3	.....	.....	.....	nw.	0	0	.....	.....	clear	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, N. 41° 18′, W. 55° 52′	30.16	766.1	39	3.9	91	nw.	6	.....	5	.....	n.	.....	.....	mod.	nw.	fine	Chauffman & Morse.
S. S. Ohio, Capt. Henry Morrison, N. 45° 40′, W. 49° 50′* †	29.84	757.9	23	—5.0	85	w.	4	.....	3	.....	nw.	.....	.....	mod.	n to w	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 50° —′, W. 30° —′†	29.30	744.2	51	10.6	86	ssw.	7	.....	6	.....	ssw.	.....	.....	.....	ssw.	gloomy	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Assyria, Capt. James Brown, N. 55° 25′ W. 8° 14′*†	30.48	774.2	44	6.7	.....	ne.	6	.....	1	.....	ne.	.....	.....	mod.	w.	clear	J. Brown.
Utopia, Capt. A. McRitchie,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents. New York.																	
S. S. Alps, Capt. C. P. Krause, N. 18° 39′, W. 74° 05′†*	30.19	766.8	75	23.9	81	sw.	6	.....	3	.....	calm	0	0	light	ene.	hazy	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 10° 11′, W. 78° 53′*	30.02	762.5	78	25.6	.....	n.	6	.....	3	.....	nne.	0	0	high	nne.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 25° 00′, W. 73° 51′*†.	30.01	762.2	72	22.2	.....	e.	1	.....	2	.....	.....	0	0	sin'h	e.	clear	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, San Juan, Hayti, W. I.	.....	.....	74	23.3	.....	calm	0	.....	0	.....	.....	0	0	.....	.....	clear	R. de Echevarrieta.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Bk. Caldew, Capt. W. Peterson S. 51° 55′, W. 80° 20′	29.76	755.9	48	8.9	.....	sw.	6	.....	9	.....	.....	.....	.....	.....	.....	misty	.....
S. S. Cipero, Capt. W. N. Lailey N. 15° 22′, W. 51° 52′	30.13	765.3	80.6	27.0	58	ene.	4	.....	2	.....	.....	.....	.....	3	ene.	d. clouds	.....
S. City of Agra, Capt. Thos. Young. N. 21° 13′, W. 40° 37′	30.18	766.6	72.5	22.5	.....	nne.	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Glaramara, Capt. R. Morton, N. 44° 24′, W. 23° 35′	29.66	753.4	55	12.8	100	se.	6	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
Glencairn, Capt. R. S. Tannock, S. 35° 20′. E. 76° 26′	29.87	758.7	71	21.7	62	wsw.	5	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Hermine, Capt. S. G. Jones, S. 52° 12′, W. 80° 00′	29.71	754.6	47.3	8.5	96	wsw.	4	.....	8	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Humboldt, Capt. A. W. Jeffery, S. 29° 12′, W. 47° 16′	29.67	753.6	78.5	25.8	69	nne.	2	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 29° 28′, W. 41° 10′	30.07	763.8	78	25.6	86	e.	4	.....	8	.....	.....	.....	.....	.....	.....	showery	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 40° 52′, W. 49° 12′	29.84	757.9	66	18.9	?	s.	4	.....	3	.....	.....	.....	.....	.....	.....	blue sky	.....
Bk. Mertola, Capt. E. W. Turner, N. 43° 24′, W. 11° 31′	30.20	767.1	57.3	14.1	100	sse.	6	.....	10	.....	.....	.....	.....	.....	.....	drizzling	.....
Minho, Capt. J. Lawson, S. 29° 10′, W. 48° 30′	29.85	758.2	78	25.6	86	n.	3	.....	2	.....	.....	.....	.....	.....	.....	blue sky	.....
Naiad, Capt. J. Smith, N. 7° 48′, W. 37° 32′	29.97	761.2	77.5	25.3	86	nne.	5	.....	5	.....	.....	.....	.....	.....	.....	misty	.....
Pole Star, Capt. F. Norman, S. 45° 10′, W. 78° 21′	29.94	760.5	52.3	11.3	97	nw.	4	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
Queen of Cambria, Capt. M. Parry. S. 41° 12′, E. 52° 41′	29.85	758.2	57.5	14.2	93	nw.	4	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
S. S. Strathleven, Capt. J. W. Pearson, N. 40° 43′, W. 57° 27′	29.59	751.6	54.5	12.5	86	se.	6	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
S. Superb, Capt. Berridge, N. 26° 54′, W. 41° 54′	30.26	768.6	71.6	22.0	75	nw.	1	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Bristol, England†*	30.38	771.6	49	9.4	.....	wsw.	6	.....	10	.....	w.	.....	.....	.....	.....	rainy	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO.																	
J. Birmingham, Agent San Francisco.																	
S. S. Newbern, Capt. E. Y. Rogers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman, N. 37° 40′, W. 74° 36′*†.	30.03	762.7	42	5.6	.....	ssw.	2	.....	8	.....	sw.	12 h'r	12 h'r	mod.	e. to se.	cloudy	H. R. Freeman.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul, Havre, France	30.15	765.9	46.4	8.0	.....	sw.	2	.....	4	.....	sw.	0	0	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Servan, N. 45° 00′, W. 52° 23′*†	29.84	758.0	30.2	—1.0	.....	nw.	4	.....	.....	.....	.....	snow	snow	large	nw.	.....	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, N. Y.																	
S. S. Gellert, Capt. Kuhlewein, N. 43° 04′, W. 56° 11′*	29.84	757.9	27	—2.8	.....	se.	3	.....	10	.....	sse.	.....	.....	mod.	ne.	sprinkling	P. Froehlich, 3d Off.
S. S. Silesia, Capt. A. Albers, N. 49° 37′, W. 10° 53′*†	30.30	769.6	50.0	10.0	.....	ene.	3	.....	5	.....	e.	0	0	4	ne.	fair	.....
S. S. Wieland, Capt. C. Hebich, N. 47° 46′, W. 39° 45′*	29.16	740.7	37.5	3.1	.....	w.	7	.....	4	.....	w.	0	0	8	w.	.....	C. Jorgensen.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson.
LAMPERT & HOLT S. S. CO.																	
Lampert & Holt. Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, Argentine Rep. S. A†*.	30.11	764.8	74	23.3	.....	ese.	3	.....	5	.....	s.	0	0	.....	.....	fair	J. Carroll.

MERCHANT-MARINE SERIES.

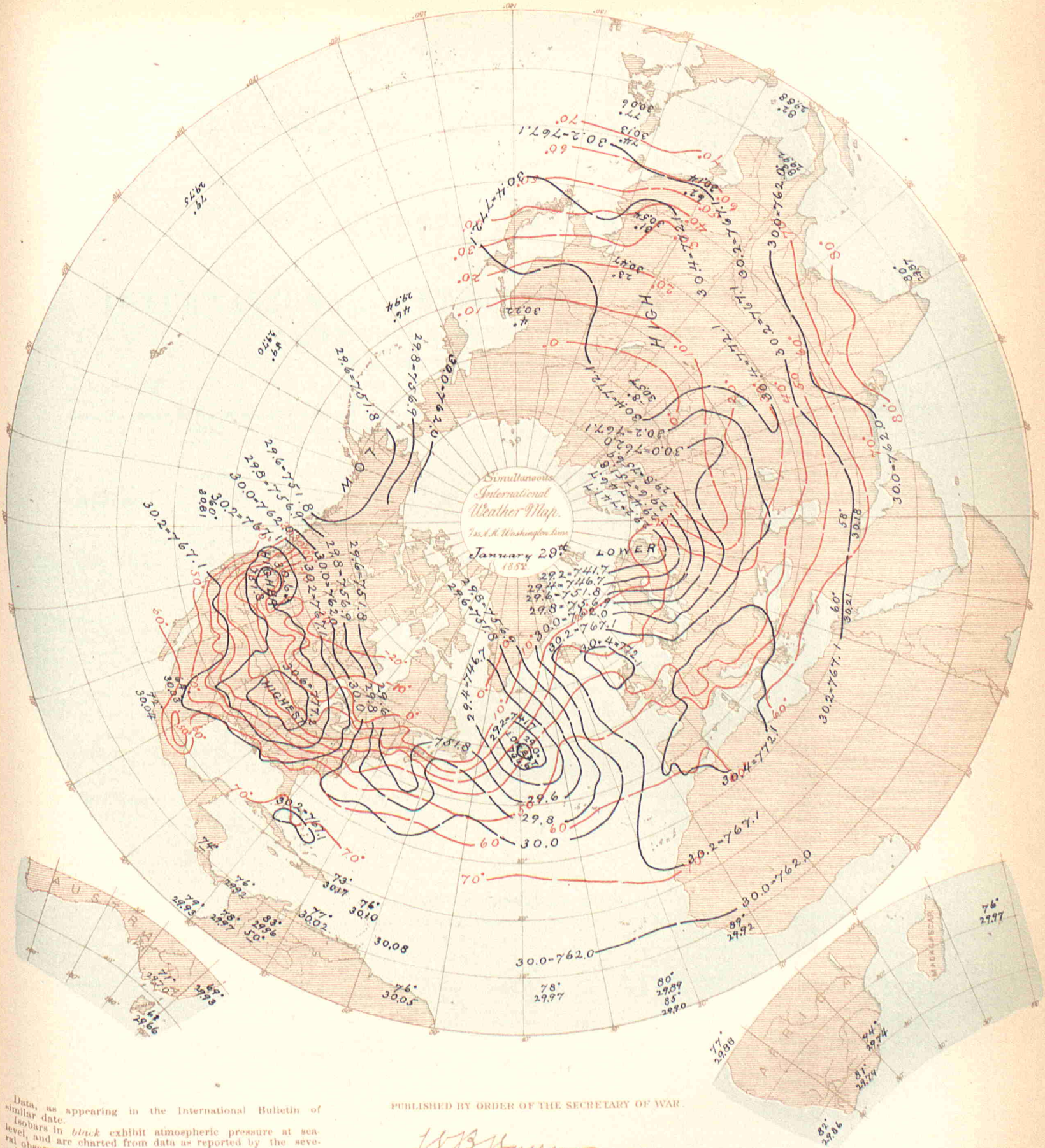
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.08	764.0				e.	4		10		se.	11 h'r	snow			snow & sleet	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, N. 49° 40′, W. 73° 50′*†	30.01	762.2	46	7.8		nw.	8		0		calm	0	0	sm'h		clear	F. O. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom Savanilla, U. S. C†	29.90	759.4	79	26.1		ne.	4									clear	
S. S. Bothnia, Capt. W. McMickan, [man																	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Timmer- N. 25° 34′, W. 79° 51′†* [holds	30.22	767.6	73	22.8		ene	3								nw.	clear	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Mans, Capt. T. H. Bonjer, N. 46° 36′ W. 45° 42′*	29.47	748.5	31	—0.6		wnw.									nw.	snow&hail	
S. S. New York, Capt. R. B. Quick																	
S. S. Olbers, Capt. J. Clarke, N. 41° 23′. W. 63° 00′*†.	29.50	749.3	45.5	7.5		w.	6-7								ese.	cloudy	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers, N. 48° 22′. W. 30° 33′	29.25	742.9				ssw.	4		10			6 h'r	6 h'r	r'gh	s;nw	covered	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander,																	G. H. Lose, 3d Off.
S. S. Leipzig, Capt. F. Pfeiffer, N. 47° 49′. W. 37° 38′	29.25	742.9	44.0	6.7	78	wsw.	7		8		w.	11 h'r	11h'r	h'vy	w.	hailing	Sander & Waller.
S. S. Neckar, Capt. R. Bussius. N. 48° 59′, W. 20° 54′	30.01	762.2	50.2	10.1		se.	4		9		sse.	0	0	mod.	sse.	overcast	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger, N. 25° 59′, W. 17° 58′*	30.25	768.3	66.2	19.0	94	ese.	4-5		6		e.	0	0	4	e.	cloudy	Montz & Kohlenbeck.
S. S. Oder, Capt. Undeutsch, N. 43° 36′, W. 59° 10′*	29.89	759.2	24.8	—4.0		s.	4		10		sw.	snow	snow	long.	se.	sleeting	
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany*	30.44	773.2	35.6	2.0		wsw.	1		10			12h'r	12h'r			rain & fog	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 36° 41′. W 135° 42′†	30.31	769.9	60	15.6	70	ssw	2		8		sw.	0	0	light	sw.	cloudy	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 45° 14′. E. 169° 17′*†	29.94	760.5	46	7.8	67	n.	2		6		n.				w.	cloudy	
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.15	765.8	65	18.3	89	ne.	2		8		w.					cloudy	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 39° 56′, W. 73° 56′*†	29.50	749.3				w.	6		2		wnw.					hazy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, N. 37° 05′, W. 74° 50′†	30.07	763.8	46	7.8		nnw.	1		10		nnw.	6 h'r	6 h'r	long	s.	cloudy	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 39° 18′, W. 123° 56′†	30.26	768.6	44	6.7	84	nne.	1		0					light		clear	E. W. Holmes.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann N. 43° 45′, W. 124° 36′†	30.34	770.6	38	3.3	81	ne.	4		0					sm'h	nne.	clear	A. C. James, 2d officer
S. S. Columbia, Capt. F. Bolles,																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 37° 54′, W. 124° 25′†	30.22	767.6	47	8.3	85	n.	2		0					sm'h		clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, N. 33° 29′, W. 118° 00′†	30.09	764.3	50	10.0	86	nne.	2		0					sm'h		clear	
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†	30.28	769.1	38	3.3		sw.	4		4		sw.	0	0	sm'h		clear	
S. S. Idaho, Capt. E. Alexander, San Francisco, Cal†	30.17	766.3	44	6.7	92	n.	2		0							clear	
S. S. Orizaba, Capt. Chas. B. Johnson,																	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, Monterey, Cal †	30.18	766.6	40	4.4	82	nw.	1		0			0	0	sm'h		clear	T. Wallace.
S. S. State of California, Capt. G. Debney, Portland, Oregon†	30.49	774.4	22	—5.6	72	ene.	3		0			0	0			clear	
S. S. Victoria, Capt. H. M. Hayward, N. 42° 12′, W 124° 30′†	30.30	769.5	44	6.7	84	n.	2		0					mod.	nw.	clear	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulley, Supt., New York.*																	
S. S. Australia, Capt. ———																	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, S. 34° 10′. E. 166° 40′†	30.15	765.8	70	21.1	75	s.	5		1		s.	0	0	h'vy	s.	clear	W. H. Hawes, 2d Off
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 35° 29′, W. 169° 32′†	30.70	779.8	59	15.0	64	ese.	4		5		se.	0	0	long	se.	fair	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn, S. 3° 56′. W. 167° 04′†	29.84	757.8	80	26.7	91	ene.	3		5		ene.	0	0	long	ene.	fair	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 35° 49′, E. 139° 55′†	30.18	766.6	57	13.9	75	s.	0		10		n.	0	0			overcast	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 20° 45′, W. 105° 58′.†	29.88	758.9	73	22.8	85	nne.	4		7		n.	0	0	mod.	nw.	cloudy	
S. S. Grenada, Capt. M. Connolly, Panama, Panama.†	29.94	760.5	74	23.3	90	nw.	2		5		nw.	0	0			light haze	
S. S. South Carolina, Capt. W. J. Russell, N. 25° 34′. W. 113° 38′*†	30.06	763.5	59	15.0	88	nw.to n	3		10		n.	12 h'r	driz	light	n.	rainy	
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	29.93	760.2	69	20.6	95	ne.	2		2		n.					clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co. *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Muriel, Capt. Geo. S. Locke N 25° 05′. W. 65° 50′						calm	0		5			0	0	sm'h		fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, N. 46° 33′, W. 44° 53′*	29.48	748.8	29	—1.7		w.	7		10		w.	0.5	13.		w.	stormy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 51° 20′. E. 3° 15′*†	30.27	768.8	44	6.7	84	ssw.	1		10		sw.	0	0	sm'h		overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 42° 37′. W. 48° 55′*	29.85	758.2	36	2.2		nw.	7		2		nnw.	0	0	long h'vy	nw.	fair	
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. J. Vis N. 47° 52′. W. 33° 42′*	29.08	738.6	58.2	14.6	87	sse.	3		8		sw.	2 h'r	2 h'r	high	w.		
THINGVALLA LINE *Funch, Edye & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. G. J. H. Laub Copenhagen, Denmark†	30.17	766.3	41.0	5.0		wsw.	3		3		wsw.	c	0			clear	J. T. Uiberling
WARREN LINE. *Warren & Co, Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 42° 12′, W. 67° 24′*†	29.67	753.6	38	3.3		se.	1		9		s.	10 h'r	snow sleet	sli't	e.	misty	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 41° 31′, W. 54° 05′*†	29.96	761.0	37	2.8		e.	4		10		ene.	snow	shr's	long	nw	snowing	J. Moore.
S. S. Britannic, Capt. H. H. Perry, Off Brow Head,*†	30.14	765.5	47	8.3		ene.	3		0			0	0	sm'h		blue sky	W. Thomas.
S. S. Celtic, Capt. B. Gleadell Liverpool, Eng.*†	30.00	762.0	46	7.8	85	ese.	4		10			13 h'r	h'vy			snowing	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 40° 30′, W. 71° 40′*†	29.84	757.9	43	6.1		wnw.	5		2?		wnw.	0	0	sm'h	wnw.	overcast?	H. D. Jay, 4th Officer.
S. S. Republic, Capt. P. J. Irving, N. 49° 34′, W. 37° 56′†	28.92	734.6	46	7.8	92	s.	6		8		sw.	shr's	shr's	r'gh.	sw.	cloudy	H. Goulden, 4th Officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, Hull, England						ene.	6		10		ene.	16 h'r	16 h'r			light rain	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, Pensacola, Florida†	30.32	770.1	58	14.4	87	n.			10 s		n.	0	0			overcast	J. Jorgensen.
Bk. Alpha, Capt. Ole Grönn, N. 35° 12′, W. 9° 30′*†	30.32	770.1	68	20.0		e.	1		6		w.	0	0	sm'h		fair	Ole Grönn.
Sch'r Annie R. Lewis, Capt. L. L. Lewis Ponce, Porto Rico, W. 1*†	30.16	766.1	77	25.0		n.	1		2		ene.	0	0			clear	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin S. 2° 08′ W. 37° 50′*†	28.50	723.9				se.					se.			light	se.	cloudy	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 51° 54′, W. 6° 18′*†	29.97	761.2				nne.	5		5		n.	6 h'r	6 h'r	mod	ne.	fair	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 22° 37′, W. 39° 02′†	30.00	762.0				nne.	3		2		ne.	0	0	sm'h	e.		
S. Enoch Train, Capt. H. D. Chapman. N. 53° 45′, E. 5° 20′*	30.33	770.4				calm	0		10		e.	0	0	sm'h		hazy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 51° 02′, E. 1° 20′*	30.24	768.1				sse.	5		10		wsw.	0	0	sm'h		hazy	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.10	764.5	40	4.4	73	wnw.	5		8		wnw.	0.54	13.7	sm'h		cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S 48° 01′, W. 80° 30′†	29.94	760.5	51	10.6		nw.	5		10		nw.	1 h'r	1 h'r	sm'h		squally	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 44° 44′, W. 23° 55′			55	12.8		se.	8		8		sse.	2 h'r	h'vy	cross	se. ssw.	squally	
Bk. Gamaliel, Capt. D. J. Anthony, S. 13° 47′, W. 34° 58′*†	29.05	737.9				ese.	3		0			0	0	sm'h	ese.	clear	
Bk. Geo. Booth, Capt. D. Williams N. 41° 35′, W. 69° 18′*†	29.54	750.3	40	4.4		nw.	6		2			snow	snow	cross			D. Williams.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 37° 10′, W. 15° 34′*	30.14	765.5				nnw.	4		3		nw.	0	0	mod.	nw. sw.	fair	T. Minssen.
Bk. New York, Capt. J. E. Sorensen. Off Tarifa, Spain*†	30.50	774.7				e.	6				e.	0	0	h'vy	e.	cloudy	Sorensen & Arvesen.
Bk. Peppina, Capt. Gov. S. d'Anconaz, Fiume, Austria†	30.34	770.6	65	18.3	52	calm	0		0							clear	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly N. 10° 00′, W. 33° 37′*†	29.95	760.7				e.			5		e.	0	0				J. Connolly.
Bk. Stella, Capt. L. N. T. Sommer, N. 3° 20′, W. 24° 20′*	29.79	756.7	79.7	26.5	98	calm	0		7		s.			sm'h			
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.35	770.9	58	14.4	93	sw.	3		0			0	0			clear	J. Green.
Bg. Wanburn, Capt. I. W. Covert, S. 32° 46′, W. 18° 00′*†	30.40	772.1				e.	4		3		e.			sm'h			I. W. Covert.
Bk. Winifred, Capt. N. P. Dutton. N. 20° 52′, W. 36° 20′*†	30.10	764.5				ene.										squally	N. P. Dutton.
S. Woodbury, Capt. H. T. Schmidt, N. 37° 00′, W. 75° 23′*†	29.74	755.4	42	5.6	?	nw.	5		10		nw.			sm'h	nw.	cloudy	H. T. Schmidt.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

Heliotype Printing Co Boston

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 30, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.50	774.7	67.6	19.8	72	w.			2		0			0	0	clear	Moiroud.
Algiers			30.35	771.0	55.4	13.0	76	ene.			1		0			0	0	clear	Nicolas.
La Calle			30.38	771.6	57.6	14.2	78	ene.			3		1			0	0	fair	Fonfréde.
Tunis			30.41	772.4															Jacques.
Sfax																			Gau.
Saida			30.41	772.3	59.0	15.0	39	sw.			2		0			0	0	clear	Perès.
Tebessa			30.43	772.9	52.2	11.2	43	s.			1		0			0	0	clear	Derché.
Geriville					55.9	13.3	77	sw.			2		0			0	0	clear	Lonchamp.
Laghouat			30.49	774.4	52.2	11.2	71	w.			2		0			0	0	clear	Herbin.
Biskra			30.47	773.9	60.4	15.8	35	nw.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.85	758.2	29.94	760.5	58.4	14.7	61	sw.	11	4.9			4			0.08	2.0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.88	759.0	30.47	774.0	28.0	— 2.2	100	calm			0		10			0	0	dense fog	Prof. Ivan Stozir.
Cracow, I. R. Observatory	29.63	752.6	30.43	773.0	37.9	3.3	71	n.	0.7	0.3			8			0.020	0.5		Dr. Wierzbiski.
Eperies	29.51	749.7	30.45	773.4	31.3	— 0.4	87	calm			0		10			0	0	foggy	Julius Mikolik.
Gratz	29.15	740.3	30.48	774.3	27.7	— 2.4	79	e.			1		10			0	0		Andreas Rospini.
Hermannstadt	28.92	734.5	30.40	773.6	26.6	— 3.0	98	n.			1		10			0.024	0.6		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.00	736.7	30.45	773.3	26.6	— 3.0	98	ssw.			1		5			0.130	3.3	foggy	The Staff.
Lemberg	29.32	744.7	30.36	771.1	35.4	1.9	73	nw.			2		10			0.039	1.0		Dr. T. Stanecki.
Pola	30.26	768.7	30.38	771.6	48.9	9.4	82	wnw.			2		6			0	0		I. R. Hydrographic Office.
Szathmar	29.98	761.4	30.45	773.3	28.2	— 2.1	90	sw.			2		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.18	766.6	30.48	774.2	30.4	— 0.9	92	calm			0		10			0	0		Karl Stancel.
Trieste	30.30	769.7	30.41	772.3	48.2	9.0	71	calm			0		2			0	0		Rieder.
Vienna	29.72	754.8	30.48	774.2	29.8	—1.2	96	sw.			1		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae'
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.51	774.9	30.62	777.7	38.5	3.6	76	e.	29	13.0			10			0.030	0.8	squally	W. Boswell.
Armagh, Observatory	30.17	766.3	30.43	772.9	39.0	3.9	84	e.	12	5.4			10					gloomy	S. Call.
Bidston, Liverpool Obs'y			30.42	772.7	39.2	4.0	84	ene.	23	10.3			10					overcast	John Hartnup.
Bolton, Sharples	29.87	758.7	30.43	772.9	37.1	2.8	88	e.	12	5.4			10					gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.13	765.3	30.53	775.4	38.9	3.8	85	se.			2		10			0.10	2.5	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	80.0	26.7	66	ne.			2		2					d. clouds	Corpl. J. Surgenor.
Cardington			30.33	770.4	43.0	6.1	91	ne.			0.6		10					overcast	John McLaren.
Chatham, School M. E.	30.20	767.1	30.33	770.4	42.1	5.6	93	n.			1		10			blank	blank	overcast	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.06	763.5	30.29	769.4	44.2	6.8	88	se.			3		10					drizzling	The Staff.
Fort Napier, Natal	27.54	699.5	29.76	755.9	95.2	35.7	28	e.			1		2					blue sky	Pvt. E. K. Anniss. A. H.C.
Free Town, Sierra Leone	29.68	753.9	29.92	760.0	88.0	31.1	66	w.			1		4					d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.23	767.8	40	4.4	91	n.			2		10			0.20	5.1	overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.29	769.4	30.35	770.9	58.0	14.4	87	e.			3		8					overcast	Opl. O. Baldwin
Glasgow, Observatory	30.32	770.1	30.52	775.2	37.6	3.1	69	e.			3		9 k					misty	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.16	766.1	30.34	770.6	42.1	5.6	83	nne.			1		10			blank	blank	overcast	The Staff.
Guernsey	30.02	762.5	30.33	770.4	45.0	7.2	88	wnw.			1		10					raining	A. Collenette, F. M. S.
Kew, Observatory	30.31	769.9	30.35	770.9	42.6	5.9	83	n.	11	4.9			10					misty	The Staff.
Leicester, Museum	30.12	765.0	30.38	771.6	42.0	5.6	87	ne.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.33	770.4	30.40	772.1	59.2	15.1	68	ne.			1		9					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.12	765.0	30.17	766.3	67.5	19.7	92	se.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.85	758.2	30.40	772.1	38.8	3.8	97	ne.			2		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.12	765.0	30.35	770.9	42.6	5.9	85	nne.			2		10					overcast	The Staff.
Plymouth	30.22	767.6	30.30	769.6	44.7	7.1	92	ese.			2		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.66	778.7	37	2.8	75	e.	23	10.3			10					misty	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.22	767.6	30.28	769.1	38.8	3.8	79	nne.			2		10					gloomy	W. H. Lyne.
Sheffield	30.21	767.3	30.50	774.7	37.6	3.1	99	nne.			2		10			0.01	0.3	drizzling	W. F. Cooper.
Silloth Rectory	30.44	773.2	30.47	773.9	40.0	4.4	69	ene.			4		0			0	0	blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.43	772.9	38.0	3.3	80	e.	17	7.6			8					d. clouds	Rev. S. J. Perry.
Stratfield Turgiss					43.3	6.3	85	n.			1		10					foggy	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.20	767.1	30.26	768.6	46	7.8	92	se.			7		10					raining	W. Newcombe.
Valencia, Observatory	30.14	765.5	30.16	766.1	43.4	6.3	71	e.	25	11.2			7					d. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.56	750.8	29.61	752.1	5	—15.0	95	nw.	15	6.7		0	0			1.000	25.4	clear	H. J. Cundall, C. E.
Chatham, N. B.*	29.62	752.3	29.69	754.1	— 4	—20.0	100	sw.	3	1.3		0	0			0.58	14.7	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.53	750.0	29.55	750.6	2	—16.7	66	sw.	15	6.7		5 k	5 s	w.	calm	0.08	2.0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	28.75	730.2	29.64	752.8	10	—12.2	96	sw.	3	1.3		0	0			0	0	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.55	750.6	29.69	754.1	9	—12.8	87	w.	8	3.6		0	2 k		nw.	0.30	7.6	fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.67	753.6	30.03	762.7	22	— 5.6	73	sw.	27	12.1			10 ks		nw.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.65	753.1	29.87	758.7	19	— 7.2	70	w.	23	10.3			10 n			0	0	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.22	742.2	29.95	760.7	24	— 4.4	73	w.	18	8.0			10 n		w.	0.03	0.8	cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.43	747.5	30.18	766.6	17	— 8.3	83	sw.	11	4.9		0	0			inap.	inap.	clear	H. Morgan.
Port Stanley, Ontario	29.51	749.5	30.21	767.3	16	— 8.9	87	w.	18	8.0		0	0			0	0	clear	M. Payne.
Quebec, Quebec*	29.55	750.6	29.80	756.9	4	—15.6	87	nw.			5		10 ks		nw.	0.05	1.3	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.34	745.2	29.82	757.4	19	— 7.2	96	nw.	6	2.7			10 ks		nw.	inap.	inap.	light snow	W. H. McIntyre.
Sangeen, Ontario*	29.28	743.7	30.03	762.7	24	— 4.4	96	sw.	28	12.5			10 ks		w.	0.05	1.3	cloudy	K. Stewart.
St. Andrews, N. B.	29.78	756.4	29.83	757.7	6	—14.4	93	nw.	5	2.2		0	0			0.24	6.1	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.29	744.0	29.36	745.7	8	—13.3	100	nw.	37	16.5		10 cs	2 n			0.65	10.5	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.71	754.6	30.12	765.0	17	— 8.3	83	w.	15	6.7		0	2 s		w.	0	0	clear	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.77	756.1	29.84	757.9	18	— 7.8	67	nw.	23	10.3		2 k	0	nw.		0.15	3.8	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.32	744.7	29.58	751.3	25	— 3.9	100	s.	4	1.8			10					snowing	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	30.10	764.5	30.13	765.3	71.0	21.7	69	ssw.	14.7	6.6			10 n			0.920	23.4	showery	John Duthie.
Cape Town, C. G. H. Obs'y	29.11	739.4	29.15	740.4	78.5	25.8	47	sse.	34	15.2		0	4			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Hankow	30.29	769.4	30.58	776.7	33.2	0.7		nne.			3		10			0	0	covered	N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.35	770.8	30.37	771.4	39.7	4.3	83	nnw.	5.4	2.4			10 kn			0.472	12.0	covered	M. Marc Dechevrens, S. J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.56	776.1	30.60	777.3	29.8	—1.2	65	ne.	10.1	4.5			0						Oversergent Fischer.
Fanöe	30.55	776.0	30.57	776.5	32.5	0.3	81	ene.			6		1						Overloerer Lauridsen.
Godthaab, Greenland	29.43	747.6	29.48	748.7	— 7.1	—21.7		n.			4		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.91	759.7	29.95	760.8	41.4	5.2		s.			8		10					raining	A. O. Thorlacius.
Thorshavn	30.64	778.3	30.68	779.2	37.9	3.3	66	se.	11	5			8						Overloerer Bergh.
Vestervig	30.54	775.6	30.63	777.9	31.8	—0.1	60	ne.			4		0						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.68	753.9	30.35	770.8	50.0	10	79	ese.			1	ck	0			0	0		M. Labroue, Director.
Alençon, Normal School	29.82	757.5	30.37	771.5	44.2	6.8	85	w.			3		n		s.	0.071	1.8		M. Nicot, Director.
Arras, Engineer School	30.06	763.4	30.32	770.2	44.1	6.7	88	nnw.			2		kn			1.228	31.2		M. Klein, Commandant.
Avignon, Normal School	30.32	770.2	30.40	772.2	50.7	10.4	70	nne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.79	756.7	30.36	771.2	47.8	8.8	65	wnw.			1		1c			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.07	763.8	30.35	770.8	46.4	8	72	w.			1		5		nw.	0	0	cloudy	M. Frère Eugène Marié.
Besançon, Normal School			30.43	772.8	32.0	0	93	ne.			1		s			0	0		M. Gobin, Director.
Bordeaux, Observatory	30.07	763.8	30.34	770.5	50.9	10.5	65	ese.			1		8			0	0	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.78	756.3	30.32	770.2	55.4	13	66	ssw.			1		kn		ssw.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.04	763.0	30.28	769.2	49.6	9.8	92	se.			1		10		se.	0.236	6.0		M. de Kennaree, Dir.
Caen, Normal School	30.26	768.6	30.34	770.6	45.3	7.4	83	w.			1		8		wnw.	0.04	1.	very cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.95	760.7	30.30	769.7	42.8	6.0	88	s.			1		10			0.031	0.8	covered	M. Jadot, Director.
Charleville, Normal School	29.80	756.8	30.33	770.3	41.7	5.4	66	wnw.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.98	736.0	30.30	771.1	51.3	10.7	46	w.			1	5 ck	c			0	0	½ covered	M. Alluard, Director.
Cluny, Normal School	29.54	750.2	30.43	772.9	43.5	6.4	79	ne.			1				sw.				M. de Villemontée, Dir.
Commercy, Normal School	29.47	748.6	30.38	771.7	39.2	4	90	w.			1		1c	w.	w.	0.031	0.8	covered	Dr. Coulet, Director.
Gap, Normal School	27.87	707.9	30.48	774.1	45.7	7.6	36	nw.			2					0	0		M. Jeangirard, Director.
Grésque, du. Rhone	29.28	743.7	30.43	772.9	51.3	10.7	70	nw.			1		10		sw.	0	0	covered	M. Kinn, Director.
Grenoble, Normal School	29.63	752.5	30.43	772.8	44.1	6.7	55	ese.			1		0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.73	729.8	30.44	773.1	50.9	10.5	70	sw.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.05	763.3	30.32	770.2	44.6	7	97	s.			2		8		s.	0.12	3.	raining	M. Ollitrault, Director.
Lescar, Normal School	29.70	755.9	30.33	770.3	60.8	16	54	ne.			1	0	0			0	0	clear	M. Chauvin, Director.
Lorient, Naval Observatory	30.25	768.3	30.35	770.9	50.0	10.0	100	calm			0		10			0.217	5.5	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.32	744.8	30.41	772.4	44.1	6.7	72	se.			1	2 c	0	w.		0	0	clear	M. André, Director.
Mans, Normal School	30.03	762.8	30.35	770.9	47.3	8.5	95	ne.			1		10			0.055	1.4	covered	M. Piboen, Director.
Marseille, Observatory	30.16	766.1	30.43	773.0	53.8	12.1	75	sw.			0.1		10		w.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.02	635.4	29.86	758.4	42.4	5.8	33	s.	11	5.0			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.30	769.6	30.41	772.4	53.2	11.8	69	ne.			3		5		se.	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	29.56	750.7	30.37	771.5	36.0	2.2	96	nne.			1		10 n			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.24	768.0	30.39	772.0	51.3	10.7	82	se.			0–1		10 n			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boisslère, Director
Perpignan, Observatory	30.30	769.5	30.41	772.4	52.2	11.2	68	ne.	3.8	1.7			10		sse.	0	0	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.37	542.8			37.4	3.0		ssw.			1		1		ssw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.34	745.2	30.43	773.0	47.8	8.8	70									0	0		M. Taillieu.
Puy de Dôme Obs'y, Summit	25.40	645.2			40.3	4.6	48	sw.			2		5		w.	0	0	½ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.36	771.1	30.39	771.9	49.6	9.8	81	s.			1		5			0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.14	765.6	30.36	771.2	50.0	10	76	sw.			1		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	28.18	715.8	30.38	771.7	46.8	8.2	57	e.			1	c	0			0	0		M. Coirat, Director.
Rouen, Normal School	30.30	769.5	30.34	770.7	46.8	8.2	72	wsw.			1		8			0	0	very cloudy.	M. Platrier, Director.
Saint Lô, Normal School	30.19	766.7	30.34	770.7	44.1	6.7	83	w.			1		10		w.	0.004	0.1	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.19	766.7	30.35	770.9	43.2	6.2	90	nw.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.69	754.0	30.42	772.6	53.4	11.9	70	sse.			3		2	se.		0	0	slightly cl'dy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.84	758.0	30.34	770.5	42.8	6.0	79	ne.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.52	749.7	30.38	771.6	30.7	—0.7	80	nw.			2	0	6 ks		w.	0.051	1.3	rain; snow; fg	Prof. Dr. Hoh.
Berlin	30.26	768.5	30.44	773.2	34.7	1.5	91	e.			1		10			0	0		Prof. Dr. Arndt.
Breslau	29.92	759.9	30.46	773.6	35.8	2.1	89	e.			2		10	w.		0.075	1.9		Royal University Obs'y.
Carlsruhe	29.92	760.0	30.39	771.9	32.9	0.5	84	s.			1		10	sw.		0.079	2.0	dense fog	Albert Senz.
Cassel	29.57	751.1	30.28	769.2	32.4	0.2	92	s.			1		10	s.				snowing	Dr. H. Möhl.
Frankfort on the Main	29.97	761.2	30.36	771.1	32.5	0.3	92	ssw.			1		10			0.146	3.7		Physical Society.
Friedrichshafen	28.95	735.2	30.47	773.8	32.4	0.2	89	s.			1		10			0.236	6.0	foggy	Wilhelm, Chief Tel.
Hamburg	30.36	771.2	30.46	773.0	35.8	2.1	89	e.			4		10			0	0	hazy	E. Preller.
Kiel	30.48	774.2	30.50	774.6	35.8	2.1	71	ene.			2		7			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.95	760.6	30.39	771.8	35.8	2.1	91	ene.			2		10			0	0		H. Leppig, Asst.
Magdeburg	30.19	766.9	30.39	772.0	37.2	2.9	94	ne.			1		1c ks			0	0		Dr. Assmann.
Memel	30.30	769.7	30.35	770.9	34.9	1.6	63	nnw.			7	5 ck	0					squally	Issermann.
Munich	28.50	723.9	30.39	771.8	44.8	7.1	43	calm.			0		2			0	0		Central Station.
Neufahrwasser	30.48	774.3	30.50	774.7	34.2	1.2	50	nnw.			4		1			0	0		A. Lothes.
Neustadt, Palatinate	29.80	757.0	30.34	770.5	31.3	—0.4		ssw.			2		10			0.031	0.8		Dicknether.
Stuttgart	29.37	740.0	30.30	769.0	40.1	4.5	68	e.			1		10			0.067	1.7		Prof. Dr. Schoder.
Wustrow	30.54	775.6	30.56	776.2	33.1	0.6	96	ne.			4	0	5 s			0	0		Profs. Brandes & Reimer.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.87	758.8	30.27	768.8	57.6	14.2		w.			0.5		1			0.004	0.1	clear	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the last 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.93	760.3	29.98	761.6	74.2	23.4	70	w.	19	8.5			8	w.		0	0	gloomy	
Deesa	29.41	747.1	29.89	759.1	82.8	28.2	32	w.	7.3	3.3			6	sw.		0	0	d. clouds	
Bombay	29.85	758.3	29.89	759.2	78.9	26.1	67	nw.	13	5.8			5	sw.		0	0	d. clouds	
Poona, Yarrowda.	28.02	711.8	29.85	758.1	88.9	31.6	20	wsw.	10	4.5			8	wnw.		0	0	d. clouds	
Belgaum	27.37	695.2	29.87	758.7	85.1	29.5	12	ne.	6	2.7			0			0	0	blue sky	
Lahore	29.18	741.3	29.96	761.0	59.6	15.3	65	w.	1.9	0.8			10					drizzling	
Roorkee	29.02	737.0	29.94	760.6	66.2	19.0	69	s.	2.4	1.1			10			0.03	0.8		
Agra	29.35	745.5	29.92	760.1	75.2	24.0	32	w.	1.2	0.5			6		w.	0	0		
Nagpur	28.86	730.0	29.89	759.2	86.2	30.1	30	s.	4.0	1.8			3	w.		0	0	d. clouds	
Jubbulpore	28.59	726.2	29.98	761.4	71.5	21.9	30	se.	1.4	0.6			3			0	0	d. clouds	
Lucknow	29.58	751.4	29.97	761.2	75.2	24.0	43	calm	3.5	1.6			9	ne.		0	0	d. clouds	
Allahabad	29.63	752.5	29.95	760.7	69.6	20.9	60	calm	0.9	0.4			9			0	0	d. clouds	
Patna	29.76	755.8	29.95	760.6	71.5	21.9	49	wnw.	3.7	1.6			8	wnw.	wnw.	0	0	d. clouds	
Hazaribagh	27.92	709.0	29.95	760.8	73.3	22.9	34	nw.	8.8	3.9			3			0	0	d. clouds	
Cuttack	29.85	758.3	29.94	760.4	82.0	27.8	41	calm					0			0	0	blue sky	
Calcutta, Alipore	29.91	759.6	29.93	760.2	76.5	24.7	57	sw.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.81	757.1	29.93	760.3	69.3	20.7	54	calm	2.6	1.2			0			0	0	blue sky	
Chittagong	29.87	758.8	29.97	761.1	73.6	23.1	87	s.	2.8	1.2			0			0	0	blue sky	
Sibsagar	29.67	753.6	30.02	762.5	61.6	16.4	91	ne.	3.2	1.4			10	w.	w.	0.11	2.8	overcast	
Jeypore	28.45	722.6	29.91	759.6	75.4	24.1	40	ssw.	3.9	1.7			8		s.	0	0	d. clouds	
Zanzibar, Africa	29.86	758.4			81.6	27.6	81	nnw.	3.2	1.4			4			0.62	15.7	d. clouds	
Trichinopoly	29.68	753.9			82.5	28.1	55	e.	2	0.9			5			0	0	d. clouds	
Bellary	28.44	722.4			85.0	29.4	9	e.	2.2	1.0			0			0	0	blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce, Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.98	761.5	30.41	772.3	49.1	9.5	34	calm	0	0			4			0	0		Prof. Giovanni Clodig.
Milan	29.89	759.3	30.45	773.3	42.3	5.7	65	w.	3.1	1.4			2			0	0		Prof. Schiaparelli.
Padua	30.29	769.4	30.40	772.3	44.1	6.7	57	n.	0.7	0.3			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.53	750.0	30.48	774.3	41.0	5.0	70	ne.	3.1	1.4			2			0	0		Prof. P. F. Denza.
Genoa	30.24	768.0	30.43	773.0	53.2	11.8	60	se.	3.8	1.7			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.44	722.4	30.45	773.3	44.4	6.9	37	e.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.34	770.7	30.40	772.1	44.2	6.8	71	nne.	9.4	4.2			5			0	0		Prof. Luigi Guidi.
Florence	30.18	766.6	30.45	773.4	37.4	3.0	89	nw.			2		10	wnw.		0	0		Prof. Costantino Pitter.
Leghorn	30.35	771.0	30.45	773.3	51.1	10.6	77	ne.	0.7	0.3			7			0	0		Prof. P. Monte.
Rome	30.24	768.0	30.42	772.6	51.8	11.0	61	nnw.	0.7	0.3			4			0	0		Prof. P. S. Ferrari.
Lecce	30.09	764.3	30.35	771.0	54.7	12.6	68	nnw.	16.1	7.2			1	nw.		0	0		Prof. C. de Giorgi.
Cosenza	29.47	748.6	30.39	772.0	54.3	12.4	77	sw.	2.5	1.1			2	s.		0	0		Prof. D. Conti.
Cagliari	30.21	767.4	30.41	772.5	55.0	12.8	50	w.			2		5	w.		0	0		Prof. A. Pacinotti.
Palermo	30.16	766.1	30.42	772.7	56.1	13.4	56	ne.	1.8	0.8			4			0	0		Prof. G. Ciacciatore.
Syracuse	30.33	770.4	30.38	771.6	55.0	12.8	68	nne.	9.4	4.2			5	wnw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.84	758.0	30.38	771.7	55.2	12.9	67	s.	0	0			1	ene.		0	0		Prof. T. Brioschi.
Stelvio	22.34	567.5			25.5	— 3.6	45	e.			1		1			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.36	568.0			28.6	— 1.9	40	e.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.13	765.3	30.17	766.3	34.6	1.4	84	calm	0	0		ck	8 cs			0.534	13.6	cloudy	
Hakodate	30.12	765.0	30.13	765.3	36.0	2.2	82	nw.	3.0	1.3			10		nw.	0.350	8.9	overcast	
Hiroshima, I. M. Obs'y	30.06	763.5	30.08	764.0	45.9	7.7	97	calm	0	0			10 n			0.421	10.7	light rain	K. Sasaki
Kanazawa	30.20	767.1	30.31	769.9	44.1	6.7	98	se.	2.1	0.9			10 n					light rain	S. Endo.
Kioto	30.02	762.5	30.20	767.1	47.5	8.6	85	n.	1.3	0.6			10 n			0.355	9.0	light rain	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.87	758.7	30.07	763.8	61.1	16.2	89	s.	19.5	8.7			10 n			0.620	15.8	raining	S. Takehayashi.
Niigata	30.11	764.8	30.15	765.8	40.8	4.9	88	sse.	2.8	1.3			10 n			0.425	10.8	raining	
Nobiru	30.18	766.6	30.20	767.1	36.1	2.3	82	nnw.	5.5	2.5			10 s			0.080	2.0	cloudy	H. Midzushina.
Sapporo					32.1	0.1	90	calm	0	0			10			0	0	covered	
Tokei Obs'y, Yeddo	30.16	766.0	30.23	767.8	45.9	7.7	75	ese.	3.3	1.5		ck	10 s		wsw.	0	0	cloudy	The Staff.
Wakayama	30.13	765.3	30.18	766.6	57.1	13.9	91	ssw.	10.6	4.7		ck	10 n		ssw.	0.362	9.2	light rain	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.68	753.9	29.86	758.4	75.9	24.4	88	e.	11.0	4.9			10n;ks		nne.	2.43	61.7	overcast	Oliver & Figot.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.69	601.3	29.91	759.7	50.9	10.5	70	calm	0	0		0	0			0	0		Vicente Fernandez.
Leon	24.43	620.4	30.27	768.7	47.6	8.6	72	n.			1	1 c	0	n.		0	0	foggy	Prof. M. Leal.
Mazatlan	29.78	756.4	30.04	763.1	64.0	17.8	94	nw.			3	0	1		nw.	0	0	clear	F. Quijano, O. E.
Mexico, Central Obs'y	23.10	586.7	30.28	769.1	44.6	7.0	73	calm	0	0		0	0			0	0		The Staff.
Morelia	24.29	617.0	30.53	775.6	50.4	10.2	80	s.			5	3 c	3 k	se.	s.	0	0	½ cloudy	M. Tena, M. D.
Pabellon, Aguascalientes	23.96	608.5	30.00	761.9	55.9	13.3	54	calm			0	0	0			0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.47	596.2	30.42	772.7	41.0	5.0	60	calm			0	0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.19	614.5	30.18	766.7	47.8	8.8	55	e.			1	5	0	w.		0	0	½ cloudy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.64	575.1	30.38	771.6	48.2	9.0	67	w.	7.4	3.3		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.28	769.1	30.28	769.1	43.7	6.5		w.			1					0.051	1.3		
Groningen	30.30	769.7	30.36	771.1	38.3	3.5		ene			3					0.043	1.1		
Helder	30.32	770.0	30.32	770.0	38.5	3.6		ene.			4					0.075	1.9		
Hellevoetsluis	30.26	768.7	30.26	768.7	40.5	4.7	95	se.			1					0	0		
Utrecht	30.24	768.2	30.29	769.4	39.0	3.9	98	se.			1		10			0.102	2.6	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.61	777.5	30.67	779.1	31.3	— 0.4	74	nw.	7	3			0			0	0		
Brono	30.42	772.7	30.46	773.7	34.5	1.4	65	nnw.	18	8			10			0.055	1.4		
Christiania	30.47	773.8	30.62	777.8	25.5	— 3.6	67	w.	0	0			5			0	0		
Gjæsvær	29.89	759.3	29.92	759.9	23.9	— 4.5		wnw.			6		10						
Lodingen	30.30	769.7	30.35	770.9	21.6	— 5.8	57	nnw.			2		1			0.130	3.3		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					52.9	11.6	76	nnw.	13.0	5.8			5			0.528	13.4		Dr. J. A. Sampaio.
Campo Major	29.28	743.8	30.30	769.7	55.4	13.0	66	s.	2.5	1.1			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.07	763.7	30.16	766.0	61.2	16.2	85	sw.	6.9	3.1			10			0.681	17.3	raining	Capt. D. A. de Cunha.
Lisbon, Observatory	29.95	760.7	30.32	770.0	53.8	12.1	83	e.	5.6	2.5			10			0	0		The Staff.
Ponta Delgada, Azores	30.06	763.4	30.13	765.2	53.6	12.0	72	wnw.	13.0	5.8			3			0.217	5.5		
Saint Paul de Loando	29.69	754.0	29.88	759.0	82.8	28.2	71	wnw.	1.3	0.6			2	e.		0	0		
Serra da Estrella	25.44	646.2	30.31	769.9	38.3	3.5	92	se.	19.9	8.9			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.74	730.1	29.91	759.6	12.0	—11.1		s.	18	8			10 n			0.008	0.2		Major K. Lasarew.
Archangel	29.37	746.1	29.39	746.6	12.9	—10.6	90	nw.	13	6			10			0	0		Capt. Ssellwerstow.
Astrakhan	30.24	768.2	30.16	766.1	29.8	— 1.2	84	wsw.	4	2			10 ks			0.008	0.2		Capt. Wisganow.
Barnaul	29.76	756.0	30.31	769.9	12.9	—10.6	85	sw.	9	4			10			0	0		Meteorological Obs'y.
Dorpat	29.72	754.8	29.97	761.3	23.0	— 5.0	95	ne.	13	6			10 n			0.114	2.9	snowing	Observatory.
Ekaterinburg	28.69	728.7	29.71	754.6	9.5	—12.5	80	sse.	9	4		7 cs;c	0			0	0	light clouds	Meteorological Obs'y.
Kasan	29.02	737.1	29.30	744.1	25.9	— 3.4	93	ssw.	7	3			10			0.079	2.0	snowing	Observatory.
Kertch	30.09	764.3	30.11	764.8	37.9	3.3	82	w.	7	3			9 n			0	0		Lagorio & Sastyrez.
Kieff	29.48	748.7	30.15	765.8	28.4	— 2.0	34	n.	20	9		c	1 ks			0	0		Observatory.
Lugan	29.70	754.3	29.91	759.7	31.3	— 0.4	90	wsw.	22	10			10			0.028	0.7		Meteorological Obs'y.
Moscow	29.16	740.6	29.67	753.6	17.4	— 8.1	49	ne.	7.8	3.5		0	0			0.004	0.1		Meteorological Obs'y.
Nikolajev	30.16	766.0	30.23	767.8	36.3	2.4	82	w.	4	2			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.09	764.2	30.17	766.4	— 7.6	—22.0	90	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.31	769.9	30.45	773.5	29.8	— 1.2	42	calm	0	0		0	4 k			0	0		Physical Observatory.
St. Petersburg	29.85	758.2	29.87	758.6	19.9	— 6.7	57	nnw.	18	8		0	0			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.63	727.3	30.28	769.2	34.7	1.5	66	calm	0	0			2			0	0		Teich, A. M.
Tiflis	28.73	729.7	30.19	766.8	42.3	5.7	42	nw.	18	8		8 ck	0			0	0		Physical Observatory.
Warsaw	29.99	761.8	30.44	773.2	32.7	0.4	62	wnw.	7	3		cs	8 k						Astronomical Obs'y.
Wilna	29.77	756.1	30.22	767.5	28.2	— 2.1	66	w.	13	6			8			0	0		Berg, Assistant.
Yeniseisk	30.24	768.2	30.57	776.5	— 4.0	—20.0	81	calm	0	0			0			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.53	775.4	40	4.4	91	e.			4	0	0			0	0	clear	J. Youngclause.
North Unst, Shetland Ids																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.29	769.4	30.39	771.9	54.7	12.6	72	s.	2.2	1.0			9			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.28	769.1	30.34	770.6	61.9	16.6	53	se.	4.3	1.9		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.34	694.4	30.39	771.9	48.2	9.0	58	sw.	2.7	1.2		0	8			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.11	714.0	30.39	771.8	53.8	12.1	64	se.	3.1	1.4		4	0	se.		0	0	lt. clouds	The Staff.
Murcia, Met. Obs'y	30.25	768.3	30.40	772.2	56.7	13.7	71	s.	1.1	0.5		5	5			0	0	covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.28	743.7	30.18	766.6	58.8	14.9	63	se.	7.4	3.3			10			0	0	covered	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.02	762.6	30.09	764.3	62.6	17.0	93	calm	0	0		3 c	0	nw.		0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.96	761.0	30.02	762.5	79.1	26.2	67	e.	3.3	1.5		5 c	3 cs		ene.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.23	767.7	30.33	770.3	60.6	15.9	60	se.	9.8	4.4		5	4	s.	se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I.	30.01	762.2	30.10	764.5	70.5	21.4	86	calm	0	0		2 c	3 k	se.	se.	0	0		E. Gadea, Chief Engu'r.
Tuguegarao, Philippine Id's	29.95	760.7	30.08	764.0	78.3	25.7	70	s.	8.5	3.8			9 ks		se.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.11	764.8	30.15	765.8	14.7	— 9.6	87	nw.			4		0			0	0		
Umea	30.24	768.1	30.29	769.4	24.1	— 4.4	63	n.			2		0			0	0		
Hernosand	30.31	769.8	30.36	771.1	31.1	— 0.5	50	nnw.			6		2			0.004	0.1		
Stockholm	30.24	768.1	30.42	772.6	30.2	— 1.0	69	nne.			6		10			0	0		
Wisby	30.27	768.9	30.33	770.4	35.2	1.8	93	nne.			7		3			0.047	1.2		
Sub Series.																			
Upsala	30.32	770.0	30.40	772.2	30.6	— 0.8	93	nne.	14.3	6.4			9		n.	0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.98	736.0	30.48	774.3	28.8	— 1.8	100	se.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.33	770.4	37.4	3.0	78	nne.	9	4.0			10		n.	0	0		The Observatory.
Valona			30.36	771.1	57.0	13.9		nw.			1		2			0	0	slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.22	767.7	59.5	15.3	59	n.			1	0	0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.03	762.7	30.12	765.0	23	— 5.0	88	s.	4	1.8			10 s			0.05	1.3	cloudy	
Alpena, Michigan	29.32	744.7	30.03	762.7	11.5	—11.4	80	sw.	14	6.3		0	0			0	0	clear	
Atlanta, Georgia	29.11	739.4	30.34	770.6	35.0	1.7	53	e.	8	3.6			10 s		calm	0	0	cloudy	
Atlantic City, New Jersey	30.31	769.9	30.32	770.1	19.1	— 7.2	70	w.	7	3.1		0	0			0	0	clear	
Augusta, Georgia	30.20	767.1	30.40	772.1	39.8	4.3	30	ne.	6	2.7			10 s			0	0	cloudy	
Baltimore, Maryland	30.29	769.4	30.34	770.6	23	— 5.0	73	nw.	6	2.7		0	hz.			0	0	clear	
Barnegat, New Jersey	30.25	768.3	30.27	768.8	17.7	— 7.9	69	w.	14	6.3		0	0			0	0	clear	
Bismarck, Dakota	27.90	708.6	29.90	759.4	5	—15.0	76	s.	3	1.3		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.41	696.2	30.34	770.6	7	—13.9	91	nw.	4	1.8			10 s		calm	0	0	cloudy	
Boston, Massachusetts	29.91	759.7	30.08	764.0	16.0	— 8.9	83	sw.	14	6.3		7 cs	0			0	0	fair	
Brownsville, Texas	29.94	760.5	30.00	762.0	50	10.0	100	n.	4	1.8			10 n			0.01	0.3	light rain	
Buffalo, New York	29.37	746.0	30.17	766.3	23.5	— 4.7	80	sw.	38	17.0		0	7 ks		sw.	inap.	inap.	fair	
Burlington, Vermont	29.65	753.1	29.96	761.0	23.0	— 5.0	46	w.	22	9.8			10 s		w.	inap.	inap.	cloudy	
Cairo, Illinois	29.93	760.2	30.35	770 9	26.0	— 3.3	76	ne.	6	2.7			10 s		calm	0	0	cloudy	
Campo, California	27.58	700.5	30.21	767.3	29	— 1.7	88	nw.	1	0.4		0	0			0	0	clear	
Camp Thomas, Arizona	27.25	692.1	30.08	764.0	35	1.7	96	calm			0	0	2 s			0.32	8.1	clear	
Cape Henry, Virginia	30.39	771.9	30.41	772.4	28	— 2.2	64	n.	12	5.4		2 c	3 s			0	0	fair	
Cape May, New Jersey	30.31	769.9	30.34	770.6	23	— 5.0	46	nw.	24	10.7		0	0			0	0	clear	
Castroville, Texas	29.21	741.9	30.06	763.5	38	3.3	100	nw.	10	4.5			10 n			0.36	9.1	light rain	
Cedar Keys Florida	30.15	765.8	30.17	766.3	53	11.7	66	ne.	14	6.3			10 s		e.	0.05	1.3	cloudy	
Champaign, Illinois	29.45	748.0	30.32	770.1	15.6	— 9.1	66	s.	7	3.1		5 ck	0	w.		0	0	fair	
Charleston, S. Carolina	30.27	768.8	30.33	770.4	39	3.9	38	ne.	12	5.4		0	9 s		ne.	0.05	1.3	cloudy	
Charlotte, N. Carolina	29.48	748.8	30.37	771.4	28.0	— 2.2	64	e.	4	1.8			10 s			0	0	cloudy	
Chattanooga, Tennessee	29.48	748.8	30.34	770.6	30.5	— 0.8	73	e.	8	3.6		10 cs	0	calm		0	0	cloudy	
Cheyenne, Wyoming	23.75	603.2	30.00	762.0	13.3	—10.4	68	nw.	8	3.6		0	0			0	0	clear	
Chicago, Illinois	29.48	748.8	30.23	767.8	19.9	— 6.7	76	sw.	13	5.8		0	0			0	0	clear	
Chincoteague, Virginia	30.36	771.1	30.38	771.6	21	— 6.1	58	nw.	5	2.2		3 c	2 s	w.		0	0	fair	
Cincinnati, Ohio	29.70	754.4	30.38	771.6	24.1	— 4.4	73	sw.	3	1.3			10 s			0	0	cloudy	
Cleveland, Ohio	29.52	749.8	30.30	769.6	15	— 9.4	83	sw.	10	4.5		0	1 s			inap.	inap.	clear	
Coleman City, Texas	28.24	717.3			32	0.0	92	ne.					10 s			0.28	7.1	cloudy	
Columbus, Ohio	29.46	748.3	30.36	771.1	18	— 7.8	61	sw.	4	1.8		5 cs	0			0	0	fair	
Concho, Texas	28.10	713.7	30.12	765.0	31	— 0.6	88	n.					10 s			0.47	11.9	cloudy	
Davenport, Iowa	29.54	750.3	30.25	768.3	21	— 6.1	58	sw.	6	2.7		hz.	4 s	calm	sw.	0	0	fair	
Dayton, Washington T'y	28.38	720.8	30.18	766.6	16	— 8.9	83	s.	1	0.4			10 s			0	0	cloudy	
Deadwood, Dakota	25.11	637.8	30.06	763.5	10	—12.2	73	sw.	3	1.3		0	0			0	0	clear	
Decatur, Texas					32	0.0	88	se.	4	1.8			10 n			0.24	6.1	light rain	
Delaware Breakwater, Del.	30.31	769.9	30.33	770.4	20	— 6.7	84	sw.	12	5.4		2 c;cs	0	sw.		0	0	clear	
Denison, Texas	29.30	744.2	30.14	765.5	29.0	— 1.7	88	e.	6	2.7			10 n			0.41	10.4	light snow	
Denver, Colorado	24.52	622.8	30.04	763.0	21.2	— 6.0	72	s.	7	3.1		0	0			0	0	clear	
Des Moines, Iowa	29.23	742.4	30.20	767.1	19	— 7.2	70	sw.	4	1.8		0	5 s		sw.	0	0	fair	
Detroit, Michigan	29.49	749.0	30.25	768.3	22.0	— 5.6	87	sw.	12	5.4		0	0			0	0	clear	
Dodge City, Kansas	27.36	694.9	30.11	764.8	21.3	— 5.9	87	s.	9	4.0			10 s			0.19	4.8	cloudy	
Dubuque, Iowa	29.40	746.7	30.17	766.3	15.5	— 9.2	73	s.	3	1.3		2 c	0	sw.		0	0	clear	
Duluth, Minnesota	29.13	739.9	29.89	759.2	14	—10.0	64	sw.	6	2.7		0	0			0	0	clear	
Eagle Pass, Texas	29.24	742.7	30.08	764 0	44.1	6.7	93	nw.	4	1.8			10 n			0.06	1.5	light rain	
Eagle Rock, Idaho	25.40	645.1	30.36	771.1	—19	—28.3	100	n.	2	0.9		0	0			0	0	clear	
Eastport, Maine	29.77	756.1	29.84	757.9	8	—13.3	65	sw.	6	2.7		0	0			0.16	4.1	clear	
El Paso, Texas	26.18	665.0	30.06	763.5	36.5	2.5	92	w.	6	2.7			10 s		calm	0.37	9.4	cloudy	
Erie, Pennsylvania	29.48	748.8	30.26	768.6	18	— 7.8	84	sw.	13	5.8			10 s		w.	0.01	0.3	cloudy	
Escanaba, Michigan	29.27	743.4	29.99	761.7	8	—13.3	76	sw.	4	1.8		0	0			0	0	clear	
Florence, Arizona																			
Fort Apache, Arizona	24.94	633.5	30.06	763.5	31	— 0.6	74	w.	1	0.4		0	6 s		calm	0.44	11.2	fair	
Fort Assinnaboine, Montana	26.91	683.5	29.95	760.7	21	— 6.1	61	sw.	16	7.2		0				0	0	clear	
Fort Bennett, Dakota	28.26	717.8	30.00	762.0	— 6	—21.1	64	calm	0	0		0	0			0	0	clear	
Fort Benton, Montana	26.91	683.5	29.89	759.2	28	— 2.2	77	sw.	18	8.0		0	0			0	0	clear	
Fort Buford, Dakota	27.73	704.3	29.93	760.2	7	—13.9	58	s.	7	3.1		0	0			0	0	clear	
Fort Custer, Montana	26.66	677.2	30.04	763.0	1	—17.2	100	se.	8	3.6		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.01	635.2	29.99	761.7	32	0.0	92	ne.	4	1.8			10 s		calm	0.07	1.8	cloudy	
Fort Elliott, Texas	27.21	691.1	30.14	765.5	18	— 7.8	58	se.	1	0.4			10 s		se.	0.20	5.1	cloudy	
Fort Gibson, Indian T'y	29.59	751.6	30.19	766.8	28.0	— 2.2	88	e.	6	2.7			10 n			0.20	5.1	light snow	
Fort Grant, Arizona	25.21	640 3	30.11	764.8	32	0.0	65	ne.	11	4.9		3 cs	0			0.21	5.3	clear	
Fort Griffin, Texas	28.77	730.7	30.15	765.8	29	— 1.7	77	ne.	6	2.7			10 s		ne.	0.73	18.5	cloudy	
Fort Keogh, Montana	27.28	692.9	29.97	761.2	1	—17.2	72	w.	1	0.4		0	0			0	0	clear	
Fort Macon, North Carolina	30.38	771.6	30.39	771.9	29	— 1.7	77	ne.	14	6.3		10 c	0	ne.		0	0	cloudy	
Fort McKavett, Texas	27.81	706.4	30.20	767.1	33.8	1.0	81	calm	0	0			10 s			0.09	2.3	cloudy	
Fort Missoula, Montana	26.76	679.7	30.22	767.6	— 1	—18.3	100	s.	1	0.4			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	29.64	752.8	29.68	753.9	—15	—26.1	100	ne.	10	4.5		0	8 ks		ne.	0	0	fair	
Fort Shaw, Montana	26.16	664.5	30.02	762.5	27	— 2.8	56	sw.	36	16.1		9 cs	0			0	0	cloudy	
Fort Sill, Indian Territory	28.88	733.5	30.20	767.1	26.5	— 3.1	94	n.	1	0.4			10 n			0.32	8.1	light snow	
Fort Stevenson, Dakota	27.72	704.1	29.78	756.4	5	—15.0	54	sw.	3	1.3		0	0			0	0	clear	
Fort Verde, Arizona					28.9	— 1.7	67	nw.			2	0	0			0	0	clear	
Fredericksburg, Texas	28.25	717.5	30.07	763.8	35	1.7	100	ne.	4	1.8			10 s			0.33	8.4	cloudy	
Galveston, Texas	29.96	761.0	30.00	762 0	45	7.2	92	ne.	20	8.9			10 n		ne.	0.09	2.3	light rain	
Grand Haven, Michigan	29.45	748.0	30.16	766.1	26.5	— 3.1	88	sw.	24	10.7		0	5 s		sw.	0	0	fair	
Hatteras, North Carolina	30.34	770.6	30.36	771.1	32	0.0	78	n.	14	6.3		3 k	hz.			0	0	clear	
Helena, Montana	25.73	653 5	30.16	766.1	8	—13.3	58	nw.	2	0.9		0	5 s			0	0	fair	
Henrietta, Texas	29.14	740.1	30.21	767.3	27	— 2.8	100	ne.	2	0.9			10 n			0.41	10.4	light snow	
Huron, Dakota	28.47	723.1	30.01	762.2	1	—17.2	65	se.	7	3.1		0	0			0	0	clear	
Indianapolis, Indiana	29.47	748.5	30.31	769.9	18	— 7.8	76	s.	2	0.9		5 c	0	s.		0	0	fair	
Indianola, Texas	29.93	760.2	29.96	761.0	46.6	8.1	100	n.	33	14.8			10 n			0.09	2.3	light rain	
Jacksboro, Texas	28.91	734.3	30.15	765.8	27	— 2.8	100	ne.	3	1.3			10 n		n.	0.48	12.2	light snow	
Jacksonville, Florida	30.19	766.8	30.24	768.1	52	11.1	72	n.	13	5.8			10 s			0.38	9.7	cloudy	
Keokuk, Iowa	29.57	751.1	30.27	768.8	21.5	— 5.8	76	s.	6	2.7			10 s		s.	0	0	cloudy	
Key West, Florida	30.08	764.0	30.11	764.8	69.0	20.6	84	ne.	3	1.3		0	2 k		e.	0	0	clear	
Kittyhawk, North Carolina	30.38	771.6	30.40	772.1	27	— 2.8	77	n.	12	5.4		8 c;cs	1 s			0	0	cloudy	
Knoxville, Tennessee	29.27	743.4	30.35	770.9	27.2	— 2.7	74	ne.	6	2.7			10 s;sk			0	0	cloudy	
La Crosse, Wisconsin	29.23	742.4	30.07	763.8	22	— 5.6	58	se.	8	3.6		0	0			0	0	clear	
La Mesilla, New Mexico	26.08	662.4	30.10	764.5	29.8	— 1.2	88	calm	0	0			10 s			0.46	11.7	cloudy	
Leavenworth, Kansas	29.28	743.7	30.24	768.1	27	— 2.8	77	s.	4	1.8			10 s			0	0	cloudy	
Lewiston, Idaho	29.37	746.0	30.24	768.1	21.6	— 5.8	54	w.	1	0.4			10 s		calm	0	0	cloudy	
Little Rock, Arkansas	29.93	760.2	30.26	768.6	29	— 1.7	77	ne.	8	3.6			10 n			0.45	11.4	heavy snow	
Los Angeles, California	29.86	758.4	30.26	768.6	41.0	5.0	82	n.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	29.74	755.4	30.33	770.4	28.0	— 2.2	64	se.	5	2.2			10 s		calm	0	0	cloudy	
Lynchburg, Virginia	29.64	752.6	30.30	771.1	22.2	— 5.4	58	w.	3	1.3		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.05	737.9	30.14	765.5	17	— 8.3	64	sw.	12	5.4		0	0			0	0	clear	
Marquette, Michigan	29.09	738.9	29.87	758.7	19	— 7.2	70	w.	24	10.7		0	0			0	0	clear	
Mason, Texas	28.36	720.3	30.10	764 5	35	1.7	79	e.	2	0.9			10 s		e.	0.79	20.1	cloudy	
Memphis, Tennessee	29.96	761.0	30.32	770.1	26	— 3.3	100	ne.	4	1.8			10 n			0.01	0.3	light snow	
Milwaukee, Wisconsin	29.35	745.5	30.15	765.8	19	— 7.2	84	sw	8	3.6		0	sk.			0	0	clear	

STATIONS	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.13	765.3	30.17	766.3	43.0	6.1	68	e.	9	4.0	.....	.....	10 s	.....	e.	0.08	2.0	threatening.	
Montgomery, Alabama	30.02	762.5	30.26	768.6	38.8	3.8	55	e.	3	1.3	.....	.....	10 n	.....	.....	0.03	0.8	light rain	
Moorhead, Minnesota	28.76	730.5	29.87	758.7	3	—16.1	72	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Morgantown, W. Virginia	29.33	745.0	30.39	771.9	20.5	— 6.4	74	sw.	5	2.2	.....	3 cs	0	.....	.....	inap.	inap.	clear	
Mt. Washington, N. H.	23.06	585.7	29.69	754.1	— 0.0	—22.8	100	nw.	60	26.8	.....	.....	fg	.....	nw.	0.11	2.8	dense fog	
Nashville, Tennessee	29.78	756.4	30.34	770.6	28.2	— 2.1	63	e.	6	2.7	.....	10 cs	0	.....	.....	0	0	cloudy	
New Haven, Connecticut	30.05	763.3	30.17	766.3	15	— 9.4	67	sw.	6	2.7	.....	3 c	0	nw.	.....	0	0	clear	
New London, Connecticut	30.12	765.0	30.17	766.3	18	— 7.8	53	w.	6	2.7	.....	2 c	0	calm	.....	0	0	clear	
New Orleans, Louisiana	30.02	762.5	30.08	764.0	50.0	10.0	66	e.	17	7.6	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	
Newport, Rhode Island	30.10	764.5	30.14	765.5	19.3	— 7.1	64	w.	16	7.2	.....	6 cs	1 s	w.	calm	0	0	fair	
New River, N. Carolina	.....	.....	.....	.....	27	— 2.8	77	n.	.....	.....	1	0	3 s	.....	.....	0	0	clear	
New Shoreham, Rhode I'd	30.12	765.0	30.16	766.1	25.2	— 3.8	64	nw.	24	10.7	.....	0	5 k	.....	nw.	0	0	fair	
New York, New York	30.06	763.5	30.25	768.3	17	— 8.3	83	sw.	10	4.5	.....	0	0	.....	.....	0	0	clear	
Norfolk, Virginia	30.38	771.6	30.41	772.4	28	— 2.2	54	calm	0	0	.....	3 cs	0	.....	.....	0	0	clear	
North Platte, Nebraska	26.98	685.3	30.10	764.5	22.6	— 5.2	74	s.	10	4.5	.....	0	2 s	.....	.....	0	0	clear	
Olympia, Washington T'y	29.92	760.0	29.96	761.0	32.0	0.0	88	s.	18	8.0	.....	.....	10 n	.....	calm	0.01	0.3	light snow	
Omaha, Nebraska	28.93	734.8	30.20	767.1	27.2	— 2.7	92	sw.	8	3.6	.....	0	8 n	.....	.....	inap.	inap.	light snow	
Oogianmie, Pt. Barrow, Alas.	30.16	766.1	30.18	766.6	—39.0	—39.4	76	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	29.76	755.9	30.10	764.5	24.0	— 4.4	73	w.	21	9.4	.....	.....	10 s	.....	w.	0.11	2.8	cloudy	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	30.14	765.5	30.17	766.3	45.8	7.7	56	ne.	11	4.9	.....	.....	10 s	.....	.....	0.03	0.8	cloudy	
Philadelphia, Pa.	30.26	768.6	30.32	770.1	18	— 7.8	67	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Pike's Peak, Colorado	17.24	437.9	29.94	760.5	— 5	—20.6	87	nw.	26	11.6	.....	0	3 s	.....	.....	0.09	2.3	clear	
Pioche, Nevada	24.07	611.4	30.27	768.8	7	—13.9	80	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.49	749.0	30.34	770.6	18.1	— 7.7	67	sw.	9	4.0	.....	0	0	.....	.....	inap.	inap.	clear	
Port Eads, Louisiana	30.04	763.0	30.06	763.5	58.2	14.6	95	e.	20	8.9	.....	0	hz	.....	.....	0.05	1.3	clear	
Port Huron, Michigan	29.47	748.5	30.20	767.1	15.0	— 9.4	84	s.	9	4.0	.....	0	0	.....	.....	0	0	clear	
Portland, Maine	29.90	759.4	29.95	760.7	14.5	— 9.7	67	sw.	12	5.4	.....	3 cs	5 s	sw.	calm	inap.	inap.	cloudy	
Portland, Oregon	30.24	768.1	30.31	769.9	28.2	— 2.1	88	e.	5	2.2	.....	.....	10 s	.....	calm	0	0	cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	32	0.0	50	n.	15	6.7	.....	10 c	0	n.	.....	0	0	cloudy	
Prescott, Arizona	24.71	627.6	30.09	764.3	11	—11.7	50	w.	4	1.8	.....	0	0	.....	.....	inap.	inap.	clear	
Punta Rassa, Florida	30.11	764.8	30.12	765.0	63.5	17.5	81	ne.	7	3.1	.....	.....	10 s	.....	e.	0	0	cloudy	
Red Bluff, California	29.95	760.7	30.33	770.4	32.3	0.2	80	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Rio Grande City, Texas	29.75	755.6	30.00	762.0	46	7.8	83	ne.	7	3.1	.....	.....	10 s	.....	calm	0.12	3.0	cloudy	
Rochester, New York	29.41	747.0	30.12	765.0	20	— 6.7	84	w.	20	8.9	.....	1 ck	3 s	w.	w.	0.02	0.5	fair	
Roseburg, Oregon	29.71	754.6	30.28	769.1	30.9	— 0.6	92	e.	1	0.4	.....	0	5 s	.....	.....	0	0	fair	
Sacramento, California	30.26	768.6	30.34	770.6	34.8	1.6	79	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.69	754.1	30.33	770.4	20.9	— 6.2	70	s.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	
St. Paul, Minnesota	29.08	737.9	30.00	762.0	14.5	— 9.7	82	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	
St. Vincent, Minnesota	28.77	730.7	29.75	755.6	8	—13.3	76	s.	11	4.9	.....	0	0	.....	.....	0	0	clear	
Salt Lake City, Utah	25.75	654.0	30.32	770.1	10	—12.2	60	calm	0	0	.....	0	0	.....	.....	0	0	clear	
San Antonio, Texas	29.33	745.0	30.06	763.5	36.7	2.6	89	n.	10	4.5	.....	.....	10 n	.....	n.	0.42	10.7	light rain	
San Diego, California	30.18	766.6	30.25	768.3	43.5	6.4	78	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Sandusky, Ohio	29.57	751.1	30.29	769.4	16	— 8.9	76	sw.	15	6.7	.....	0	0	.....	.....	0	0	clear	
Sandy Hook, New Jersey	30.26	768.6	30.30	769.6	18.0	— 7.8	84	nw.	16	7.2	.....	0	0	.....	.....	0	0	clear	
San Francisco, California	30.27	768.8	30.34	770.6	42	5.6	92	e.	2	0.9	.....	0	fg	.....	.....	0	0	clear	
Santa Fé, New Mexico	23.02	584.7	30.03	762.7	14.5	— 9.7	78	w.	2	0.9	.....	.....	10 s	.....	.....	0.34	8.6	cloudy	
Savannah, Georgia	30.23	767.8	30.33	770.4	42	5.6	42	ne.	12	5.4	.....	.....	10 ks	.....	.....	inap.	inap.	cloudy	
Shreveport, Louisiana	29.96	761.0	30.21	767.3	33	0.6	88	ne.	8	3.6	.....	.....	10 n	.....	ne.	0.08	2.0	light rain	
Silver City, New Mexico	24.12	612.6	29.98	761.5	29	— 1.7	80	nw.	6	2.7	.....	.....	10 s	.....	calm	0.97	24.6	cloudy	
Sitka, Alaska	29.11	739.4	29.18	741.2	37.6	3.1	80	se.	4	1.8	.....	6 k	0	se.	.....	0.92	23.4	fair	
Smithville, North Carolina	30.34	770.6	30.38	771.6	30	— 1.1	67	n.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	
Spokane Falls, Wash. Ter.	28.06	712.7	30.20	767.1	9	—12.8	68	w.	2	0.9	.....	.....	10 s	.....	sw.	0	0	cloudy	
Springfield, Illinois	29.59	751.6	30.32	770.1	22.5	— 5.3	74	sw.	5	2.2	.....	hz	hz.	.....	.....	0	0	clear	
Springfield, Massachusetts	30.00	762.0	30.14	765.5	19.4	— 7.0	53	sw.	12	5.4	.....	4 k	0	w.	.....	0	0	fair	
Springfield, Mo.	28.74	730.0	30.32	770.1	27.5	— 2.5	88	se.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	
Stockton, Texas	26.96	684.8	30.10	764.5	29.5	— 1.4	100	calm	0	0	.....	.....	10 s	.....	n.	0.10	2.5	cloudy	
Thatcher's Island, Mass.	30.00	762.0	30.06	763.5	19.0	— 7.2	70	w.	20	8.9	.....	0	9 s	.....	.....	0	0	cloudy	
Toledo, Ohio	29.54	750.3	30.28	769.1	19	— 7.2	70	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Tucson, Arizona	27.62	701.5	30.12	765.0	39	3.9	92	calm	0	0	.....	0	0	.....	.....	0.13	3.3	clear	
Umatilla, Oregon	29.89	759.2	30.28	769.1	18.0	— 7.8	83	se.	2	0.9	.....	.....	10 s	.....	.....	0	0	cloudy	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.92	760.0	30.19	766.8	35	1.7	69	ne.	7	3.1	.....	.....	10 n	.....	ne.	0.15	3.8	light rain	
Visalia, California	29.93	760.2	30.32	770.1	35	1.7	84	e.	4	1.8	.....	0	2 s	.....	.....	0	0	clear	
Washington, D. C.	30.25	768.3	30.37	771.4	19.5	— 6.9	84	sw.	3	1.3	.....	1 cs	0	.....	.....	0	0	clear	
West Los Animas, Colorado	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wickenburg, Arizona	.....	.....	.....	.....	31	— 0.6	80	calm	.....	.....	0	0	0	.....	.....	0	0	clear	
Williamsport, Pa.	29.61	752.1	30.24	768.1	18	— 7.8	83	nw.	11	4.9	.....	.....	hz	.....	.....	0	0	dense haze.	
Wilmington, N. Carolina	30.33	770.4	30.39	771.9	31	— 0.6	68	ne.	6	2.7	.....	10 c	hz	w.	calm	0	0	cloudy	
Winnemucca, Nevada	25.81	655.6	30.35	770.9	0	—17.8	72	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Yankton, Dakota	28.66	728.0	30.08	764.0	20	— 6.7	84	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	30.00	762.0	30.15	765.8	47.0	8.3	71	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559.3	.....	.....	50.0	10.0	70	calm	0	0	.....	5 ck;k	2 s	ne.	.....	0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.05	763.3	30.06	763.5	76	24.4	81	e.	.....	.....	.....	8 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.94	760.5	29.96	761.0	77	25.0	90	nw.	4	1.8	.....	.....	10 ks	.....	n.	0.15	3.8	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.98	761.5	30.00	762.0	74	23.3	90	e.	.....	.....	.....	2 k	5 ks	.....	.....	0.1	3.	.....	B. Bigar.
Havana, Cuba, W. I.	30.19	766.8	30.24	768.1	69	20.6	76	calm	0	0	.....	2 cs	2 ks	calm	calm	0	0	fair	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.06	763.5	30.07	763.8	66.0	18.9	89	n.	1	0.4	.....	0	0	.....	.....	0	0	fine	Robert Johnstone.
Navassa, W. I.	29.98	761.5	30.06	763.5	75	23.9	72	ne	12	5.4	.....	5 ck	5 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	76	24.4	91	e.	.....	.....	2	5 k	8 ks	e.	.....	0.050	1.3	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.97	761.2	79	26.1	89	calm	.....	.....	0	.....	10 ks	.....	calm	blank	blank	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	73.4	23.0	90	ne.	.....	.....	3	0	9 ks	.....	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.05	763.3	30.08	764.0	74	23.3	72	n.	4.8	2.1	.....	0	0	.....	.....	0	0	clear	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.72	754.9	29.77	756.1	—39.0	—39.4	.....	nw.	4	1.8	.....	.....	10 s	.....	nw.	0.10	2.5	snowing	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 21° 02′, E. 109° 40′	30.11	764.8	66	18.9		e.			3–4		10					1	e.	dens e fog	Comm. A. J. Errington.
H. M. S Alert, Singapore Roads, India	29 88	758.9	80.2	26.8	85	n.			1		4							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.30	769.6	59	15.0	73	e.			1		3							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.12	765.0	74	23.3	59	ese.			3–4		3	se.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Chimbote, Peru	29.92	760.0	69	20.6	100	ese.			2		8	calm				2	se.	d. clouds	Capt. G. R. Hope.
H. M. S. Condor																			Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.36	771.1	60	15.6		ene.			2		7	ene.				1	wsw.	d. clouds	Lieut. J. L. Burr.
H. M. S. Cormorant, S. 28° 30′, E. 157° 35′	29.93	760.2	76	24.4		ne.			3		2	ne.				1	ne.	d. clouds	Capt. Bruce.
H. M. S. Curaçoa, N. 32° 03′, E. 120° 40′	30.24	768.1	39.5	4.2	100	nnw.			2		10							overcast	Capt. S. Long.
H. M. S. Diamond, S. 36° 18′, E. 16° 30′			63.5	17.5	61	sse.			4		3					4	ssw.	d. clouds	Capt. A. T. Dale.
H. M. Dock-Yard, Bermuda, W. I.	30.01	762.2	59	15.0	70	wnw.			4–5		8	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 20° 56′, W. 73° 41′	30.12	765.0	74	23.3	95	ene.			1		3					1	se.	d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 51° 40′, W. 57° 51′	29.46	748.3	52	11.1	72	wnw.			2–3		5					3–4	wsw.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.93	760.2	82	27.8		calm			0		5							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Emerald, S. 42° 53′, E. 147° 22′	29.74	755.4	57	13.9	93	calm			0		6	s.						d. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.29	769.4	57	13.9		ssw.			4–6		10	ssw.						d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, S. 32° 22′, W. 19° 25′	30.27	768.8	74	23.3	76	nne.			2		3					1	nnw.	d. clouds	Capt C. A. P. Bridge.
H. M. S. Euryalus																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′, E. 43° 12′	29.93	760.2	79	26.1	84	w.			1		3							d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.14	765.5	49	9.4	93	calm			0		10							heavy rain	Capt. R. F. Hoskyn.
H. M S. Gannet, S. 24° 25′, W. 73° 50′	30.01	762.2	66	18.9	70	sse.			4		10					2	s.	gloomy	Comm. E. G. Bourke.
H. M. S. Garnet																1	se.		Capt. L. Jones.
H. M. S. Iris, Off Limasol, Cyprus	30.22	767.6	63	17.2	88	sw.			1		0					1	nw.	blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.07	763.8	70	21.1	90	se.			1		7	se.						misty	Capt. R. E. Tracey.
H. M. S. Lark, S. 34° 56′, E. 174° 25′	30.11	764.8	68.3	20.2	93	ene.			1		6					1	e.	d. clouds	Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.94	760.5	63.5	17.5		sw.			1		10					1	n.	overcast	Comm. J. T. R. Ayler.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.03	762.7	70	21.1	88	e.			1		10							misty	Capt. A. Carpenter.
H. M. S. Malabar, Suez Bay, Egypt	30.23	767.8	60	15.6	88	nnw.			1–2		4	nnw.				1	nnw.	d. clouds	Capt. H. Hand.
H. M. S. Mutine, Callao, Peru	29.97	761.2	69	20.6	95	calm			0		8							misty	Comm. F. Edwards.
H. M. S. Northampton, N. 13° 53′, W. 61° 24′	30.01	762.2	79	26.1	70	ene.			4		4	ene.				2	ene.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. J. Kinahan.
H. M. S. Pelican, N. 3° 21′, W. 23° 52′	29.88	758.9	85	29.4	91	n.			1		5					3	n.	misty	Capt. F. R. Dicken.
H M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.19	766.8	59.1	15.1		nnw.			1		0							blue sky	Capt. W. H. Edwards.
H. M S. Rocket, N. 48° 27′, W. 123° 27′	29.88	758.9	33	0.6	?	nne.			1		10							snowing	Lieut. V. B. Orlebar.
H. M. S. Ruby, Colombo, Ceylon, India	29.85	758 2	78.5	25.8	95	n.			1		8	n.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull, S. 5° 10′, E. 39° 42′	29.28	743.7	84	28.9	91	calm			0		0							blue sky	Comm. M. Byles.
H. M. S. Serapis																			Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 05′, W. 80° 20′	30.04	763.0	77.5	25.3	79	ene.			2		2					2	ene.	d. clouds	Capt. C. G. Fane.
H. M. S Triumph, S. 1° 58′, W. 81° 30′	29.96	761.0	79	26.1	82	calm			0		9	s.				1	n.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 5° 45′, E. 82° 09′	29.88	758.9	80	26.7	100	e.			6		9	w.				4	ene.	d. clouds	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.06	763.5	72	22.2		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, N. 25° 17′, E. 51° 42′	30.17	766.3	63.5	17.5	52	nw.			6		3	nw.				3	nw.	dense mist	Capt. T. P. Nesham.
H. M. S. Zephyr, Nagasaki, Japan	30.05	763.3	61	16.1	100	s.			4–6		10	s.				3	s.	squally	Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Brava, Cape Verd Ids	30.03	762.8	81.5	27.5	65	sw.			2		5	se.				2	sw.	d. clouds	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stocknolm.																			
H. M. Corvette Balder, N. 11° 00′, W. 67° 27′	30.00	761.9	75.2	24.0	85	e.			3		6							misty	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
UNITED STATES NAVAL SERIES.																			
Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
By authority of the Secretary of the Navy.																			
N. Yard, Pensacola, Fla	30.19	766.8	46	7.8	69	nne.	11	4.9	.....	.....	10	.....	ne.	0	0	.....	.....	cloudy	
N. Yard, Portsmouth, N. H.	30.02	762.5	14	—10.0	.....	w.	9	4.0	.....	.....	0	.....	.....	0	0	.....	.....	hazy	
Naval Hospital Yokohama, Japan	30.12	765.0	56	13.3	81	sw.	.....	.....	5	.....	10	.....	sw.	0	0	.....	.....	threatening.	
Adams. Callao, Peru	29.75	755.6	69	20.6	95	sse.	.....	.....	2	.....	10	.....	.....	.....	.....	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	29.97	761.2	58	14.4	82	ne.	.....	.....	1	.....	8	.....	.....	0	0	sm'h	.....	cloudy	
Alert. Bang Kok, Bar Siam, India*	29.78	756.4	83	28.3	83	s.	.....	.....	2	.....	5	.....	s.	0	0	sm'h	.....	hazy	
Alliance, Boston, Mass.*†	30.08	764.0	19	— 7.2	68	nw.	.....	.....	2	.....	5	.....	.....	0	0	.....	.....	fair	
Ashuelot Tientsin, China	30.45	773.4	28	— 2.2	88	s.	.....	.....	2	.....	2	.....	calm	.....	.....	.....	.....	clear	
Brooklyn, Montevideo, Uruguay	29.84	757.9	71	21.7	90	e.	12	5.4	.....	.....	2	.....	e.	0	0	light	e.	fair	
Colorado, New York, N. Y.	30.22	767.6	17	— 8.3	100	sw.	12	5.4	.....	.....	2	.....	calm	0	0	.....	.....	clear	
Essex, N. 33° 18′, W. 25° 30′	30.24	768.1	63	17.2	78	nnw.	.....	.....	3	.....	2	.....	.....	.....	.....	long	nw.	clear	
Franklin, Norfolk, Va.	30.42	772.7	28	— 2.2	.....	n.	6	2.7	.....	.....	2	.....	n.	0	0	.....	.....	fair	
Galena, Funchal, Maderia Island.	30.18	766.6	62	16.7	100	ssw.	.....	.....	3	.....	8	.....	w.	.....	.....	long	w.	cloudy	
Independence, N. Yard, Mare I'd, Cal.	30.19	766.8	38	3.3	81	calm	0	0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La.	30.06	763.5	50	10.0	72	ene.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Lackawanna, Valparaiso, Chili†	30.11	764.8	56	14.4	?	ne.	.....	.....	1	.....	8	.....	ne.	.....	.....	.....	.....	cloudy	
Lancaster, Naples, Italy	30.37	771.4	58	14.4	64	s.	.....	.....	1	.....	2	.....	s.	0	0	.....	.....	misty	
Michigan, Erie, Pa.	30.21	767.3	18	— 7.8	83	wsw.	.....	.....	6	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I.	30.12	765.0	17	— 8.3	100	wnw.	10	4.5	.....	.....	5	.....	.....	.....	.....	sm'h	.....	fair	
Monocacy, Yokohama, Japan	30.27	768.8	57	13.9	94	sw	.....	.....	3	.....	10	.....	sw.	.....	.....	.....	.....	cloudy	
Nipsic, Villafranca, France	30.41	772.4	60	15.6	60	s.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.05	763.3	68	20.0	100	sse.	.....	.....	2	.....	8	.....	n.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.05	763.3	70	21.1	95	ese.	.....	.....	1	.....	10	.....	n.	.....	.....	.....	.....	cloudy	
Passaic, Washington, D. C.	30.38	771.6	22	— 5.6	?	w.	.....	.....	3	.....	8	.....	w.	.....	.....	.....	.....	cloudy	
Pensacola, Valparaiso, Chili	30.05	763.3	58	14.4	76	nne.	2	0.9	.....	.....	10	.....	ne.	0	0	sm'h	.....	cloudy	
Powhatan, Norfolk, Va.	30.38	771.6	26	— 3.3	76	nnw.	.....	.....	1	.....	5?	.....	nw.	.....	.....	.....	.....	cloudy?	
Quinnebaug, N. 41° 41′, E. 10° 01′	30.42	772.7	58	14.4	70	wnw.	.....	.....	2	.....	8	.....	calm	.....	.....	sm'h	.....	cloudy	
Ranger, N. 19° 13′, W. 104° 43′*	29.89	759.2	71	21.7	95	n.	.....	.....	1	.....	2	.....	calm	0	0	sm'h	.....	fair	
Richmond, N. 11° 30′, E. 178° 06′*	29.83	757.7	78	25.6	86	ne.	.....	.....	5	.....	5	.....	e.	0.03	0.8	mod.	e.	fair	
Shenandoah, Montevideo, Uruguay*	29.93	760.2	71	21.7	71	e.	.....	.....	4	.....	2	.....	e.	.....	.....	sm'h	.....	fair	
St Louis, League Island, Pa.	30.42	772.7	26	— 3.3	88	w.	7	3.1	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Swatara, Kobe, Japan*	30.04	763.6	58	14.4	82	sw.	.....	.....	1	.....	10	.....	ssw.	.....	.....	sm'h	.....	light rain	
Tennessee, New York, N. Y.	30.22	767.6	18	— 7.8	.....	w.	10	4.5	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Vandalia, Santa Anna, Curacoa, W. I.	29.96	761.0	76	24.4	86	e.	.....	.....	3	.....	5	.....	e.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass.	30.07	763.8	17	— 8.3	.....	wsw.	7	3.1	.....	.....	8	.....	w.	0	0	.....	.....	cloudy	
Wachusetts, San Francisco, Cal.	30.29	769.4	43	6.1	92	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Wyoming, Port Royal, S. C.	30.33	770.4	41	5.0	49	ne.	16	7.2	.....	.....	10	.....	ne.	0.01	0.3	.....	.....	cloudy	
Yantic, Aspinwall, Panama*	29.91	759.7	76	24.4	91	n.	.....	.....	3	.....	5	.....	n	.....	.....	mod.	n.	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Polynesian, Capt. Robt. Brown, Liverpool, Eng*	30.20	767.1	39	3.9	.....	ene.	4	.....	10	.....	ese.	0	0	sm'h	.....	cloudy	Roberts & Spark.
S. S. Prussian, Capt. J. G. Stephens. N. 46° 00′, W. 49° 15′*	29.27	743.4	33	0.6	.....	wsw.	3	.....	10	.....	.....	.....	.....	h'vy	con.	overcast	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.49	774 4	35	1.7	.....	ne.	5	.....	.....	.....	n.	0	0	.....	.....	cloudy	J. Bairrison.
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. Illinois, Capt. J. W. Shackford, N. 42° 06′, W. 49° 38′	29.72	754.9	46	7.8	85	nnw.	6	.....	10	.....	s.	.....	.....	mod.	w.	rainy	Cauffman & Morse.
S. S. Ohio, Capt. Henry Morrison, N. 44° 51′, W. 54° 30*†	29.18	741.2	26	—3.3	77	w.	8	.....	8	.....	w.	.....	.....	h'vy	w.	squally	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 49° —′, W. 34° —′.†	29.73	755.1	44	6.7	67	nw.	1	.....	2	.....	ssw.	.....	.....	mod.	nw.	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
Assyria, Capt. J. Brown,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Brown.
Utopia, Capt. A. McRitchie,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Haynes.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 19° 52′, W. 73° 24*†	30.18	766.6	75	23.9	81	ene.	4	.....	2	.....	calm	0	0	sm'h	.....	hazy	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 12° 58′, W. 77° 33′*	29.89	759.2	78	25.6	.....	nne.	6	.....	2	.....	nne.	0	0	high	ene.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladiom, N. 21° 44′, W. 74° 07′*†	29.99	761.7	76	24.4	.....	ese.	5	.....	0	.....	.....	0	0	light	ese.	clear	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, San Juan, Porto Rico. W. I.	.....	.....	74	23.3	.....	ene.	2	.....	5?	.....	ene.	0	0	mod.	ene.	clear?	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Fisher & Welden.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russel, N. 18° 17′, W. 26° 26′	30.14	765.5	70.5	21.4	84	ne.	5	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Caldew, Capt. W. Peterson, S. 54° 10′, W. 77° 45′	29.49	749.0	46	7.8	.....	wnw	3	.....	9	.....	.....	.....	.....	.....	.....	misty	.....
S. S. Cipero, Capt. W. N. Lailey, N. 13° 36′, W. 54° 51′	30.07	763.8	76.1	24.5	90	e.	4	.....	6	.....	.....	.....	.....	3	e.	d. clouds	.....
S. City of Agra, Capt. Thos. Young, N. 24° 02′, W. 42° 00′	30.23	767.8	70.5	21.4	.....	e.	5	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Glaramara, Capt. R. Morton, N. 46° 22′, W. 20° 24′	29.64	752.8	53	11.7	93	se.	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Glencairn, Capt. R. S. Tannock,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. G. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 30° 30′, E. 38° 50′	29.95	760.7	78	25.6	82	ene.	3	.....	3	.....	.....	.....	.....	.....	.....	misty	.....
May Hulse, Capt. H. Youlden, S. 41° 07′, W. 51° 02′	30.00	762.0	66.4	19.1	58	nw.	1	.....	2	.....	.....	.....	.....	.....	.....	blue sky	.....
Bk. Mertola, Capt. E. W. Turner, N. 46° 00′, W. 11° 26′	30.02	762.5	56.0	13.3	97	sse.	6	.....	10	.....	.....	.....	.....	.....	.....	drizzling	.....
Minho, Capt. J. Lawson, S. 32° 58′, W. 51° 48′	29.84	757.9	75	23.9	90	ene.	3	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Naiad, Capt. John Smith. N. 10° 16′, W. 39° 38′	30.00	762.0	77.3	25.2	82	nne.	6	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 43° 44′, W. 77° 22′	30.07	763.8	55.2	12.9	93	w.	3	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Queen of Cambria, Capt. M. Parry. S. 40° 46′, E. 54° 26′	29.82	757.4	62	16.7	72	nw.	2	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Strathleven, Capt. C. W. Pearson, N. 41° 37′, W. 52° 57′	29.33	745.0	43.5	6.4	67	wnw.	6	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Superb, Capt. Berridge N. 28° 02′, W. 41° 56′	30.33	770.4	68.9	20.5	90	ene.	2	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Bristol*†	30.40	772.1	49	9.4	.....	ne.	4	.....	10	.....	calm	0	0	.....	.....	dull	Wm. Fitt.
CALIFORNIA AND MEXICAN S. S. CO.																	
J. Birmingham, Agent, San Francisco.																	
S. S. Newbern, Capt. E. Y. Rogers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman, N. 33° 50′, W. 77° 10′*†	30.44	773.2	43	6.1	.....	nnw.	3	.....	1?	.....	nw.	0	0	mod.	e.	cloudy?	B. J. Henry, 1st Off.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d Officer.
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. Frangeul,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Servan, N. 43° 39′, W. 57° 11′*†	29.57	751.0	28.4	—2.0	.....	nw.	8	.....	.....	.....	.....	snow	snow	very large	nw.	.....	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York.																	
S. S. Gellert, Capt. Kuhlewein, N. 45° 30′, W. 50° 00′*	29.16	740.7	39	3.9	.....	sw.	2	.....	10	.....	sw.	3 h'r	snow	mod.	ne.	cloudy	P. Frochlich, 3d Off.
S. S. Silesia, Capt. A. Albers, N. 50° 05′, W. 3° 46′*†	30.36	771.1	45.5	7.5	.....	e.	4	.....	5	.....	e. sw.	0	0	1	ne.	fair	.....
S. S. Wieland, Capt. C. Hebich, N. 46° 30′, W. 43° 35′*	29.16	740.7	47	8.3	.....	se.	6	.....	10	.....	se.	rain	rain	5	se. wnw.	rainy	C. Jorgensen.
INMAN LINE.																	
John G. Dale, Agent, New York.																	
S. S. City of Berlin, Capt. R. Leitch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Patterson & Thompson
LAMPERT & HOLT'S S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres*†	30.01	762.2	74	23.3	.....	ene.	4	.....	8	.....	ne.	0	0	.....	.....	.....	J. Carroll

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Red. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.51	774.9				se.	3		10		e.	3 h'r and	sleet rain			cloudy	T. Knight, 2d officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, N. 34° 50′, W. 75° 44′*†	30.42	772.7	46	7.8		nne.	4		0			0	0	sm'h		clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, Savanilla, U. S. C.†	29.90	759.4	77	25.0		ne.	2									fair	
S. S. Bothnia, Capt. MacMacken, [man																	E.F.Stembridge, 3d offi
S. S. City of Alexandria, Capt. L. F. Timmer- N. 31° 15′, W. 78° 50′*† [nolds	30.41	772.4	65	18.3		nne.	4								ne.	rainy	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Maas, Capt. T. N. Bonjer, N. 45° 12, W. 49° 24′*	29.09	738.9	32	0.0		wsw.								high	w.	snowing	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke N. 41° 20′, W. 60° 00′*†	29.74	755.4	42	5.6		wnw.	8–9								nw.	snowy	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers, N. 47° 30′, W. 35° 27′	29.74	755 4				s.	6		8		w.	6 h'r	6 h'r	h'vy	s;w.	cloudy	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander,																	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. F. Pfeiffer, N. 47° 10′, W. 40° 57′	29.60	751.8	46.0	7.8	100	s.	7		10		s.	2 h'r	2h'r	hv'y	nw.	raining	Sander & Waller.
S. S. Main, Capt. Julius Barre, N. 41° 55′, W. 65° 33′*	29.90	759.4				nw.	6		10		n.	4h'r	snow	high	nw.	snowing	
S. S. Neckar, Capt. R. Bussius, N. 49° 17′, W. 14° 22′	29.89	759.2	52.7	11.5		ese.	7		10		se;ese.	2 h'r	2 h'r	r'gh	ese; se.	rain & fog	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A, Jaeger, N. 22° 29′, W. 20° 40′*	30.16	766.1	75.2	24.0	85	ne.	2		0			0	0	2	ne.	clear	
S. S. Oder, Capt. C. Undeutsch, N. 42° 17′, W. 62° 58′*	29.67	753.6	24.8	—4.0		nw.	6		4		w.	snow	&hail	cross	wnw.	hailing	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany*	30.72	780.3	32.0	0.0		ne.	3		2		nne.	0	0			clear	E. Hatteusaner.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 36° 03′, W. 141° 12′†	30.40	772.1	62	16.7	83	se.	2		0			0	0	mod.	w.	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 46° 11′, E. 176° 01′†*	29.90	759.4	47	8.3	69	wsw.	4		4?		wsw.			mod.	w.	cloudy?	
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.09	764.3	66	18.9	84	e.	3		8							overcast	
OCEAN S. S. CO. *George Young, Agent. New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson,																	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 33° 42′. W. 77° 20′†	30.42	772.7	42	5.6		ne.	3		10		e.	0	0	long	ne	fair	H. K. Hallett.
OREGON IMROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 41° 35′, W. 124° 42′†	30.36	771.1	45	7.2	76	nnw.	2		5		nw.			light		fair	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann N. 39° 43′, W. 124° 13′†	30.35	770.9	47	8.3	77	nnw.	5		2		nnw.	0	0	mod.	nnw.	fine	A. C. James, 2d Off.
S. S. Columbia, Capt. Fred Bolles, N. 40° 50′, W. 124° 27′†	30.35	770.9	45	7.2	76	n.	1		2		n.	0	0	sm'h	nnw.	clear	W. Irvine.
S. S. Oregon, Capt. E. Poleman,																	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 34° 22′. W. 120° 23 †	30.18	766.6	48	8.9	56	n.	4		0					sm'h		clear	
S. S. Geo. W. Elder, Capt. H. G. Morse, Esquimalt, B. C †	30.13	765.3	42	5.6		sw.	4				sw.	0	0	sm'h		clear	
S. S. Idaho, Capt. E. Alexander, San Francisco, Calif	30.26	768.6	45	7.2	76	calm	0		0							clear	
S. S. Orizaba, Capt. Chas. B. Johnson,																	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace. San Francisco, Calif	30.49	774.4	40	4.4	82	s.	1		0			0	0			clear	T. Wallace.
S. S. State of California, Capt. G. Debney, Portland, Oreg n†	30.09	764.3	28	—2.2	?	ese.	4		5?		s.	0	0			cloudy?	
S. S. Victoria, H. M. Hayward, N. 38° 34′, W. 123° 34′†	30.32	770.0	53	11.7	86	nnw.	3		10					mod.	nw.	cloudy	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. ———																	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb. S. 34° 20′. E. 171° 50′†	30.11	764.8	70	21.1	84	ese.	3		8		ese.	0	0	sm'h	ese.	cloudy	W. H. Hawes, 2d Offi.
S. S. City of Rio de Janeiro, Capt. Cavarly. N. 35° 47′, W. 163° 38′†	30.73	780.5	58	14.4	76	se	5		5		se.	0	0	long	se.	fair	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn, S. 9° 13′, W. 168° 32′†	29.84	757.9	82	27.8	83	ne.	2		10		ne.	0	0	long	ene.	cloudy	E. Le Saik.
S. S. City of Tokio, Com. J. Maury N. 34° 38′, E. 138° 18′†	30.02	762.5	53	11.7	73	w.	8		8		sw.	1 h'r	1 h'r	light	wsw.	cloudy	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 22° 34′, W. 106° 05′†	30.00	762.0	68	20.0	84	nnw.	3		7		nw.	0	0	mod.	nw.	cloudy	
S. S. Granada, Capt. M. Connolly, Panama, Panama†	29.91	759.7	71	21.7	95	nw.	2		5?		nw.	0	0			clear?	
S. S. South Carolina, Capt. W J. Russell, N. 23° 14′, W. 110° 29′*†	30.07	763.8	63	17.2	78	nnw.	4		1		sw.	0	0	light	n.	hazy	
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	29.92	760.0	60	18.9	100	ne.	2		2		n.					clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.																	
Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. CO.																	
E. A. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke, N. 28° 21′, W. 67° 05′	.....	.....	.....	.....	.....	nnw.	3	.....	10	.....	.....	.....	.....	sm'h	.....	drizzling	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Andersen.
S. S. Rhynland, Capt. W. G. Randle, N. 45° 40′, W. 48° 39′*	29.10	739.1	31	—0.6	.....	wsw.	6	.....	10	.....	wsw.	0.8	2.0	.....	wsw.	cloudy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 50° 02′, W. 2° 27′*†	30.26	768.6	49	9.4	77	ene.	2	.....	10	.....	wnw.	0	0	sm'h	.....	overcast	M. Eymond.
S. S. Waesland, Capt. H. Nickels. N. 44° 37′ W. 43° 09′*	29.11	739.4	58	14.4	.....	s.	6	.....	10	.....	ssw.	5 h'r	5 h'r	r'gh	s.	misty	.....
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W A. Scholten, Capt. G. J. Vis. N. 47° 31′, W. 37° 09′*	29.44	747.8	51.2	10.7	72	s.	6	.....	8	.....	s.	4 h'r	4 h'r	high	sw.	rainy	.....
THINGVALLA LINE.																	
Funch, Edye, & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub, Copenhagen, Denmark†	30.54	775.7	34.7	1.5	.....	ene.	2	.....	1	.....	ene.	0	0	.....	.....	clear	J. T. Ulberling.
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters. N. 41° 57′, W. 60° 41′*†	29.80	756.9	28	—2.2	.....	wnw.	7	.....	9	.....	wnw.	6 h'r	snow	r'gh	wnw.	snowing	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent, New York.																	
S. S. Adriatic, Capt. J. W. Jennings, N. 42° 59′, W. 47° 28′*†	29.30	744.2	45	7.2	.....	nnw.	2	.....	10	.....	.....	sh'rs	shr's	long	s.	raining	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Thomas.
S. S. Celtic, Capt. B. Gleadell Liverpool, England†*	30.28	769.1	43	6.1	7	e.	5	.....	10	.....	.....	0	0	.....	.....	overcast	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. D. Jay, 4th Officer.
S. S. Republic, Capt. P. J. Irving, N. 48° 15′, W. 42° 54′†	29.25	742.9	37	2.8	90	sse.	6	.....	10	.....	sw.	6 h'r	6 h'r	r'gh	s.	sleeting	H. Goulden, 4th Officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell, Hull, Eng.*	30.04	778.2	40	4.4	.....	e.	3	.....	2	.....	se.	0	0	.....	.....	fine	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.25	768.3	50	10.0	64	ne.	.....	.....	10 8	.....	.....	0	0	.....	.....	overcast	J. Jorgensen.
S. S. Alfonso XII, Capt. E. Bayona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Alpha, Capt. Ole Grönn, N. 35° 00′, W. 9° 50′.*†	30.28	769.1	64	17.8	.....	ssw.	4	.....	3	.....	sw.	0	0	sm'h	.....	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. McCarthy.
Schr Annie R. Lewis, Capt. L. L. Lewis. Ponce, Porto Rico, W. I †*	30.10	764.5	76	24.4	.....	n.	1	.....	5?	.....	ene.	0	0	.....	.....	clear?	L. L. Lewis.
Bk. Dom Pedro II, Capt. C. E. Coffin, S. 1° 19′, W. 38° 51′*†	29.70	754.4	.....	.....	.....	ne. to ene.	.....	.....	.....	.....	ene.	.....	.....	light	n.	clear	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 50° 38′, W. 12° 12′*†	29.92	760.0	.....	.....	.....	se.	5	.....	.....	.....	se.	2 h'r	2 h'r	mod.	se.	misty	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 24° 36′, W. 40° 53′†	30.00	762.0	.....	.....	.....	nne.	3	.....	2	.....	nne.	0	0	sm'h	ene.	.....	.....
S. Enoch Train, Capt. H. D. Chapman. N. 54° 00′. E. 5° 55′*	30.34	770.6	.....	.....	.....	ene.	6	.....	10	.....	ene.	shr's	shr's	light	ne.	hazy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 53° 10′, E. 2° 49′*	30.35	770.9	.....	.....	.....	ene.	6	.....	10	.....	ene.	3 h'r	light	short	ene.	cloudy	J. C. Andersen.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.37	771.4	29	—1.7	.....	sw.	2	.....	2	.....	w.	0	0	sm'h	.....	clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. Morrison, S. 47° 22′, W. 81° 34′†	29.66	753.4	53	11.7	.....	nw.	4	.....	.....	.....	.....	3 h'r	3 h'r	sm'h	.....	foggy	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 43° 45′, W. 24° 11′	.....	.....	53	11.7	.....	w.	6	.....	2	.....	wnw.	3 h'r	h'vy	high	w.	squally	.....
Bk. Gamaliel, Capt. D. J. Anthony, S. 12° 28′, W. 34° 34′*†	29.05	737.9	.....	.....	.....	ene.	4	.....	0	.....	.....	0	0	reg.	e.	clear	.....
Bk. Geo. Booth, Capt D. Williams, N. 39° 34′, W. 64° 20′*†	29.80	756.9	48	8.9	.....	nw.	.....	.....	0	.....	.....	0	0	.....	nw.	.....	D. Williams.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 38° 55′, W. 12° 51′*	30.02	762.5	.....	.....	.....	wnw.	6	.....	10	.....	.....	0	0	long	var.	foggy	T. Minssen.
Bk. New York, Capt. J. E. Sorensen. Off Gibralter Mediterranean*†	30.45	773.4	.....	.....	.....	e.	4	.....	.....	.....	e.	0	0	mod.	e.	cloudy	Sorensen & Arvesen.
Bk. Peppina, Capt. Giov. S. d. Anconaz, Fiume, Austria†	30.29	769.4	53	11.7	66	calm	0	.....	5	.....	n.	.....	.....	.....	.....	fair	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 7° 35′, W. 31° 30′*†	29.90	759.4	.....	.....	.....	ene.	.....	.....	8	.....	ene.	0	0	.....	.....	.....	J. Connolly.
Bk. Stella, Capt. H. N. T. Somer, N. 2° 40′, W. 24° 18′*	29.83	757.7	79.7	26.5	96	n.	1	.....	4	.....	s.	.....	.....	sm'h	.....	.....	.....
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.25	768.3	58	14.4	93	sse.	4	.....	8	.....	s.	0	0	.....	.....	cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 33° 48′, W. 16° 00′*†	30.40	772.1	.....	.....	.....	n.	3	.....	0	.....	.....	.....	.....	sm'h	.....	.....	I. W. Covert.
Bk. Winifred, Capt. N P. Dutton, N. 18° 53′, W. 34° 15′*†	30.15	765.8	.....	.....	.....	ene.	.....	.....	.....	.....	.....	.....	.....	.....	.....	clear	N. P. Dutton.
S. Woodbury Capt. H. T. Schmidt, N. 36° 34′, W. 71° 35′*†	30.05	763.3	42	5.6	75	nnw.	6	.....	.....	.....	nw.	.....	.....	hv'y	nw.	cloudy	H. T. Schmidt.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,

Brig. & Bvt. Maj. Gen'l,

Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Chief Signal Officer, U. S. A.

Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JANUARY 31, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.22	767.6	68.0	20.0	66	w.			2		0			0	0	clear	Moiroud.
Algiers			30.28	769.0	56.1	13.4	81	w.			1		0			0	0	clear	Nicolas.
La Calle			30.28	769.2	64.4	18.0	67	ene.			1		1			0	0	fair	Fonfrède.
Tunis			30.32	770.1															Jacques.
Sfax																			Gau.
Saida			30.32	770.1	55.8	13.2	47	sw.			3		2			0	0	fair	Perès.
Tebessat			30.35	771.0	56.1	13.4	19	nw.			3		0			0	0	clear	Derché.
Geriville					54.7	12.6	77	sw.			3		1			0	0	fair	Louchamp.
Laghouat			30.41	772.3	52.2	11.2	78	w.			1		0			0	0	clear	Herbin.
Biskra			30.39	772.0	64.0	17.8	37	nw.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.18	766.6	30.27	768.8	58.0	14.4	61	ssw.	11	4.9			4			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.96	761.0	30.54	775.8	35.6	2.0	78	ne.			3		2			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.85	758.1	30.68	779.2	24.4	— 4.2	81	n.	19.2	8.6			6			0	0		Dr. Wierzbiski.
Eperies	29.56	750.7	30.50	774.8	26.6	— 3.0	61	n.			5		10 ks			0	0		Julius Mikolik.
Gratz	29.19	741.5	30.52	775.1	34.2	1.2	67	ssw.			2		4			0	0		Andreas Rospini.
Hermannstadt	28.76	730.6	30.29	769.4	27.3	— 2.6	89	nw.			3		10			0.028	0.7		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.24	742.6	30.68	779.2	30.2	— 1.0	88	ne.			2		10 k			0	0	covered	The Staff.
Lemberg	29.52	749.8	30.60	777.2	21.7	— 5.7	62	ne.			3		5			0.024	0.6		Dr. T. Stanecki.
Pola	30.22	767.7	30.34	770.7	46.4	8.0	52	e.			5		0			0	0		I. R. Hydrographic Office.
Szathmar	29.90	759.5	30.37	771.3	27.9	— 2.3	71	nw.			4		1			0	0		Joseph Midlinszky, S. J.
Szegedin	30.16	766.0	30.46	773.0	32.9	0.5	64	nw.			3		8			0	0		Karl Stancel.
Trieste	30.24	768.1	30.34	770.7	44.6	7.0	47	ne.			4		2			0	0		Rieder.
Vienna	29.92	760.0	30.69	779.5	32.4	0.2	56	n.			2		10			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae·
Maesseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.54	775.7	30.64	778.2	41.2	5.1	75	sse.	28	12.5			10			0.120	3.0	squally	W. Boswell.
Armagh, Observatory	30.18	766.0	30.43	772.9	44.9	7.2	91	sse.	23	10.3			10					raining	S. Call.
Bidston, Liverpool Obs'y			30.61	777.5	49.7	4.8	85	se.	25	11.2			10					overcast	John Hartnup.
Bolton, Sharples	30.08	764.0	30.64	778.2	38.7	3.7	84	se.	7	3.1			10					gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.26	768.6	30.66	778.7	39.2	4.0	86	se.			1		10			0.01	0.3	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	81.0	27.2	70	ne.			3		3					d. clouds	Corpl. J. Surgenor.
Cardington			30.66	778.7	40.0	4.4	88	e.			0.6		10					overcast	John McLaren.
Chatham, School M. E.	30.53	775.4	30.67	779.0	38.4	3.6	90	e.			2		10					overcast	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.31	769.9	30.54	775.7	46.7	8.2	83	ese.			5		10					overcast	The Staff.
Fort Napier, Natal	27.76	705.1	29.98	761.5	67.2	19.6	84	e.			1		8					overcast	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	87.0	30.6	72	nw.			1		3					d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.28	769.1	51	10.6	93	s.			3		10			0	0	overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.24	768.1	30.30	769.6	58.4	14.7	85	ne.			4		7						Cpl. O. Baldwin
Glasgow, Observatory	30.36	771.1	30.57	776.5	40.6	4.8	80	ese.			3		10					raining	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.49	774.4	30.67	779.0	39.1	3.9	81	ese.			2		10					overcast	The Staff.
Guernsey	30.26	768.6	30.57	776.5	41.0	5.0	91	e.			1		10					overcast	A. Collenette, F. M. S.
Kew, Observatory	30.64	778.2	30.67	779.0	39.6	4.2	82	e.	19	8.5			10					misty	The Staff.
Leicester, Museum	30.38	771.6	30.66	778.7	40.0	4.4	81	se.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.13	765.3	30.21	767.3	61.0	16.1	60	nw.			1		3					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.04	763.0	30.08	764.0	73.0	22.8	87	se.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.12	765.0	30.67	779.0	38.5	3.6	87	ese.			2		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.42	772.7	30.65	778.5	39.6	4.2	80	e.			3		10					overcast	The Staff.
Plymouth	30.47	773.9	30.55	776.0	46.5	8.1	85	ese.			3		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.49	774.4	41.2	5.1	96	sse.	30	13.4			8					d clouds	Rev. C. Clouston, L. L. D
Scutari Cemetery, Turkey	30.03	762.7	30.10	764.5	41.0	5.0	77	sw.			1		10			blank	blank	gloomy	W. H. Lyne
Sheffield	30.37	771.4	30.69	779.5	39.0	3.9	83	s.			2		10			0	0	overcast	W. F. Cooper.
Siloth Rectory	30.56	776.2	30.59	777.0	41.1	5.1	78	ese.			4		10			0.030	0.8	raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.65	778.5	39.9	4.4	77	se.	15	6.7			10					overcast	Rev. S. J. Perry.
Stratfield Turgiss					39.5	4.2	82	e.			3		10					overcast	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.47	773.9	30.53	775.4	49	9.4	85	e.			7		8					gloomy	W. Newcombe.
Valencia, Observatory	30.28	769.1	30.31	769.9	52.6	11.4	85	sse.	30	13.4			10					raining	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.82	757.4	29.87	758.7	14	—10.0	87	ne.	3	1.3			10 s			0	0	cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	29.79	756.7	29.86	758.4	9	—12.8	91	n.	1	0.4			10 s		n.	0	0	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.84	757.9	29.86	758.4	1	—17.2	83	ne.	15	6.7			10 n		calm	inap.	inap.	light snow	J. McWilliams.
Fort Garry, Manitoba*	28.77	730.7	29.67	753.6	5	—15.0	96	ne.	8	3.6			10 ks		n.	0	0	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.79	756.7	29.92	760.0	20	— 6.7	96	w.	1	0.4		8 k	0	w.		0	0	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.49	749.0	29.84	757.9	27	— 2.8	88	sw.	9	4.0			10 ks		sw.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.57	751.1	29.78	756.4	20	— 6.7	96	s.	16	7.2			10 n			inap.	inap.	light snow	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nizon.
Parry Sound, Ontario*	29.00	736.6	29.72	754.9	29	— 1.7	92	s.	14	6.3			10 n		sw.	inap.	inap.	light snow	Rev. R. Moseley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.07	738.4	29.80	756.9	22	— 5.6	86	se.	5	2.2		8 ck	0	se.		0	0	fair	H. Morgan.
Port Stanley, Ontario	29.11	739.4	29.80	756.9	19	— 7.2	91	sw.	1	0.4			10 ks		sw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.43	747.5	29.77	756.1	20	— 6.7	100	w.			1		10 n		w.	inap.	inap.	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.20	741.7	29.68	753.9	23	— 5.0	88	calm	0	0			10 n			inap.	inap.	light snow	W. H. McIntyre.
Saugeen, Ontario*	29.00	736.6	29.76	755.9	18	— 7.8	87	s.	7	3.1		2 cs	0			0	0	clear	K. Stewart.
St. Andrews, N. B.	29.83	757.7	29.88	758.9	21	— 6.1	81	w.	1	0.4		0	0			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A
Sydney, C. B*	29.80	756.9	29.86	758.4	14	—10.0	83	w.	8	3.6		0	0			0	0	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.40	746.7	29.81	757.2	21	— 6.1	96	sw.	5	2.2		5 cs	0	w.		0	0	fair	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.84	757.9	29.91	759.7	30	— 1.1	85	w.	1	0.4		10 k	0	w.		0	0	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.49	749.0	29.77	756.1	10	—12.2		w.	5	2.2		0	0			0.60	15.2		John Dolany.
St. Pierre, N. F.																			N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.07	763.8	30.10	764.5	72.0	22.2	74	e.	8.1	3.6		0	1 s			0.050	1.3	clear	John Dathie.
Cape Town, C. G. H. Obs'y	29.94	760.5	29.98	761.5	82.2	27.9	51	s.	35	15.6		0	0			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow																			N. Titoushkin.
Zi-Ka-Wei, near Shanghai	30.43	773.0	30.46	773.7	35.6	2.0	98	n.	4.9	2.2			10			1.169	29.7	covered	M. Marc Dechevrens, S. J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.85	783.7	30.90	784.9	32.2	0.1	67	e.	11	5			0						Oversergent Fischer.
Fanöe	30.88	784.4	30.90	784.9	35.4	1.9	80	e.			2		1						Overloerer Lauridsen.
Godthaab, Greenland	28.60	726.4	28.64	727.5	9.0	—12.8	96	ne.			4		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.55	750.6	29.60	751.7	44.2	6.8		s.			8		10					rain	A. O. Thorlacius.
Thorshavn	30.35	770.8	30.38	771.7	42.1	5.6	82	s.	7	3			4						Overloerer Bergh.
Vestervig	30.80	782.4	30.89	784.7	34.0	1.1	83	calm			0		0						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.63	752.7	30.30	769.5	48.6	9.2	81	ese.			1	1 c	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	30.02	762.4	30.57	776.4	39.9	4.4	97	ne.			4		n		n.	0.055	1.4		M. Nicot, Director.
Arras, Engineer School	30.35	770.9	30.62	777.8	40.5	4.7	90	e.			2		n			0	0		M. Klein, Commandant.
Avignon, Normal School	30.17	766.4	30.25	768.4	53.2	11.8	54	nnw.			2		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.93	760.3	30.52	775.2	39.2	4.0	83	e.			1		10			0.08	2.	covered	M. Saillard, Director.
Beauvais, Normal School	30.34	770.6	30.62	777.8	40.1	4.5	77	e.			2		10			0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.39	772.0	40.3	4.6	93	s.			3		8		s.	0	0		M. Gobin, Director.
Bordeaux, Observatory	30.07	763.7	30.34	770.5	49.8	9.9	65	ne.			1		1			0	0	almost clear	M. Rayet, Director.
Bourges, Normal School	29.87	758.6	30.44	773.2	41.9	5.5	78	nne.			1		n		nne.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.24	768.0	30.48	774.1	49.6	9.8	89	ese.			1		8		ese.	1.614	41.0		M. de Kennaree, Dir.
Caen, Normal School	30.49	774.4	30.57	776.4	41.0	5	87	se.			1		10		e.	0	0	covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.17	766.3	30.50	774.8	41.5	5.3	87	e.			3		5	se.	e.	0	0	cloudy	M. Jadot, Director.
Charleville, Normal School	30.09	764.2	30.62	777.8	41.7	5.4	54	nne.			2		2			0	0	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.00	736.6	30.41	772.5	39.9	4.4	77	nw.			2		10			0	0	covered	M. Allnard, Director.
Cluny, Normal School	29.54	750.2	30.43	772.9	37.0	3.1	86	n.			4		fg					foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.95	753.2	30.59	776.9	30.5	2.5	93	e.			3		10	e.	e.	0.04	1.	covered	Dr. Coulet, Director.
Gap, Normal School	27.69	703.2	30.25	768.4	49.3	9.6	40	nw.			1					0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.10	739.0	30.24	768.1	52.3	11.3	61	sw.			2		5		sw.	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.50	749.4	30.30	769.6	45.0	7.2	56	ese.			1		ckn			0	0		M. Ablard, Director.
Guéret, Normal School	28.75	730.2	30.45	773.5	39.2	4	83	e.			1		10		e.	0.020	0.5	covered	M. Rivoire, Director.
Lamballe, Normal School	30.25	768.3	30.53	775.5	43.2	6.2	85	w.			1		5		w.	0.059	1.5	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.71	754.7	30.28	769.1	59.2	15.1	52	sw.			1	2 c	0			0	0	slightly cl'dy.	M. Chauvin, Director.
Lorient, Naval Observatory	30.40	772.1	30.50	774.7	50.0	10.0	74	e.			2		5		calm	0.157	4.0	½ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.33	744.9	30.40	772.1	38.7	3.7	87	n.			2		5 n	nw.	n.	0	0	cloudy	M. André, Director.
Mans, Normal School	30.22	767.5	30.54	775.8	39.4	4.1	86	w.			3		10			0.024	0.6	covered	M. Piboen, Director.
Marseille, Observatory	30.00	761.9	30.27	768.9	54.5	12.5	60	wnw.			2		8		wnw.	0	0		M. Stephan, Director.
Montlouis Pinstituteur	24.95	633.8	29.80	756.8	42.8	6.0	37	e.	5.6	2.5			0						M. Cave, for Dr. Fines.
Montpellier, Normal School	30.14	765.5	30.25	768.4	58.3	14.6	70	w.			1		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.72	754.9	30.55	775.9	37.8	3.2	83	nne.			2	0	8 kn			0.051	1.3	very cloudy	M. Hasse, Director
Nantes, Observatory	30.35	770.8	30.50	774.8	42.4	5.8	78	ene.			3-4	ck	7 k		ene.	0.094	2.4		M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.17	766.4	30.28	769.2	53.0	12.0	60	se.	1.8	0.8			1			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.34	541.9			30.5	2.5		ne.			1		1		ne.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.21	742.0	30.31	769.8	45.7	7.0	91									0	0		M. Tallieu.
Puy de Dôme Obs'y, Summit	25.32	643.1			27.1	—2.7	100	ne.			3		8			0	0	¾ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.37	771.5	30.41	772.3	49.6	9.8	72	ne.			3		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.25	768.4	30.47	774.0	46.0	7.8	72	ne.			4		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.08	713.1	30.27	768.8	46.8	8.2	75	n.			1		0			0	0	clear	M. Colrat, Director.
Rouen, Normal School	30.56	776.2	30.61	777.4	40.3	4.6	72	e.			3		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.42	772.7	30.58	776.7	39.7	4.3	78	e.			2		10		e.	0.04	1.	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.40	772.2	30.57	776.4	40.6	4.6	73	nne.			2		10		e.	0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.61	752.1	30.34	770.6	45.0	7.2	97	n.			1		fg	w.		0	0	light fog	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.06	763.5	30.55	776.0	38.8	3.8	76	ne.			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Davy, Director
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.80	756.9	30.67	779.1	34.7	1.5	55	ese.			4	0	2 k		se.	0.079	2.0		Prof. Dr. Hoh.
Berlin	30.63	777.9	30.82	782.7	36.5	2.5	56	ne.			1		7			0	0		Prof. Dr. Arndt.
Breslau	30.20	767.1	30.74	780.9	30.0	—1.1	52	nne.			4		5			0	0		Royal University Obs'y.
Carlsruhe	30.15	765.7	30.61	777.6	39.9	4.4	89	ne.			3		10	ne.		0	0		Albert Senz.
Cassel	30.00	762.0	30.72	780.2	34.0	1.1	93	e.			1		0			0.075	1.9		Dr. H. Möll.
Frankfort on the Main	30.31	769.9	30.76	779.8	35.6	2.0	66	nne.			3		0			0.043	1.1		Physical Society.
Friedrichshafen	28.98	736.2	30.48	774.3	39.4	4.1	79	ne.			6		8	ne.		0	0		Wilhelm, Chief Tel.
Hamburg	30.78	781.9	30.88	784.3	36.0	2.2	70	ne.			2		0			0	0		E. Preller.
Kiel	30.86	783.9	30.88	784.3	35.2	1.8	73	ne.			2		9			imp.	imp.		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.37	771.4	30.82	782.9	32.7	0.4	82	ne.			2		3			0	0		H. Leppig, Asst.
Magdeburg	30.63	778.1	30.84	783.3	36.1	2.3	94	ne.			2		0			0	0		Dr. Assmann.
Memel	30.70	779.7	30.74	780.9	25.8	—2.9	53	nne.			2	0	2 k					snowy	Issermann.
Munich	28.69	728.8	30.59	777.0	34.0	1.1	79	ne.			3		2	e.		0.433	11.0		Central Station.
Neufahrwasser	30.78	781.9	30.80	782.3	32.5	0.3	52	nne.			3		8			0.016	0.4		A. Lothes.
Neustadt, Palatinate	30.07	763.7	30.60	777.2	38.3	3.5	75	n.			0		10	n.		0	0		Dicknether.
Stuttgart	29.60	751.9	30.55	775.9	38.7	3.7	75	e.			1		10			0.008	0.2		Prof. Dr. Schoder.
Wustrow	30.89	784.7	30.92	785.3	36.1	2.3	91	ene.			1	0	1 s			0	0		Profs. Brandes & Reimer.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.72	755.0	30.12	765.0	54.7	12.6		nw.			0.5		0			0	0	clear	Schmidt & Wourlisch.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.98	761.4	30.03	762.7	71.4	21.9	57	sw.	12	5.4			4	sw.		0.01	0.3	d. clouds	
Deesa	29.43	747.5	29.90	759.6	79.7	26.5	34	nne.	10.0	4.5			7	w.		0	0	d. clouds	
Bombay	29.90	759.5	29.91	760.4	78.2	25.7	72	nnw.	16	7.2			6	wsw.		0	0	d. clouds.	
Poona, Yarrowda.	28.04	712.1	29.86	758.5	87.8	31.0	17	wnw.	17	7.6			6	w.		0	0	d. clouds	
Belgaum	27.39	695.7	29.91	759.8	80.5	26.9	28	s.	7	3.1			8	s.		0	0	d. clouds	
Lahore	29.19	741.5	29.97	761.2	59.6	15.3	71	w.	2.2	1.0			0			0.13	3.3	blue sky	
Roorkee	29.09	738.9	30.04	762.9	58.8	14.9	94	se.	1.4	0.6			10			0.23	5.8		
Agra	29.40	746.6	29.98	761.6	64.2	17.9	68	w.	5.4	2.4			10					drizzling	
Nagpur	28.87	733.3	29.90	759.4	86.5	30.3	21	sw.	4.4	2.0			0			0	0	blue sky	
Jubbulpore	28.55	725.2	29.92	760.0	74.2	23.4	28	nw.	1.9	0.8			0			0	0	blue sky	
Lucknow	29.52	749.7	29.89	759.3	81.2	27.3	34	calm	0.8	0.4			5	e.		0	0	d. clouds	
Allahabad	29.56	750.9	29.88	758.9	75.3	24.1	56	calm					1			0	0	d. clouds	
Patna	29.76	755.9	29.95	760.8	72.5	22.5	57	sse.	2.6	1.2			2	se.	se.	0	0		
Hazaribagh	27.92	709.1	29.93	760.3	78.8	26.0	25	wnw.	5.5	2.5			0			0	0	blue sky	
Cuttack	29.86	758.6	29.95	760.7	84.5	29.2	35	sw.	0.2	0.1			1			0	0	blue sky	
Calcutta, Alipore	29.93	760.1	29.95	760.7	79.5	26.4	70	calm					0			0	0	blue sky	
Dhubri	29.85	758.2	29.98	761.4	69.8	21.0	72	calm	8.4	3.8			0			0	0	blue sky	
Chittagong	29.90	759.4	29 99	761.7	73.1	22.8	75	w.	1.6	0.7			0			0	0	blue sky	
Sibsagar	29.69	754.0	30.04	763.0	61.6	16.4	90	ene.	2.5	1.1			10	w.	w.	0.02	0.5	d. clouds	
Jeypore	28.56	725.4	30.07	763 7	59.4	15.2	90	nne.	6.2	2.8			10	ne.		0.26	6.6	overcast	
Zanzibar, Africa	29.84	757.9			83.2	28.4	79	sw.	3.4	1.5			4			0	0	d. clouds	
Trichinopoly	29.70	754.4			82.0	27.8	60	e.	2	0.9			10			0	0	overcast	
Bellary	28.45	722.6			85.0	29.4	12	e.	3.5	1.6			10 ck			0	0	overcast	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.97	761.1	30.39	771.9	47.8	8.8	40	e.	5.6	2.5			0			0	0		Prof. Giovanni Clodig.
Milan	29.85	758.2	30.40	772.2	45.9	7.7	63	ne.	3.1	1.4			8	nnw.		0	0		Prof. Schiaparelli.
Padua	30.27	768.8	30.38	771.7	49.1	9.5	59	ene.	20.6	9.2			1			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.45	748.1	30.41	772.4	39.7	4.3	77	nne.	1.8	0.8			10			0.059	1.5		Prof. P. F. Denza.
Genoa	30.11	764.8	30.31	769.8	51.8	11.0	62	calm	0	0			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.40	721.4	30.41	772.3	37.8	3.2	71	w.			4		10			0	0		Prof. D. C. Bruno.
Pesaro	30.30	769.6	30.35	771.0	46.2	7.9	73	n.	4.2	1.9			7			0	0		Prof. Luigi Guidi.
Florence	30.06	763.5	30.33	770.3	42.8	6.0	79	ne.			2		10			0	0		Prof. Costantino Pitter.
Leghorn	30.23	767.8	30.32	770.1	49.8	9.9	84	ne.	3.1	1.4			10	w.		0.039	1.0		Prof. P. Monte.
Rome	30.08	764.1	30.26	768.7	50.7	10.4	55	n.	2.5	1.1			10			0	0		Prof. P. S. Ferrari.
Lecce	29.93	760.2	30.19	766.9	53.4	11.9	70	nnw.	13.0	5.8			6	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.32	744.8	30.24	768.2	51.1	10.6	75	ssw.	1.8	0.8			9	sw.		0	0		Prof. D. Conti.
Cagliari	30.07	763.7	30.27	768.8	54.1	12.3	51	nw.			2		4	nw.		0	0		Prof. A. Pacinotti.
Palermo	30.00	762.1	30.26	768.7	55.9	13.3	51	ene.	4.2	1.9			5	nw.		0	0		Prof. G. Ciacciatore.
Syracuse	30.18	766 6	30.23	767.8	55.4	13.0	66	e.	4.9	2.2			4	wnw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.70	754.4	30.24	768.1	52.7	11.5	70	ne.	0.7	0.3			10	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.31	566.6			22.5	— 5.3	90	ne.			2		8			0.118	3.0	misty	Prof. P. F. Denza.
Valdobbia	22.29	566.2			19.4	— 7.0	73	se.			6		10			0.472	12.0	covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.00	762.0	30.04	763.0	35.5	1.9	76	w.	25.5	11.4		0	6 s			0.283	7.2	stormy	
Hakodate	29.98	761.5	29.99	761.7	35.0	1.7	66	wnw.	27.0	12.1			5		w.	0	0	fair	
Hiroshima, I. M. Obs'y †	30.14	765 5	30.16	766 0	48.6	9.2	78	nne.	6.1	2.7		ck	10 s			0	0	covered	K. Susaki
Kanazawa	30.13	765.3	30.23	767.8	43.9	6.6	97	nne.	2.8	1.3			10 n					light rain	S. Endo.
Kioto	29.96	761.0	30.14	765.5	49.0	9.4	84	nw.	1.0	0.4		ck	10 s			0.004	0.1	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.01	762.2	30.22	767.6	48.6	9.2	93	n.	1.1	0.5			10 n			0.180	4.6	raining.	S. Takehayashi
Niigata	30.17	766.3	30.20	767.1	42.0	5.6	86	n.	8.7	3.9			10n			0.110	2.8	light rain	
Nobiru	30.02	762.5	30.03	762.7	42.6	5.9	76	nnw.	11.2	5.0		cs	10 s			0	0	cloudy	H. Midzushina.
Sapporo					32.1	0.1	87	sw.	10.8	4.8			10			0.005	0.1	snowing	
Tokei Obs'y, Yeddo	29.93	760.2	29.99	761.7	54.9	12.7	71	n.	4.9	2.2		8 ck		sw.	nne.	0.070	1.8	cloudy	The Staff.
Wakayama	30.07	763.8	30.12	765.0	52.3	11.3	82	nne.	4.0	1.8		ck	10 s	w.		0.142	3.6	light rain	Y. Kuwamura.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.63	752.6	29.82	757.4	77.3	25.2	80	e.	16.5	7.4		0	8k;ks;n		ese.	2.49	63.2	cloudy	Oliver & Figot.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato	23.69	601.7	29.91	759.7	52.7	11.5	71	calm	0	0		0	0			0	0		Vicente Fernandez
Leon	24.42	620.2	30.28	769.1	45.5	7.5	77	n.			1	0	0			0	0	blue sky	Prof. M. Leal.
Mazatlan	29.73	755.1	29.99	761.8	59.5	15.2	76	nw.			4	0	0			0	0	fine	F. Quijano, C. E.
Mexico, Central Obs'y	23.05	585.5	30.21	767 4	45.5	7.5	76	calm	0	0		0	2 s			0	0	fine	The Staff.
Morelia	24.30	617.3	30.54	775.9	50.5	10.3	78	se.			3	0	0			0	0	very fine	M. Tena, M. D.
Pabellon, Aguascallentes	23.90	607.1	29.99	761.7	48.7	9.3	55	calm			0	0	0			0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.6	30.32	770.0	44.2	6.8	80	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.11	612.5	30.05	763.4	53.0	11.7	63	se.			1	1	0	w.		0	0	clear	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Chávaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.51	571.8	30.24	768.1	46.6	8.1	58	w.	12.7	5.7		0	0			0	0	fine	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.72	780.2	30.72	780.2	37.0	2.8		ene.			3					0	0		
Groningen	30.78	781.8	30.84	783.2	35.2	1.8		e.			3					0	0		
Helder	30.78	781.9	30.78	781.9	33.3	0.7		ene.			4					0	0		
Hellevoetsluis	30.71	780.0	30.71	780.0	35.6	2.0	95	ene.			3					0	0		
Utrecht	30.71	779.9	30.75	781.1	37.8	3.2	47	ene.			3		10			0	0	dull	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.81	782.5	30.87	784.1	36.3	2.4	43	sse.	9	4			0			0	0		
Brono	30.58	776.8	30.62	777.8	41.0	5.0	55	wsw.	18	8			10			0.047	1.2		
Christiania	30.71	779.9	30.86	783.9	26.8	— 2.9	76	wsw.	0	0			0			0	0		
Gjæsvær	29.90	759.5	29.93	760.1	37.4	3.0		wsw.			8		10						
Lodingen	30.34	770.7	30.39	771.9	35.4	1.9	85	w.			5		8			0.020	0.5		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					58.1	14.5	86	wnw.	7.4	3.3			8			0.098	2.5		Dr. J. A. Sampaio.
Campo Major	29.25	743.0	30.28	769.0	53.6	12.0	73	e.	9.4	4.2			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.14	765.5	30.23	767.8	60.3	15.7	57	calm	0	0			3			0.071	1.8		Capt. D. A. de Cunha.
Lisbon, Observatory	29.88	758.9	30.25	758.3	52.3	11.3	98	e.	12.5	5.6			9			0.130	3.3		The Staff.
Ponta Delgada, Azores	30.24	768.2	30.32	770.0	60.4	15.8	75	wsw.	3.8	1.7			3			0.031	0.8		
Saint Paul de Loando	29.67	753.6	29.87	758.7	80.6	27.0	73	nnw.	0.7	0.3			8			0	0		
Serra da Estrella	25.42	645.7	30.30	769.7	37.0	2.8	100	se.	4.3	1.9			10			0.004	0.1	foggy	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.97	735.9	30.16	766.0	5.7	—14.6		ssw.	22	10		7 cs	0			0	0		Major K. Lasarew.
Archangel	30.11	764.9	30.13	765.4	11.5	—11.4	89	nw.	9	4			10			0	0		Capt. Ssellwerstow.
Astrakhan	30.16	766.1	30.08	764.0	21.7	— 5.7	65	w.	2	1		0	7 s			0.031	0.8	light clouds	Capt. Wisganow.
Barnaul	29.72	754.8	30.26	768.5	16.7	— 8.5	89	sw.	9	4			10			0.067	1.7		Meteorological Obs'y.
Dorpat	30.32	770.1	30.58	776.8	20.8	— 6.2	69	n.	13	6		0	0			0	0		Observatory.
Ekaterinburg	28.40	721.3	29.40	746.8	12.4	—10.9	93	sse.	2	1			10			0.114	2.9	snowing	Meteorological Obs'y.
Kasan	29.24	742.7	29.53	750.1	8.1	—13.3	71	ssw.	2	1			10			0	0		Observatory.
Kertch	29.98	761.6	30.00	762.1	31.5	— 0.3	87	wnw.	2	1		0	8 ks			0	0		Lagorio & Sastyrez.
Kieff	29.51	749.5	30.20	767.0	17.6	— 8.0	68	nw.	11	5			9 ks;n			0.020	0.5	light snow	Observatory.
Lugan	29.71	754.7	29.93	760.2	24.4	— 4.2	77	wsw.	13	6			10			0	0		Meteorological Obs'y.
Moscow	29.35	745.4	29.87	758.6	14.4	— 9.8	67	n.	27	12		0	8 ks			0.016	0.4		Meteorological Obs'y.
Nikolaiev	30.08	764.1	30.15	765.9	29.1	— 1.6	66	n.	22	10		0	2 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.13	765.4	30.22	767.6	—10.1	—23.4	90	calm	0	0			4			0	0		Lieut. Iwanow.
Pekin, China	30.52	775.2	30.66	778.8	23.7	— 4.6	47	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	30.43	772.8	30.44	773.2	17.6	— 8.0	62	nnw.	13	6		0	0			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.71	729.2	30.37	771.4	33.1	0.6	68	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.60	726.3	30.05	763.2	42.6	5.9	54	nw.	13	6			8 s			0	0		Physical Observatory.
Warsaw	30.21	767.3	30.67	778.9	25.7	— 3.5	47	nnw.	13	6		0	1 k						Astronomical Obs'y.
Wilna	30.11	764.7	30.57	776.4	21.2	— 6.0	56	nw.	4	2			1			0	0		Berg, Assistant.
Yeniseisk	30.21	767.4	30.54	775.7	—.4.4	—20.2	80	e.	2	1			0			0	0		M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.30	769.6	43	6.1	91	sse.			7		10			0.2	5.	raining	Andrew Gibb.
Monach Lt. House, Hebrides																			J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.17	766.2	30.26	768.7	55.4	13	70	sw.	3.6	1.6			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.27	768.9	30.33	770.4	61.0	16.1	94	se.	4.0	1.8		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.30	693.3	30.34	770.6	48.9	9.4	64	s	2.2	1.0		0	2			0	0	light clouds	Domingo Martin.
Madrid, Royal Obs'y	28.04	712.3	30.34	770.7	40.4	8.0	76	s.	1.6	0.7		6	0	s.		0	0	light clouds	The Staff.
Murcia, Met. Obs'y	30.17	766.2	30.32	770.1	57.7	14.3	69	ene.	1.1	0.5		3	4	w.		0	0	cloudy.	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.30	744.1	30.20	767.0	58.3	14.6	60	se.	6.3	2.8			10			0	0	covered.	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.92	760.0	29.99	761.7	69.6	20.9	90	ese.	3.1	1.4		0	fg.			0	0	foggy	Benito Vines, S. J.
Manilla, Philippine Islands	29.95	760.8	30.01	762.3	80.6	27.0	70	ese.	3.5	1.6		1 c	7 ck		ene.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.19	766.7	30.29	769.2	60.3	15.7	65	se.	11.7	5.3		2	8	s.	se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.01	762.2	30.10	764.5	73.0	22.8	95	calm	0	0		4 cs	5 k	se.	se.	0.177	4.5	cloudy	E. Gadea, Chief Engu'r.
Tuguegarao, Philippine Id's	29.92	760.0	30.05	763.3	76.5	24.7	88	se.	1.1	0.5			8 ck		se.	inap.	inap.	covered.	José L. Yrastorza.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.37	771.5	30.41	772.5	20.5	— 6.4	79	nw.			2		8			0	0		
Umea	30.52	775.5	30.58	776.8	29.1	— 1.6	76	nw.			2		6			0	0		
Hernosand	30.65	778.6	30.71	779.9	36.5	2.5	60	wnw.			2		0			0	0		
Stockholm	30.61	777.4	30.78	781.9	30.2	— 1.0	69	nw.			2		1			0	0		
Wisby	30.68	779.3	30.74	780.8	31.3	— 0.4	85	ne.			4		5			0	0		
Sub-Series.																			
Upsala	30.68	779.2	30.76	781.4	31.6	— 0.2	69	w.	4.9	2.2			1			0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.90	734.1	30.38	771.6	37.6	3.1	93	n.			1					0.031	0.8	raining	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.14	765.5	43.5	6.4	68	ese.	4	2.0			10		n.	0	0		The Observatory.
Valona			30.18	766.6	55.9	13.3		w.			1		5			0	0	cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.04	763.0	63.0	17.2	52	sw.			3	0	1 ks		sw.	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.		
Albany, New York	29.89	759.2	29.98	761.5	23	— 5.0	88	s.	2	0.9			10 s			0	0	cloudy	
Alpena, Michigan	29.01	736.8	29.72	754.9	20	— 6.7	70	sw.	6	2.7		0	4 s		sw.	0	0	fair	
Atlanta, Georgia	28.49	723.6	29.72	754.9	34.0	1.1	100	ne.	5	2.2			10 s		calm	1.06	26.9	cloudy	
Atlantic City, New Jersey	29.92	760.0	29.93	760.2	32	0.0	88	calm	0	0			10 n			0.11	2.8	heavy snow	
Augusta, Georgia	29.53	750.0	29.73	755.1	36.2	2.3	89	calm	0	0			10 n			1.24	31.5	light rain	
Baltimore, Maryland	29.83	757.7	29.88	758.9	30	— 1.1	100	sw.	2	0.9			10 n			0.10	2.5	light snow	
Barnegat, New Jersey	29.93	760.2	29.95	760.7	31.0	— 0.6	85	sw.	3	1.3			10 n			inap.	inap.	light snow	
Bismarck, Dakota	27.73	704.3	29.73	755.1	9	—12.8	80	calm	0	0			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.08	687.8	30.01	762.2	11	—11.7	100	nw.	1	0.4			10 s		calm	0.23	5.8	cloudy	
Boston, Massachusetts	29.82	757.4	29.99	761.7	23.0	— 5.0	61	sw.	7	3.1			10s;hz			0	0	cloudy	
Brownsville, Texas	30.03	762.7	30.08	764.0	49	9.4	86	nw.	8	3.6		10 cs	0			0.02	0.5	cloudy	
Buffalo, New York	29.04	737.6	29.84	757.9	23.3	— 4.8	86	se.	11	4.9			10 s			inap.	inap.	cloudy	
Burlington, Vermont	29.58	751.3	29.89	759.2	20.7	— 6.3	71	s.	13	5.8		0	0			0	0	clear	
Cairo, Illinois	29.36	745.7	29.78	756.4	29.5	— 1.4	88	nw.	8	3.6			10 s		calm	0.47	11.9	cloudy	
Campo, California	27.51	698.7	30.14	765.5	21.8	— 5.7	87	e.	3	1.3		0	0			0	0	clear	
Camp Thomas, Arizona	27.32	693.9	30.15	765.8	22.5	— 5.3	94	calm	0	0		0	0			0	0	clear	
Cape Henry, Virginia	29.71	754.6	29.73	755.1	43	6.1	93	e.	34	15.2			10 n			0.54	13.7	heavy rain	
Cape May, New Jersey	29.86	758.4	29.89	759.2	32	0.0	83	ne.	3	1.3			10 n		ne.	0.06	1.5	heavy snow	
Castroville, Texas	29.21	741.9	30.06	763.5	38	3.3	82	n.	2	0.9		0	0			0.01	0.3	clear	
Cedar Keys Florida	29.78	756.4	29.80	756.9	66	18.9	93	s.	27	12.1			10 ks		w	0	0	cloudy	
Champaign, Illinois	28.92	734.6	29.79	756.7	25.8	— 3.4	84	n.	10	4.5			10 n		n.	0.03	0.8	light snow	
Charleston, S. Carolina																			
Charlotte, N. Carolina	28.81	731.8	29.70	754.4	32.0	0.0	88	ne.			1		10 n		ne.	0.90	22.9	sleeting	
Chattanooga, Tennessee	28.86	733.0	29.72	734.9	35.0	1.7	89	sw.	7	3.1			10 n		calm	0.89	22.6	light snow	
Cheyenne, Wyoming	23.68	601.5	29.93	760.2	30.2	— 1.0	36	w.	12	5.4		0	0			0	0	clear	
Chicago, Illinois	28.98	736.1	29.73	755.1	28.0	— 2.2	92	sw.	1	0.4			10 s			0	0	cloudy	
Chincoteague, Virginia	29.83	757.7	29.85	758.2	32.5	0.3	100	e.	9	4.0			10 n		e.	0.25	6.3	heavy snow	
Cincinnati, Ohio	28.96	735.6	29.65	753.1	32	0.0	78	ne.	4	1.8			10 n			0.31	7.9	light snow	
Cleveland, Ohio	28.97	735.8	29.75	755.6	25	— 3.9	68	e.	4	1.8			10 s			0	0	cloudy	
Coleman City, Texas																			
Columbus, Ohio	28.79	731.3	29.69	754.1	28	— 2.2	88	ne.	5	2.2			10 n			0.08	2.0	light snow	
Concho, Texas	28.04	712.2	30.06	763.5	35	1.7	82	w.	9	4.0		0	0			0	0	clear	
Davenport, Iowa	29.08	738.6	29.79	756.7	30	— 1.1	68	w.	6	2.7			10 s		w.	0	0	cloudy	
Dayton, Washington T'y	28.18	715.8	29.98	761.5	31	— 0.6	88	sw.	6	2.7			10 s			0.18	4.6	threatening	
Deadwood, Dakota	24.97	634.2	29.92	760.0	24	— 4.4	84	sw.	4	1.8			10 s			0	0	cloudy	
Decatur, Texas					36	2.2	69	sw.	8	3.6		0	0			0.10	2.5	clear	
Delaware Breakwater, Del.	29.88	758.9	29.90	749.4	31	— 0.6	100	e.	15	6.7			10 n		e.	0.15	3.8	light snow	
Denison, Texas	29.14	740.1	29.98	761.5	27.3	— 2.6	77	w.	7	3.1			10 s			0.11	2.8	cloudy	
Denver, Colorado	24.44	620.8	29.96	761.0	34.8	1.6	61	se.	12	5.4		0	0			0	0	clear	
Des Moines, Iowa	28.80	731.5	29.77	756.1	28	— 2.2	77	w.	6	2.7			10 s		w.	0.02	0.5	cloudy	
Detroit, Michigan	29.02	737.1	29.78	756.4	31.0	— 0.6	78	s.	4	1.8			10 s		calm	0	0	cloudy	
Dodge City, Kansas	27.20	690.9	29.94	760.5	16.5	— 8.6	83	w.	11	4.9		0	0			0.02	0.5	clear	
Dubuque, Iowa	28.98	736.1	29.76	755.9	27.2	— 2.7	77	sw.	3	1.3			10 s		calm	0	0	cloudy	
Duluth, Minnesota	28.88	733.5	29.64	752.8	20	— 6.7	70	sw.	4	1.8		0	0			0	0	clear	
Eagle Pass, Texas	29.28	743.7	30.12	765.0	38.1	3.4	89	sw.	1	0.4		0	0			inap.	inap.	clear	
Eagle Rock, Idaho	25.17	639.3	30.13	765.3	5	—15.0	79	s.	8	3.6			10 s			0	0	cloudy	
Eastport, Maine	29.84	757.9	29.90	759.4	22.5	— 5.3	66	w.	7	3.1		0	0			0	0	clear	
El Paso, Texas	26.32	668.5	30.20	767.1	25	— 3.9	88	calm	0	0		0	0			0	0	clear	
Erie, Pennsylvania	29.03	737.3	29.80	756.9	26	— 3.3	88	se.	3	1.3			10 s			0	0	cloudy	
Escanaba, Michigan	28.96	735.6	29.68	753.9	19	— 7.2	70	sw.	5	2.2		0	0			0	0	clear	
Florence, Arizona																			
Fort Apache, Arizona	25.06	636.5	30.18	766.6	18	— 7.8	61	ne.	8	3.6		0	0			0	0	clear	
Fort Assinnaboine, Montana	26.77	679.9	29.81	757.2	25	— 3.9	64	w.	11	4.9			10 s			0	0	cloudy	
Fort Bennett, Dakota	28.03	711.9	29.77	756.1	7	—13.9	80	calm	0	0		0	0			0	0	clear	
Fort Benton, Montana	26.85	682.0	29.83	757.7	28	— 2.2	77	sw.	12	5.4			10 s		sw.	0	0	cloudy	
Fort Buford, Dakota	27.52	699.0	29.72	754.9	20	— 6.7	73	s.	3	1.3		c	0			0	0	clear	
Fort Custer, Montana	26.47	672.3	29.85	758.2	25	— 3.9	76	s.	5	2.2		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.19	639.8	30.17	766.3	36	2.2	72	sw.	8	3.6		0	0			0	0	clear	
Fort Elliott, Texas	27.08	687.8	30.02	762.5	18	— 7.8	58	nw.	12	5.4		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.33	745.0	29.93	760.2	29.5	— 1.7	88	n.	8	3.6			10 s			0.05	1.3	cloudy	
Fort Grant, Arizona	25.20	640.1	30.10	764.5	21	— 6.1	64	se.	4	1.8		0	0			0	0	clear	
Fort Griffin, Texas	28.66	728.0	30.04	763.0	32	0.0	88	sw.	6	2.7		0	0			0	0	clear	
Fort Keogh, Montana	27.06	687.3	29.75	755.6	30	— 1.1	59	w.	19	8.5			10 s		w.	0	0	cloudy	
Fort Macon, North Carolina	29.65	753.1	29.66	753.4	58	14.4	100	sw.	15	6.7			10 n		sw.	1.35	34.3	heavy rain	
Fort McKavett, Texas	27.76	705.1	30.15	765.8	32.1	0.1	71	w.	4	1.8		0	0			0	0	clear	
Fort Missoula, Montana	26.48	672.6	29.94	760.5	13	—10.6	83	ne.	3	1.3		6 k	0		sw.	0.03	0.8	fair	
Fort St. Michaels, Alaska	28.89	733.8	28.92	734.6	3	—16.1	100	n.	18	8.0		0	8 ks		n.	0.39	9.9	fair	
Fort Shaw, Montana	26.03	661.2	29.89	759.2	24	— 4.4	76	w.	18	8.0		4 k	0			0	0	fair	
Fort Sill, Indian Territory	28.69	728.7	30.02	762.5	11	—11.7	100	calm	0	0		0	0			inap.	inap.	clear	
Fort Stevenson, Dakota	27.65	702.3	29.71	754.6	10	—12.2	80	calm	0	0			10 s		calm	0	0	cloudy	
Fort Verde, Arizona					19	— 7.2	58	nw.			2	0	0			0	0	clear	
Fredericksburg, Texas	28.22	716.8	30.04	763.0	40	4.4	73	n.	7	3.1		0	0			0	0	clear	
Galveston, Texas	29.95	760.7	29.99	761.7	42	5.6	91	nw.	10	4.5		0	5 s			0.54	13.7	fair	
Grand Haven, Michigan	29.00	736.6	29.71	754.6	26.0	— 3.3	88	se.	4	1.8		0	0			0	0	clear	
Hatteras, North Carolina	29.64	752.8	29.66	753.4	59	15.0	100	se.	40	17.9			10 n		se.	0.57	14.5	light rain	
Helena, Montana	25.47	646.9	29.90	759.4	26	— 3.3	67	sw.	16	7.2		0	0			0	0	clear	
Henrietta, Texas	28.99	736.3	30.06	763.5	17	— 8.3	83	w	5	2.2		0	0			inap.	inap.	clear	
Huron, Dakota	28.23	717.0	29.77	756.1	9.3	—12.6	60	s.	2	0.9		0	0			0	0	clear	
Indianapolis, Indiana	28.82	732.0	29.66	753.4	27	— 2.8	92	ne.	3	1.3			10 n		ne.	0.02	0.5	light snow	
Indianola, Texas	29.96	761.0	30.00	762.0	44.4	6.9	93	w.	2	0.9		0	2 k		nw.	0.02	0.5	clear	
Jacksboro, Texas	28.85	732.8	30.09	764.3	25	— 3.9	73	sw.	3	1.3		0	0			inap.	inap.	clear	
Jacksonville, Florida	29.73	755.1	29.78	756.4	66	18.9	90	s.	18	8.0		2 cs	5 k		sw.	0.52	13.2	fair	
Keokuk, Iowa	29.09	738.9	29.79	756.7	25.5	— 3.6	80	calm	0	0			10 s			0.01	0.3	cloudy	
Key West, Florida	29.95	760.7	29.98	761.5	74.0	23.3	82	sw.	7	3.1		0	4 k;s		sw.	0	0	fair	
Kittyhawk, North Carolina	29.71	754.6	29.73	755.1	46	7.8	100	se.	21	9.4			10n;fog			0.80	20.3	light rain	
Knoxville, Tennessee	28.58	725.9	29.66	753.4	33	0.6	100	sw.	4	1.8			10 n			0.52	13.2	sleeting	
La Crosse, Wisconsin	28.85	732.8	29.69	754.1	30	— 1.1	56	sw.	6	2.7			10 s		calm	0	0	cloudy	
La Mesilla, New Mexico	26.14	663.9	30.16	766.1	25.0	— 3.9	88	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	28.92	734.6	29.88	758.9	25	— 3.9	73	w.	2	0.9			10 s			0.07	1.8	cloudy	
Lewiston, Idaho	29.10	739.1	29.97	761.2	25	— 3.9	48	e.	1	0.4		0	0			0	0	clear	
Little Rock, Arkansas	29.53	750.0	29.86	758.4	32	0.0	88	sw.	4	1.8			10 s			0.62	15.7	cloudy	
Los Angeles, California	29.88	758.9	30.28	769.1	41.3	5.2	82	ne.	4	1.8		0	0			0	0	clear	
Louisville, Kentucky	29.03	737.3	29.62	752.3	30.0	— 1.1	88	n.	4	1.8			10 n		calm	0.22	5.6	heavy snow	
Lynchburg, Virginia	29.02	737.1	29.74	755.4	32.5	0.3	94	ne.	2	0.9			10 n			0.50	12.7	light snow	
Mackinac City, Michigan																			
Madison, Wisconsin	28.64	727.4	29.74	755.4	26	— 3.3	76	sw.	2	0.9			10 s		calm	0	0	cloudy	
Marquette, Michigan	28.83	732.3	29.61	752.1	27	— 2.8	77	sw.	14	6.3		0	5 s		w.	0	0	fair	
Mason, Texas	28.31	719.1	30.05	763.3	39.8	4.3	73	w.	11	4.9		0	0			0	0	clear	
Memphis, Tennessee	29.48	748.8	29.84	757.9	31	— 0.6	100	w.	4	1.8			10 s			0.85	21.6	cloudy	
Milwaukee, Wisconsin	28.93	734.8	29.73	755.1	29	— 1.7	77	s.	4	1.8		3 ck	4 s			0	0	fair	

STATIONS	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.77	756.1	29.81	757.2	47.0	8.3	86	nw.	10	4.5	.....	3 cs	7 ks	nw.	nw.	0.76	19.3	cloudy	
Montgomery, Alabama	29.54	750.3	29.78	756.4	41	5.0	96	nw.	4	1.8	.....	.....	10 s	.....	.....	1.35	34.3	threatening	
Moorhead, Minnesota	28.60	726.4	29.71	754.6	— 2	—18.9	65	n.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Morgantown, W. Virginia	28.54	724.9	29.60	751.8	33.5	0.8	85	calm	0	0	.....	.....	10 n	.....	.....	0.35	8.9	light snow	
Mt. Washington, N. H.	23.30	591.8	29.92	760.0	4.0	—15.6	74	nw.	48	21.5	.....	3 c	2 s	.....	nw.	0	0	fair	
Nashville, Tennessee	29.09	738.9	29.65	753.1	35.3	1.8	94	sw.	3	1.3	.....	.....	10 ks	.....	sw.	0.55	14.0	cloudy	
New Haven, Connecticut	29.86	758.4	29.98	761.5	19	— 7.2	76	calm	0	0	.....	.....	10s;sk	.....	w.	0	0	cloudy	
New London, Connecticut	29.95	760.7	30.00	762.0	25	— 3.9	73	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	
New Orleans, Louisiana	29.82	757.4	29.88	758.9	46.0	7.8	76	nw.	15	6.7	.....	.....	10 s	.....	nw.	0.37	9.4	cloudy	
Newport, Rhode Island	29.94	760.5	30.00	762.0	28.2	— 2.1	83	sw.	7	3.1	.....	.....	10 s	.....	calm	0	0	cloudy	
New River, N. Carolina	.....	.....	.....	.....	55	12.8	100	s.	.....	.....	1	.....	10 n	.....	.....	1.05	26.7	light rain	
New Shoreham, Rhode I'd.	29.98	761.5	30.01	762.2	30.0	— 1.1	77	w.	1	0.4	.....	10 cs	0	.....	.....	0	0	cloudy	
New York, New York	29.82	757.4	30.01	762.2	26.5	— 3.1	82	sw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
Norfolk, Virginia	29.70	754.4	29.73	755.1	38	3.3	100	e.	15	6.7	.....	.....	10 n	.....	.....	0.50	12.7	light rain	
North Platte, Nebraska	26.80	680.7	29.92	760.0	15.6	— 9.1	78	w.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Olympia, Washington T'y	29.93	760.2	29.97	761.2	34.0	1.1	84	sw.	1	0.4	.....	.....	10 s	.....	calm	0.31	7.9	cloudy	
Omaha, Nebraska	28.55	725.2	29.82	757.4	22.5	— 5.3	78	sw.	5	2.2	.....	0	0	.....	.....	0.04	1.0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.63	752.6	29.65	753.1	—37.7	—38.7	76	ne.	12	5.4	.....	2 c	0	.....	.....	0	0	clear	
Oswego, New York	29.54	750.3	29.89	759.2	20.4	— 6.4	75	se.	7	3.1	.....	4 cs	0	.....	.....	Inap.	Inap.	fair	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	29.77	756.1	29.80	756.9	53.7	12.1	84	nw.	16	7.2	.....	.....	10 s	.....	w.	0.81	20.6	cloudy	
Philadelphia, Pa.	29.91	759.7	29.97	761.2	30	— 1.1	88	sw.	4	1.8	.....	.....	10 n	.....	.....	Inap.	Inap.	light snow	
Pike's Peak, Colorado	17.30	439.4	30.00	762.0	0	—17.8	83	nw.	46	20.6	.....	1 cs	0	.....	.....	0	0	clear	
Pioche, Nevada	23.96	608.6	30.16	766.1	21	— 6.1	64	s.	13	5.8	.....	10 k	0	s.	.....	0	0	cloudy	
Pittsburg, Pennsylvania	28.92	734.6	29.77	756.1	27.0	— 2.8	88	ne.	4	1.8	.....	.....	10 n	.....	.....	0.01	0.3	light snow	
Port Eads, Louisiana	29.88	758.9	29.88	758.9	50.5	10.3	86	nw.	18	8.0	.....	.....	10 k	.....	nw.	0.05	1.3	cloudy	
Port Huron, Michigan	29.04	737.6	29.77	756.1	20.8	— 6.2	82	s.	3	1.3	.....	10 cs	sk	calm	calm	0	0	cloudy	
Portland, Maine	29.87	758.7	29.92	760.0	20	— 6.7	70	sw.	4	1.8	.....	3 cs	3 s	sw.	calm	0	0	fair	
Portland, Oregon	29.99	761.7	30.06	763.5	36.0	2.2	89	s.	4	1.8	.....	.....	10 ks	.....	nw.	0.43	10.9	cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	60	15.6	100	sw.	35	15.6	.....	.....	10 n	.....	sw.	1.07	27.2	heavy rain	
Prescott, Arizona	24.75	628.6	30.13	765.3	4	—15.6	57	w.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Punta Rassa, Florida	29.91	759.7	29.92	760.0	72	22.2	84	s.	20	8.9	.....	0	hz	.....	.....	0	0	clear	
Red Bluff, California	29.68	753.9	30.06	763.5	42.8	6.0	94	s.	10	4.5	.....	.....	10 s	.....	s.	0.08	2.0	cloudy	
Rio Grande City, Texas	29.82	757.4	30.07	763.8	43	6.1	85	ne.	2	0.9	.....	5 c	0	calm	.....	0	0	fair	
Rochester, New York	29.14	740.1	29.85	758.2	23	— 5.0	88	s.	5	2.2	.....	10 cs	0	sw.	.....	0	0	cloudy	
Roseburg, Oregon	29.54	750.3	30.10	764.5	34	1.1	89	sw.	1	0.4	.....	.....	10 ks	.....	.....	0.54	13.7	cloudy	
Sacramento, California	30.05	763.3	30.13	765.3	43.8	6.6	93	se.	12	5.4	.....	.....	10 n	.....	.....	Inap.	Inap.	light rain	
St. Louis, Missouri	29.16	740.7	29.80	756.9	24.9	— 3.9	88	nw.	6	2.7	.....	.....	10 n	.....	.....	0.26	6.6	light snow	
St. Paul, Minnesota	28.72	729.5	29.67	753.6	22.0	— 5.6	88	sw.	4	1.8	.....	0	fg	.....	.....	0	0	clear	
St. Vincent, Minnesota	28.73	729.7	29.71	754.6	— 3	—19.4	100	n.	6	2.7	.....	0	1 s	.....	calm	0	0	clear	
Salt Lake City, Utah	25.48	647.2	30.05	763.3	23	— 5.0	51	se.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
San Antonio, Texas	29.29	744.0	30.02	762.5	38.6	3.7	89	calm	0	0	.....	0	0	.....	.....	0.03	0.8	clear	
San Diego, California	30.12	765.0	30.19	766.8	41.6	5.3	87	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sandusky, Ohio	29.01	736.8	29.73	755.1	29	— 1.7	77	e.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	
Sandy Hook, New Jersey	29.95	760.7	29.99	761.7	30.0	— 1.1	88	w.	8	3.6	.....	.....	10 s	.....	calm	0	0	cloudy	
San Francisco, California	30.08	764.0	30.15	765.8	47	8.3	93	s.	9	4.0	.....	.....	10 n	.....	sw.	0.06	1.5	light rain	
Santa Fé, New Mexico	23.10	586.7	30.11	764.8	18	— 7.8	61	n.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Savannah, Georgia	29.64	752.8	29.74	755.4	46	7.8	80	s.	4	1.8	.....	.....	fg	.....	.....	0.56	14.3	dense fog	
Shreveport, Louisiana	29.70	754.4	29.95	760.7	36	2.2	79	nw.	11	4.9	.....	.....	10 s	.....	.....	1.08	27.4	cloudy	
Silver City, New Mexico	24.16	613.7	30.02	762.5	20	— 6.7	76	nw.	3	1.3	.....	3 cs	0	nw.	.....	0	0	clear	
Sitka, Alaska	29.84	757.9	29.91	759.7	38.7	3.7	78	e.	3	1.3	.....	.....	10 ks	.....	e.	0.01	0.3	cloudy	
Smithville, North Carolina	29.63	752.6	29.67	753.6	55	12.8	100	sw.	9	4.0	.....	.....	10 n	.....	.....	1.42	36.1	light rain	
Spokane Falls, Wash. Ter.	27.85	707.4	29.99	761.7	17	— 8.3	91	nw.	3	1.3	.....	.....	10 n	.....	.....	0.37	9.4	light snow	
Springfield, Illinois	29.05	737.9	29.78	756.4	29.5	— 1.4	88	nw.	3	1.3	.....	.....	10 n	.....	.....	0.18	4.6	light snow	
Springfield, Massachusetts	29.86	758.4	30.00	762.0	16.9	— 8.4	67	s.	2	0.9	.....	10 cs	fg	sw.	.....	0	0	cloudy	
Springfield, Mo.	28.34	719.8	29.92	760.0	28	— 2.2	77	nw.	11	4.9	.....	.....	10 s	.....	.....	0.11	2.8	cloudy	
Stockton, Texas	26.96	684.8	30.10	764.5	31.5	— 0.3	100	w.	4	1.8	.....	0	0	.....	.....	Inap.	Inap.	clear	
Thatcher's Island, Mass.	29.92	760.0	29.98	761.5	24.0	— 4.4	88	w.	12	5.4	.....	6 cs	0	.....	.....	0	0	fair	
Toledo, Ohio	29.01	736.8	29.75	755.6	27	— 2.8	64	s.	4	1.8	.....	.....	10 s	.....	.....	0	0	threatening	
Tucson, Arizona	27.67	702.8	30.17	766.3	31	— 0.6	81	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Umatilla, Oregon	29.65	753.1	30.04	763.0	20.7	— 6.3	88	e.	7	3.1	.....	8 cs	0	nw.	.....	0	0	cloudy	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.64	752.8	29.92	760.0	38	3.3	82	w.	12	5.4	.....	.....	10 s	.....	calm	1.71	43.4	cloudy	
Visalia, California	29.80	756.9	30.19	766.8	36.5	2.5	80	e.	4	1.8	.....	1 c	0	.....	.....	0	0	clear	
Washington, D. C.	29.75	755.6	29.87	758.7	27	— 2.8	100	ne.	3	1.3	.....	.....	10 n	.....	.....	0.20	5.1	light snow	
West Los Animas, Colorado	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wickenburg, Arizona	.....	.....	.....	.....	23	— 5.0	73	calm	.....	.....	0	0	0	.....	.....	0	0	clear	
Williamsport, Pa.	.....	.....	29.88	758.9	20.5	— 6.4	90	sw.	3	1.3	.....	.....	10 s	.....	.....	0	0	threatening	
Wilmington, N. Carolina	29.25	742.9	29.64	752.8	62	16.7	87	w	16	7.2	.....	.....	10 n	.....	sw.	0.86	21.8	light rain	
Winnemucca, Nevada	29.58	751.3	29.99	761.7	32.0	0.0	74	sw.	14	6.3	.....	.....	10 s	.....	sw.	0	0	cloudy	
Wood's Holl, Mass.	25.45	646.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Yankton, Dakota	.....	.....	.....	.....	19	— 7.2	84	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	28.35	720.1	29.77	756.1	40.4	4.7	51	ne.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	30.01	762.2	30.16	766.1	53.0	11.7	71	calm	0	0	.....	5 k	2 s	.....	.....	0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	22.01	559.0	.....	.....	77	25.0	85	e.	.....	.....	.....	5 k	5 ks	e.	e.	0.40	10.2	fair	J. A. Racker.
Buenaventura, U. S. C.	30.02	762.5	30.03	762.7	78	25.6	86	sw.	8	3.6	.....	.....	10 ks	.....	sw.	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.91	759.7	29.93	760.2	75	23.9	90	e.	.....	.....	.....	0	2 ks	.....	.....	0	0	clear	B. Bigar.
Havana, Cuba, W. I.	29.98	761.5	30.00	762.0	72	22.2	90	se.	1.2	0.5	.....	.....	hz.	.....	.....	0	0	hazy	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.00	762.0	30.05	763.3	66.0	18.9	76	n.	1	0.4	.....	0	2 s	.....	e.	0	0	fair	Robert Johnstone.
Navassa, W. I.	30.03	762.7	30.04	763.0	75	23.9	72	ne.	15	6.7	.....	2 ck	5 s	se.	e.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	29.94	760.5	30.02	762.5	76	24.4	91	e.	.....	.....	2	4 c	4 s	e.	.....	0.080	2.0	.....	Dr. O. J. Hering.
Puerto Berrio, U. S. Col'mba	30.03	762.7	30.03	762.7	80	26.7	85	n.	.....	.....	1	7 ck	2 s	calm	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	29.40	746.7	29.95	760.7	73	22.8	92	ne.	.....	.....	2	0	2 ks	.....	ne.	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	.....	.....	.....	.....	72	22.2	75	calm	0	0	.....	2 ck	0	.....	.....	0	0	fair	Robert Mason.
St. Thomas, W. I.	30.02	762.5	30.04	763.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	.....	.....	.....	.....	—48.0	—44.4	.....	sw.	4	1.8	.....	4 k	3 s	sw.	sw.	0.08	2.0	cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Albatross, N. 20° 07′, E. 109° 50′	30.08	764.0	67	19.4		e.			3		10					1	e.	dense fog	Comm. A. J. Errington.
H. M. S. Alert, Singapore Roads. India.	29.90	759.4	79.8	26.6	85	ne.			1		6							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.16	766.1	59	15.0	76	calm			0		5							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante.																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.96	761.0	74.5	23.6	66	ese.			5–6		0							squally	Com. Sir F. W. Richards
H. M. S. Champion, S. 11° 00′, W. 77° 45′	29.92	760.0	66	18.9	100	se.			2		10	calm						misty	Capt. G. R. Hope.
H. M. S. Cockatrice.																			Capt. H. Y. Grenfell.
H. M. S. Condor.																			Capt. F. W. Egerton.
H. M. S. Coquette, Gibraltar, Mediterranean	30.24	768.1	60	15.6		ene.			2		5	ene.				1	wsw.	d. clouds	Lieut. J. L. Burr
H. M. S. Cormorant, S. 28° 30′, E. 160° 00′	29.92	760.0	76	24.4		ne.			1		2	ne.				1	ne	d. clouds	Capt. Bruce.
H. M. S. Curacoa, N. 31° 24′, E. 121° 31′	30.26	768.6	40.5	4.7	100	nne.			3–4		10							overcast	Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	29.99	761.7	71	21.7	62	se.			6		0					1	se.	blue sky	Capt. A. T. Dale.
H. M. Dock Yard, Bermuda, W. I.	30.17	766.3	58	14.4	69	ene.			1–2		3	ene.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 19° 40′, W. 74° 31′	30.05	763.3	78	25.6	98	ne.			1		1					1	e.	blue sky	Capt. W. R. Kennedy.
H. M. S. Dwarf.																			Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 10′, E. 39° 11′	29.88	758.9	83	28.3		nnw.			1		5	nw.						d. clouds	Capt. E. St. J. Garforth
H. M. S. Emerald, S. 42° 53′, E. 147° 22′	30.10	764.5	54	12.2	86	calm			0		2	w.						d. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter, N. 35° 26′, E. 139° 39′	30.01	762.2	56	13.3		n.			2		7	nw.						d. clouds	Capt. G. Robinson.
H. M. S. Espiegle, S. 32° 45′, W. 18° 06′	30.25	768.3	75	23.9	81	nne.			1		3	ssw.						d. clouds	Capt. C. A. P. Bridge.
H. M. S. Euryalus.																			Capt. R. D. King.
H. M. S. Fawn, N. 13° 20′ E. 43° 12′	29.89	759.2	78.5	25.8	82	s.			3		3	s.				1	s.	d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.14	765.5	55	12.8	80	calm			0		7							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 22° 25′, W. 74° 35′	29.98	761.5	67.5	19.7	66	se.			5		6					1 2	se. s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.72	754.9	53	11.7	79	w.			2		5							d. clouds	Capt. L. Jones.
H. M. S. Iris, N. 35° 15′, E. 30° 49′	30.28	769.1	63	17.2	78	wnw.			2–3		0					2		blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.06	763.5	65	18.3	94	ene.			1		10	ne.						misty	Capt. R. E. Tracey.
H. M. S. Lark, S. 35° 45′, E. 174° 48′	29.89	759.2	67.3	19.6	?	w.			1		3					1	n.	d. clouds	Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.93	760.2	61.5	16.4		n.			3		5	n.				2	n.	d. clouds	Capt. J. Aylen.
H. M. S. Magpie, N. 22° 16′, E. 114° 10′	30.07	763.8	66.3	19.1	78	ene.			1		10							misty	Capt. A. Carpenter.
H. M. S. Malabar, Suez Bay, Egypt	30.10	764.5	61	16.1	82	nnw.			1–2		3	nnw.						d. clouds	Capt. H. Hand.
H. M. S. Mutine, Callao, Peru.	29.90	759.4	66	18.9	100	se.			1		5							misty	Comm. F. Edwards.
H. M. S. Northampton, St. Lucia, W. I.	29.97	761.2	76.5	24.7	79	ne.			5		6	ne.						showery	Capt. E. Drummond.
H. M. S. Orontes.																			Capt. R. J. Kinahan.
H. M. S. Pelican, N. 5° 25′, W. 24° 13′	29.88	758.9	82	27.8	97	nnw.			2		3					3	nnw.	misty	Capt. F. R. Dicken.
H. M. S. Phœnix.																			Capt. H. H. Grenfell.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.17	766.3	61.1	16.2		nw.			1		1							blue sky	Capt. W. H. Edwards.
H. M. S. Rocket, N. 48° 27′. W. 123° 27′	29.96	761.0	31	—0.6	89	calm			0		2							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Ruby, Colombo, Ceylon, India.	29.90	759.4	80.5	26.9	91	nnw.			2		6	n.						d. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull, S. 2° 13′, E. 41° 03′	29.26	743.2	85	29.4	88	se.			2		5	nne.						d. clouds	Comm. M. Byles.
H. M. S. Serapis.																			Capt. G. O. Twiss.
H. M. S. Tenedos, N. 17° 45′, W. 78° 10′	30.02	762.5	77	25.0	71	e.			2		2					2	e.	d. clouds	Capt. C. G. Fane.
H. M. S. Triumph, S. 3° 18′, W. 81° 30′	29.92	760.0	76	24.4	90	s.			1–2		9	s.				1	n.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 5° 47′, E. 85° 25′	29.95	760.7	78.5	25.8	93	ene.			4		10	e.				1	ene.	thnd'rstorm	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.02	762.5	72	22.2		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Bedaa, Arabia	30.14	765.5	60.5	15.8	70	nw.			3		4	nw.						d. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr, Nagasaki, Japan	30.21	767.3	51	10.6	100	calm			0		10							raining	Capt. G. N. A. Pollard.
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Brava, C. Verd Ids	30.11	764.7	74.3	23.5	79	ne.			2		2					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 11° 59′, W. 68° 52′	29.98	761.4	75.6	24.2	77	e.			4		8							raining	Capt. A. L. Broberg.

UNITED STATES NAVAL SERIES.

Furnished by the co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.

By authority of the SECRETARY OF THE NAVY.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.				Clouds				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
N. Yard, Pensacola, Fla	29.76	755.9	56	13.3	81	wnw.	9	4.0			8		nw.	1.0	25.			fair	
N. Yard, Portsmouth, N. H.	29.95	760.7	16	— 8.9		wsw.	6	2.7			9		wsw.	0	0			cloudy	
Naval Hospital Yokohama, Japan	29.81	757.2	56	13.3	90	n.			3		2		w.	sli't	sli't			clear	
Adams, Callao, Peru	29.78	756.4	68	20.0	95	se.			1		8					gr'd		fair	
Alaska, Valparaiso, Chili	29.84	757.9	63	17.2	78	ne.			1		2			0	0	sm'h		fair	
Alert, Bang Kok, Bar Siam, India*	29.81	757.2	83	28.3	83	s.			1		2		s.	0	0	sm'h	s.	hazy	
Alliance, Boston, Mass.*†	30.00	762.0	25	— 3.9	100	w.			2		10			0	0			overcast	
Ashuelot, Tientsin, China	30.63	778.0	26	— 3.3	100	w.			1		10		calm					overcast	
Brooklyn, Montevideo, Uruguay	29.47	748.5	71	21.7	100	se.	30	13.4			10		se.	0.34	8.6	r'gh	se.	cloudy	
Colorado, New York, N. Y.	29.96	761.0	28	— 2.2	100	sw.	1	0.4			10			0	0			hazy	
Essex, N. 32° 50′, W. 23° 56′	30.35	770.9	62	16.7	61	nne.			3		10		ne.			long	nw.	cloudy	
Franklin, Norfolk, Va	29.74	755.4	40	4.4	100	ne.	8.4	3.8			10			0.05	1.3			raining	
Galena, Funchal, Maderia Island	30.24	768.1	61	16.1	77	se.			1		5		w.			sm'h		fair	
Independence, N. Yard, Mare I'd, Cal.	29.99	761.7	45	7.2	92	s.	2.4	1.1			10		s.	0.02	0.5			overcast	
Kearsarge, New Orleans, La	29.87	758.7	52	11.1	73	nw.			4		10							cloudy	
Lackawanna, Valparaiso, Chili†	30.02	762.5	60	15.6	88	calm			0		0							clear	
Lancaster, Naples, Italy	30.23	767.8	55	12.8	74	ne.			0–1		8		nw.	0	0			hazy	
Michigan, Erie, Pa	29.73	755.1	24	— 4.4	73	ne.			3		10							cloudy	
Minnesota, Newport, R. I.	29.98	761.5	26	— 3.3		wsw.	5	2.2			10		wnw.			sm'h		overcast	
Monocacy, Yokohama, Japan	29.95	760.7	58	14.4	94	n.			1		5		nw.					fair	
Onward, Callao, Peru†	30.03	762.7	66	18.9	100	se.			2		10		nw.			long	w.	cloudy	
Palos, Hong Kong, China	30.07	763.8	66	18.9	94	ene.			1		10		e.					drizzling	
Passaic, Washington, D. C.	29.94	760.5	27	— 2.8	?	ne.			2		10		s.					snowing	
Pensacola, Valparaiso, Chili	29.90	759.4	65	18.3	53	nne.	3	1.3			0			0	0	sm'h		clear	
Powhatan, Norfolk, Va	29.77	756.1	38	3.3	100	ene.			2		10							heavy rain	
Quinnebaug, N. 40° 35′, E. 10° 38′	30.26	768.6	55	12.8	68	w.			3		10		calm			sm'h		overcast	
Ranger, N. 19° 33′, W. 105° 07′	29.84	757.9	70	21.1	90	e.			2		2		calm	0	0	sm'h		fair	
Richmond, N. 12° 43′, E. 175° 50′*	29.84	757.9	78	25.6	86	ne.			4		2		e.	0	0	sm'h	e.	fair	
Shenandoah, Montevideo, Uruguay*	29.53	750.0	71	21.7	90	sse.			5		10					r'gh	sse.	threatening	
St Louis, Lengue Island, Pa	30.17	766.3	28	— 2.2	?	e.	12	5.4			10							snowing	
Swatara, Kobe, Japan*	29.99	761.7	56	13.3	75	e.			1		10							cloudy	
Tennessee, New York, N. Y.	29.96	761.0	27	— 2.8		sse.	2.5	1.1			10			0	0			cloudy	
Vandalia, Santa Anna, Curacoa, W. I.	29.97	761.2	76	24.4	82	e.			2		2		e.					clear	
Wabash, Boston, Mass.	29.97	761.2	21	— 6.1		sw.	4	1.8			10		w.	0	0			hazy	
Wachusetts, Mare Isld, Cal.	30.14	765.5	46	7.8	92	s.			4		10		s.					raining	
Wyoming, Port Royal, S. C.	29.70	754.4	47	8.3	100	w.	8	3.6			10		calm	0.53	13.5			cloudy	
Yantic, Aspinwall, Panama*	29.83	757.7	77	25.0	91	n.			3		8		n.			mod.	n.	cloudy	

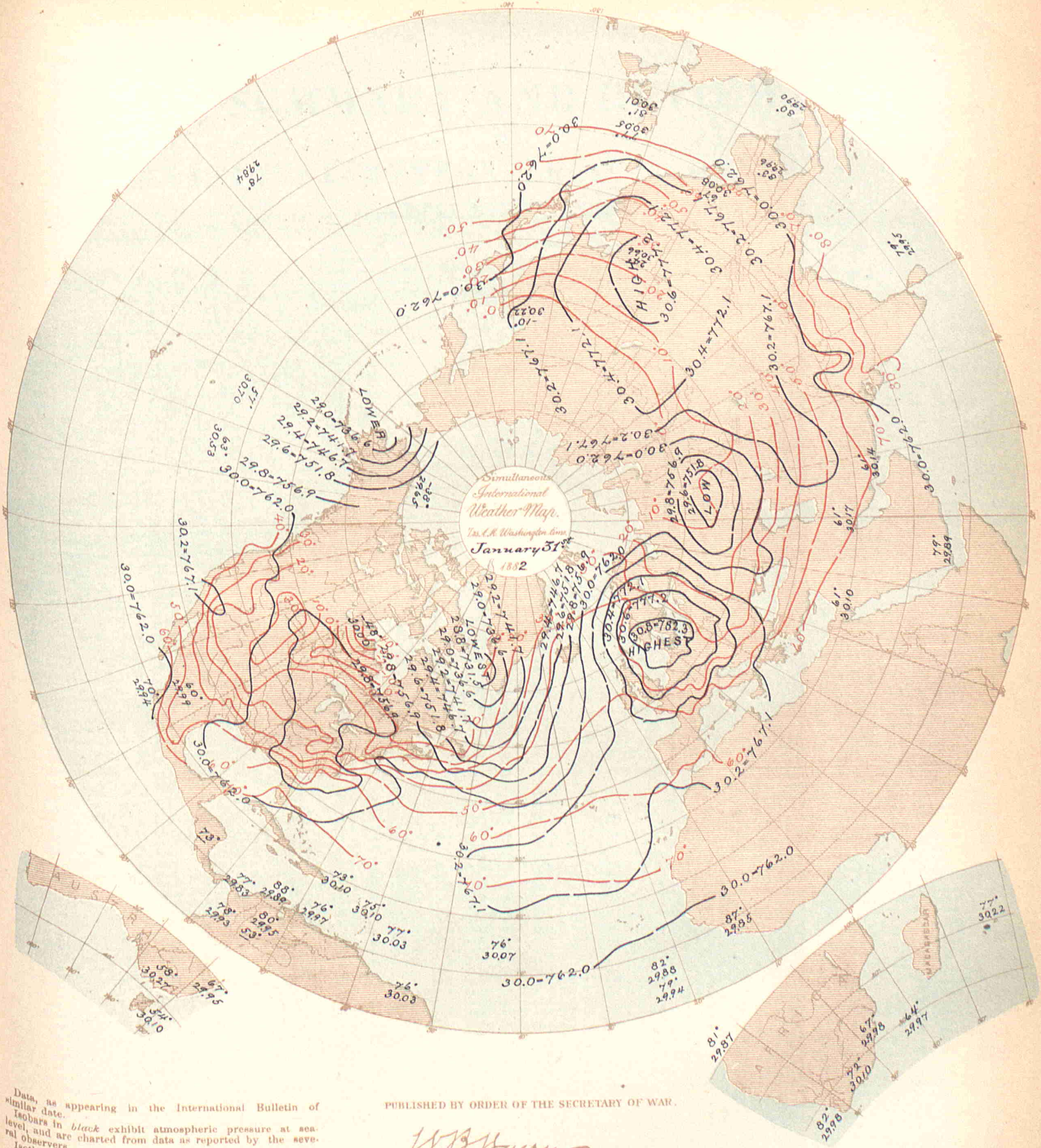
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. **Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.**																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon, 2d Officer.
S. S. Polynesian, Capt. R. Brown,																	Roberts & Spark
S. S. Prussian, Capt. J. G. Stephens, N. 48° 10′, W. 43° 02′*	29.52	749.8	31	—0.6		wsw.	10		10		wsw.			very h'vy	wsw.	snowy	J. G. Stephens.
S. S. Waldensian Glasgow, Scotland*	30.41	772.4	39	3.9		se.	3				se.	16 h'r	16 h'r			raining	J. Bairrison.
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. Illinois, Capt. J. W. Shackford, N. 44° 47′, W. 42° 29′	29.66	753.4	45	7.2	92	w.	6		10		w.			mod.	w.	overcast	Cauffman & Morse.
S. S. Ohio, Capt. Henry Morrison, N. 43° 43′, W. 57° 18′*†	29.94	760 5	28	—2.2	89	w.	4		5		w.			r'gh	w.	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 48° —′, W. 39° —′†	29.48	748.8	37	2.8	80	wnw.	9							r'gh	w.	gloomy	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
Assyria, Capt. J. Brown,																	J. Brown.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause, N. 19° 47′, W. 72° 00′*†	30.16	766.1	71	21.7	85	calm	0		2			0	0	sm'h		hazy	C. P. Krause.
S. S. Alvo, Capt. D. W. Williams, N. 15° 56′, W. 76° 04′*	30.01	762.2	78	25.6		ne.	6		5		ne.	0	0	sm'h		very fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin. N. 18° 53′, W. 74° 56′*†	29.04	737.6	78.0	25.6		e.	1		0			0	0			fine	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Mayaguez, Porto Rico, W. I.			78	25.6		ene.	2		5?		ene.	0	0	mod.	ene.	clear?	R. de Echevarrieta.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright,																	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
Baroda, Capt. C. J. Russell N. 14° 39′, W. 26° 28′	30.04	763 0	72.3	22.4	75	ne.	5		0							misty	
Bk. Caldew, Capt. W. Peterson S. 55° 45′, W. 74° 15′	29.40	746.7	49	9.4		nw.	5		10							drizzling	
S. S. Cipero, Capt. W. N. Laily N. 12° 03′, W. 58° 00′	30.03	762.7	78.3	25.7	77	ene.	4		8					2	ene.	d. clouds.	
S. City of Agra, Capt. Thos. Young, N. 25° 40′, W. 42° 19′	30.27	768.8	69.5	20 8		e.	2		1							blue sky	
Bk. Haramara, Capt. R. Morton, N. 47° 40′, W. 17° 43′	30.15	765.8	55.5	13.1	80	sw.	4		5							d. clouds	
Glencairn, Capt. R. S. Tannock,																	
Bq. Hermine, Capt. S. G. Jones, S. 55° 40′, W. 75° 20′.	29.37	746.0	48.0	8.9	97	nw.	5		10							overcast	
S. S. Humboldt, Capt. A. W. Jeffery,																	
S. Lochee, Capt. J. Raeburn, S. 31° 10′ E. 35° 56′	30.07	763.8	72	22.2	75	sse.	6		6							d. clouds	
May Hulse, Capt. H. Youlden, S. 42° 40,′ W. 52° 43′	29.87	758.7	61	16.1	82	ssw.	1		5							d. clouds	
Bk. Mertola, Capt. E. W. Turner, N. 48° 32′, W. 9° 45′	30.36	771.1	53.7	12.1	97	se.	5		10							overcast	
Minho, Capt. J. Lawson, Montevideo, Uruguay	29.47	748.5	70.9	21.6	95	sse.	5		10							threatening.	
Naiad, Capt. John Smith N. 13° 03′, W. 41° 26′	30.07	763.8	75.3	24.1	90	ene.	6		5							misty	
Pole Star, Capt. F. Norman S. 41° 49′, W. 75° 40′	30.07	763.8	61.8	16.6	88	nw.	3		4							blue sky	
Queen of Cambria, Capt. M. Parry, S. 39° 55′, E. 58° 24′	29.97	761.2	64	17.8	89	nnw.	6		10							drizzling	
S. S. Strathleven, Capt. C. W. Pearson, N. 42° 28′, W. 48° 14′	29.96	761.0	37.5	3.1	80	w.	6		8							d. clouds	
S. Superb, Capt. Berridge, N. 29° 41′ W. 41° 15′	30.31	769.9	68.8	20.4	95	wnw.	3		10							d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York*																	
S. S. Brooklyn City, Capt. S. Windham, Bristol, Eng*†	30.60	777.2	45	7.2		e.	2		10		calm	0	0			cloudy	Wm. Fitt.
CALIFORNIA, AND MEXICAN S. S. CO. *J. Birmingham, Agent San Francisco.*																	
S. S. Newbern, Capt. E. Rogers,																	
CROMWELL LINE. *Clark & Seaman, Agents, New York.*																	
S. S. Hudson, Capt. H. R. Freeman, N. 30° 00′, W. 80° 20′*†	29.32?	744.7?	70	21.1		s.	3		5?		sw.	8 h'r	8 h'r	r'gh	ne. to s.	cloudy?	R. H. Freeman.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d Officer
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, Havre, France	30.60	777.2	35.6	2.0		nne.	3		10		ne.	0	0				
S. S. St. Laurent, Capt. A. Servan, N. 42° 28′, W. 60° 51′*†	30.12	765.0	42.8	6.0		w.	4					0	0	hv'y	w.		A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents. New York*																	
S. S. Gellert, Capt. Kuhlewein, N. 47° 30′, W. 43° 40′*	29.48	748.8	34	1.1		w.	6		10		w.	2 h'r	hail	very h'vy	w.	cloudy	P. Froehlich, 3d Off.
S. S. Silesia, Capt. A. Albers N. 51° 50′, E. 2° 34′	30.69	779.6	43.2	6.2		e.	5		8		e.	0	0	2	e.	fair	
S. S. Wieland, Capt. C. Hebich. N. 45° 40′, W. 47° 16′*	29.74	755.4	30	—1.1		wsw.	7		10		wsw.	snow	snow	7	wsw.	snowy	Patterson & Thompson.
INMAN LINE. *John G. Dale, Agent, New York.*																	
S. S. City of Berlin, Capt. R. Leitch,																	C. Jorgensen.
LAMPERT & HOLT S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres,*†	29.78	756.4	68	20.0		se.	6		10		se.	12 h'r	12 h'r	0	0	heavy rain	J. Carroll.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
NATIONAL LINE. *F. W. J. Hurst, Manager, New York.*																	
S. S. England, Capt. T. P. Heeley Liverpool, England*†	30.70	779.8				ese.	3		10		ese.	0	0			cloudy	T. Knight, 2d Officer.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, N. 31° 26′, W. 79° 45 *†	29.83	757.7	68	20.0		sw.	6		7		s.	12 h'r	driz	cross	se.	threatening.	F. C. Miller, 2d Off.
S. S. Santiago, Capt. S. F. Phillips																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Alsa, Capt. J. W. Sansom Savanilla, U. S. C†	29.89	759.2	82	27.8		nne.	2-3									hazy	
S. S. Bothnia, Capt. W. McMickan, [man																	E. Stembridge, 3d Off.
S. S. City of Alexandria, Capt. L. F. Timmer- N. 35° 17′, W. 74′ 22′† * [nolds	29.91	759.7	63	17.2		se.	5								se.	rainy	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Maas, Capt. T. H. Boujer, N. 44° 26′ W. 51° 24′*	29.85	758.2	32	0.0		w.	1							very high	nw.	snowy	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke, N. 41° 23′, W. 57° 00′*†	30.15	765.8	47	8.3		nw.	4-5								nw.	fine	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers, N. 46° 25′, W. 39° 22′	29.64	752 8				w.	7		5?		w.	6 h'r and	rain hail	very h'vy	w.	cloudy?	H. Christoffers.
S. S. Hohenzollern, Capt. R. Sander,																	G. H. Lose, 3d Off.
S. S. Leipzig, Capt. F. Pfeiffer, N. 46° 20′, W. 43° 18′	29.79	756.7	39.0	3.9	80	w.	7-9		8		w.	13 h'r	13h'r	very h'vy	wnw.	hailing	Sander & Waller.
S. S. Main, Capt. Julius Barre, N. 43° 37′, W. 58° 20′.*	29.96	761.0	30.2	—1.0		wnw.	5		6		wnw.	10h'r	snow	high	wnw.		
S. S. Neckar, Capt. R. Bussius. N. 49° 32′, W. 7° 11′	30.45	773.4	52.2	11.2		se;e	4-5		9		se.	3 h'r	3 h'r	mod.	se.; ese.	overcast	Steinbrunn & Tanke.
S. S. Nurnburg, Capt. A. Jaeger, N. 19° 04′, W. 23° 23′*	30.14	765.5	73.4	23.0	85	nne.	5		0			0	0	4	nne.	clear	Montz & Kohlenbeck.
S. S. Oder, Capt. Undeutsch, N. 41° 20′, W. 67° 53′*	30.03	762.7	35.6	2.0		w.	5		8		wsw.	0	0	cross	w.	cloudy	
S. S. Ohio, Capt. G. Meyer, Bremerhaven, Germany*	30.85	783.6	37.4	3.0		ese.	2-3		1		e.	0	0			fair	E. Hattensauer.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 35° 26′, W 146° 40′†	30.53	775.4	63	17.2	83	ne.	3		2		ne.	0	0	mod.	ne.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett,																	
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.14	765.5	66	18.9	90	e.	4		8							cloudy	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson,																	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Savannah, Ga.†	29.73	755.1	56	13.3		s.	1		10			8 h'r	8 h'r			rainy	H. K. Hallett.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 44° 20′, W. 124° 47′†	30.09	764.3	44	6.7	75	nnw.	5		5		nw.			h'vy		hailing	E. W. Holmes.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d officer
S. S. Columbia, Capt. F. Bolles, N. 45° 47′, W. 124° 05′†	30.00	762.0	45	7.2	76	nw.	3		5		nnw.	0	0	h'vy	nw.	squally	W. Irvine.
S. S. Oregon, Capt. E. Polemann																	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. W. Ingalls, N. 36° 58′, W. 122° 26′.†	30.16	766.1	47	8.3	92	se.	1		10		e.			sm'h		drizzling	
S. S. G. W. Elder, Capt. H. G. Morse, N. 45° 36′, W. 124° 53′†	30.21	767.3	44	6.7		w.	4		4		nw.	0	0	light	nw.	clear	
S. S. Idaho, Capt. E. Alexander, N. 39° 05′, W. 123° 50′†	30.09	764.3	48	8.9	85	nw.	3		10		nw.			mod.	nw.	light rain	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 35° 09′, W. 120° 43′.†	30.17	766.3	47	8.3	69	nw.	3				nw.	0	0	sm'h	nw.	fair	G. H. Harisson.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Calif	30.27	768.8	48	8.9	92	s.	1		10							light rain	T. Wallace.
S. S. State of California, Capt. G. Debney, Portland, Oregon†	29.99	761.7	34	1.1	61	s.	2		8		w.					snowing	
S. S. Victoria, Capt. H. M. Hayward, San Francisco, Calif	30.14	765.5	45	7.2	84	n.	5		10							raining	
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. ———																	A. Bannerman, 2d Off.
S. S. City of New York, Capt. W. B. Cobb, S. 36° 50′. E. 174° 49′†	30.01	762 2	71	21.7	85	n.	1		1		n.	0	0	sm'h	n.	clear	W. H. Hawes, 2d Off
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 36° 01′, W. 157° 45′†	30.70	779.8	57	13.9	75	ese.	4		5		se.	0	0	mod.	e.	fair	J. M. Dow, 3d Officer.
S. S. City of Sidney, Capt. H. C. Dearborn, S. 14° 40′, W. 170° 13′	29.86	758.4	80	26.7	86	nw.	2		10		n.	0	0	mod.	nw.	misty	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 32° 29′, E. 133° 33′†	30.20	760.4	60	15.6	59	ene.	6		10		ne.	2 h'r	2 h'r	r'gh	ene.	cloudy	W. Thaxter.
S. S. Colima, Capt. R. R. Searle, N. 23° 00′, W. 108° 17′.†	29.96	761.0	65	18.3	73	nw.	6		1		nw.	0	0	r'gh	nw.	clear	
S. S. Granada, Capt. M. Connolly, Panama, Panama.†	29.89	759.2	73	22.8	95	nw.	2		8		nw.	0	0			cloudy	
S. S. South Carolina, Capt. W. J. Russell, N. 23° 11′, W. 105° 48′*†	29.94	760.5	66	18.9	79	nw.	6		0			0	0	h'vy	nw.	hazy	
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	29.95	760.7	67	19 4	1	e.	1		2		n.					clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
								Amount and kind.		Direction.							
						Direction.	Force	Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES. Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
QUEBEC S. S. Co.																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Muriel, Capt. Geo. S. Locke N 30° 25′, W. 67° 50′						ese.	3		0			0	0	long	nw.	clear	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes																	J. Andersen
S. S. Rhynland, Capt. W. G. Randle, N. 44° 51′, W. 51° 29′*	29.83	757.7	28	—2.2		wsw.	6		10		wsw.	0.5	13.		wsw.	snowy	C. H. Grant, 2d Off.
S. S. Vaderland, Capt. W. A. Beynon, N. 49° 57′, W. 8° 58′*†	30.38	771.6	55	12.8	87	sse.	4		8		sse.	3 h'r	light	mod	ssw.	cloudy	M. Eymond.
S. S. Waesland, Capt. H. Nickels, N. 46° 20′, W. 36° 44′*	29.52	749.8	44	6.7		w.	6		2		w.	6 h'r	6 h'r	mod.	w.	clear	
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis N. 46° 49′, W. 39° 07′*	29.40	746.7	54.6	12.6	79	w.	8		5		wsw.	7 h'r	7 h'r	high	sw; w	stormy	
THINGVALLA LINE																	
Funch, Edye & Co., Agents, New York.																	
S. S. Thingvalla, Capt. G. J. H. Laub Copenhagen, Denmark†	30.84	783.3	37.4	3.0		ne.	1		1		ne.	c	o			clear	J. T. Uiberling
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters. N. 41° 59′, W. 54° 03′*†	30.13	765.3	38	3.3		nw.	6		9		nw.	1 h'r	light snow	long	nw	cloudy	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent.																	
S. S. Adriatic, Capt. J. W. Jennings, N. 45° 29′, W. 40° 08′*†	29.84	757.9	44	6.7		wnw.	6		8		w.	shr's	shr's	high	nnw.	snowing	J. Moore.
S. S. Britannic, Capt. H. H. Perry,																	W. Thomas.
S. S. Celtic, Capt. B. Gleadell Liverpool, Eng.*†	30.44	773.2	41	5.0	?	se.	5		10			o	o			overcast	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy.																	H.D. Jay, 4th Officer.
S. S. Republic, Capt. P. J. Irving, N. 46° 33′, W. 47° 31′†	29.62	752.3	34	1.1	90	wsw.	6		8		w.	snow	snow	r'gh.	w.	hazy	H.Goulden, 4th Officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell, Hull, England*	30.35	770.9	42	5.6		w.	2		3		nw.	o	o			fine	Shaw & Smith.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, Pensacola, Florida†	29.87	758.7	54	12.2	73	nw.			10 8		nw.	0.78	19.8			overcast	J. Jorgensen.
Bk. Alpha, Capt. Ole Grönn, N. 35° 04′, W. 11° 55′*†	30.14	765.5	60	15.6		w.	1		7		w.	8 h'r	8 h'r		sw.	squally	Ole Grönn.
Sch'r Annie R. Lewis, Capt. L. L. Lewis Ponce, Porto Rico, W. 1*†	30.08	764.0	76	24.4		se.	1		5		ese.	o	o			fair	L. L. Lewis.
Bk. Dom Pedro II, Capt C. E. Coffin N. 0° 06′ W. 39° 18′						ene.					ene.			light	n.	clear	C. E. Coffin.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 49° 59′, W. 17° 00′*†	29.97	761.2				wsw.	4		o			8 h'r	8 h'r	mod	nw.	clear	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill, S. 26° 05′, W. 42° 53′†	29.90	759.4				nne.	3		2		nne.	o	o	sm'h	ne.		
S. Enoch Train, Capt. H. D. Chapman. N. 54° 31′, E. 6° 10′*	30.81	782.6				ese.	3		o			o	o	light	ese.	clear	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen N. 54° 57′, E. 3° 05′*	30.84	783.3				ese.	5		1		se.	o	o	short	se.	clear	J. C. Andersen.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	29.96	761.0	30	—1.1		ne.	3		10		ne.	snow	snow			snowing	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison.																	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 41° 37′, W. 23° 19′			54	12.2		sw.	3		8		sw.	o	o	sm'h		fair	
Bk. Gamaliel, Capt. D. J. Anthony, S. 10° 26′, W. 35° 39′*†	29.05	737.9				e.	4		o			o	o	sm'h	ene.	clear	
Bk. Geo. Booth, Capt. D. Williams N. 3E° 30′, W. 59° 50′*†	30.00	762.0	54	12.2			6					o	o		wnw.	overcast	D. Williams.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 38° 50′, W. 8° 52′*	29.96	761.0				nnw.	1					3 h'r	light	long	sw. nnw.	dense fog	T. Minssen.
Bk. New York, Capt. J. E. Sorensen. N 36° 14′, W. 4° 44′†	30.45	773.4				e.					e.	o	o	mod	e.	cloudy	Sorensen & Arvesen.
Bk. Peppina, Capt. Gov. S. d'Anconaz, Fiume, Austria†	30.25	768.3	57	13.9	45	ne.	4		o							clear	G. S. d'Anconaz.
Bk Pilgrim, Capt. J. Connolly N. 4° 38′, W. 29° 15′*†	29.88	758.9				ene.			5		ene.	o	o				J. Connolly.
Bk. Stella, Capt. H. N. T. Sommer, N. 2° 10′, W. 24° 10′*	29.84	757.9	78.6	25.9	98	calm	o		9								
Bk. Sunbeam, Capt. Joseph Hand, Lisbon, Portugal*†	30.19	766.8	58	14.4	100	se.	4		8		sw.	4 h'r	light			cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 34° 16′, W. 14° 52′*†	30.40	772.1				n.	2		2		n.			sm'h			I. W. Covert.
Bk. Winifried, Capt. N. P. Dutton. N. 16° 35′, W. 32° 38′*†	30.20	767.3				ene.										squally	N. P. Dutton.
S. Woodbury, Capt. H. T. Schmidt, N. 36° 41′, W. 69° 48′*†	29.83	757.7	58	14.4	100	se.	9				se.			h'vy	w.	covered	H. T. Schmidt.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

Heliotype Printing Co Boston

SUMMARY AND REVIEW

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

JANUARY, 1882.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Met'rs	Result of Simultaneous Observations for January, 1882. Mean Barometer. Actual. Inch.	Mill.	Reduced. Inch.	Mill.	Mean Temperature. Fah.	Cent.	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	NE	C	Total Movement. Miles	Kil.	Average Cloudiness. 0–10	Total Precipitation. Inch.	Mill.
Algerian Series.	° ′	° ′																								
Nemours	N. 35 06	W. 1 50	0.00 m.	13	4	.....	.....	30.35	770.9	63.7	17.6	74.	.....	3	17	6	.....	3	.....	2	.....	.....	.....	1	1.15	29.2
Algiers	N. 36 47	E. 3 04	0.20 p.m.	72	22	.....	.....	30.40	772.2	57.9	14.4	75.4	3	2	3	3	3	2	6	9	.....	.....	.....	1	0.91	23.1
La Calle	N. 36 54	E. 8 26	0.42 p.m.	36	11	.....	.....	30.40	772.1	60.6	15.9	73.	3	6	5	4	.....	1	12	.....	.....	.....	.....	3	1.91	48.5
Tunis	N. 36 42	E. 10 13	0.49 p.m.	46	14	.....	.....	30.39	772.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sfax	N. 34 44	E. 10 40	0.51 p.m.	?	?	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saida	N. 34 51	E. 0 10	0.09 p.m.	2844	867	.....	.....	30.40	772.2	57.4	10.8	61.0	5	.....	5	10	3	4	2	2	.....	.....	.....	2	0.49	12.4
Tebessa	N. 35 24	E. 8 06	0.40 p.m.	2890	881	.....	.....	30.43	773.0	48.4	9.1	59.7	3	9	.....	7	4	2	2	2	2	.....	.....	4	1.96	49.9
Geriville	N. 33 45	E. 1 10	0.13 p.m.	4285	1306	.....	.....	.....	.....	47.1	8.4	55.0	6	3	3	4	7	1	5	2	.....	.....	.....	4	1.02	25.8
Laghouat	N. 33 48	E. 2 53	0.20 p.m.	2559	780	.....	.....	30.47	774.0	49.3	9.6	59.9	9	.....	4	2	5	2	8	1	.....	.....	.....	2	0.89	22.6
Biskra	N. 34 51	E. 5 41	0.31 p.m.	410	125	.....	.....	30.43	773.0	59.5	15.3	49.0	.....	27	.....	.....	.....	3	.....	.....	1	.....	.....	3	1.01	25.7
Australian Series.																										
Melbourne	S. 37 50	E. 144 58	9.47 p.m.	91	28	29.80	757.0	29.89	759.3	61.3	16.3	72.0	1	.....	1	7	10	10	1	1	.....	.....	.....	4	0.29	7.4
Sub-Series.																										
Austro-Hungarian Series.																										
Agram	N. 45 48	E. 15 53	1.12 p.m.	536	163	29.93	760.1	30.50	774.6	37.2	2.9	82.4	.....	1	4	8	4	4	5	4	1	.....	.....	6	0.26	6.5
Cracow	N. 50 04	E. 20 00	1.28 p.m.	722	220	29.64	752.8	30.44	773.2	35.4	1.9	79.7	4	1	14	9	1	0	2	.....	.....	.....	.....	8	0.78	19.9
Eperies	N. 48 58	E. 21 15	1.33 p.m.	820	250	29.50	749.4	30.42	772.7	31.8	—0.1	79.7	5	4	.....	.....	9	.....	.....	.....	13	.....	.....	8	0.09	2.4
Gratz	N. 47 04	E. 15 28	1.10 p.m.	1171	357	29.17	741.0	30.49	774.5	35.1	1.7	70.0	.....	2	1	4	14	3	4	2	1	.....	.....	5	0	0
Hermannstadt	N. 45 47	E. 24 13	1.45 p.m.	1352	412	28.93	734.9	30.45	773.5	32.2	0.1	88.9	4	17	2	2	.....	5	.....	1	.....	.....	.....	7	0.13	3.2
Kremsmünster	N. 48 03	E. 14 08	1.04 p.m.	1260	384	29.08	738.7	30.50	774.8	32.7	0.4	88.0	.....	1	4	7	3	1	9	4	2	.....	.....	7	0.64	16.3
Lemberg	N. 49 50	E. 24 00	1.44 p.m.	978	298	29.32	744.7	30.30	771.1	33.8	1.0	79.1	.....	16	.....	4	4	3	2	2	.....	.....	.....	7	0.90	22.9
Pola	N. 44 52	E. 13 51	1.04 p.m.	105	32	30.31	769.8	30.42	772.7	49.3	9.6	66.8	2	3	7	3	1	1	6	5	3	.....	.....	4	0.97	24.6
Szathmar	N. 47 46	E. 22 53	1.39 p.m.	430	131	29.95	760.6	30.41	772.5	33.8	1.0	77.0	1	7	2	3	9	1	5	3	.....	.....	.....	7	0.24	6.0
Szegedin	N. 46 15	E. 20 10	1.29 p.m.	256	78	30.17	766.3	30.47	773.9	36.1	2.3	84.8b	2	7	2	0	2	1	0	2	15	.....	.....	6	0.13	3.2
Trieste	N. 45 39	E. 13 46	1.04 p.m.	85	26	30.35	771.0	30.46	773.6	48.9	9.4	58.7	.....	.....	1	.....	.....	1	9	3	17	.....	.....	4	0.48	12.2
Vienna	N. 48 12	E. 16 22	1.14 p.m.	663	202	29.72	755.0	30.56	776.1	35.6	2.1	72.0	1	10	4	1	.....	3	.....	1	11	.....	.....	6	0.08	2.1
Belgian Series.																										
Brussels	N. 50 51	E. 4 22	0.26 p.m.	187	57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Furnes	N. 51 04	E. 2 40	0.19 p.m.	20	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maeseyck	N. 51 06	E. 5 48	0.32 p.m.	115	35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British Series.																										
Aberdeen	N. 57 10	W. 2 06	0.00 m.	89	27	29.96	761.0	30.06	763.5	42.8	6.0	75.5	.....	1	5	10	11	3	1	.....	.....	.....	.....	6	1.31	33.3
Armagh	N. 54 21	W. 6 39	11.42 a.m.	207	63	29.95	760.7	30.20	767.1	44.1	6.7	84.0	1	.....	1	10	15	3	1	.....	.....	.....	.....	7	.....	.....
Bidston	N. 53 24	W. 3 04	11.56 a.m.	197	60	.....	.....	30.28	769.1	43.5	6.4	82.9	.....	.....	1	16	.....	11	1	2	.....	.....	.....	8	.....	.....
Bolton	N. 53 35	W. 2 28	11.58 a.m.	500	152	29.71	754.6	30.26	768.6	41.1	5.1	88.7	1	....	2	10	9	7	1	1	.....	.....	.....	9	.....	.....
Bradford	N. 53 48	W. 1 47	0.01 p.m.	366	111	29.85	758.2	30.25	768.3	44.0	6.7	82.0	.....	2	8	12	.....	4	.....	.....	.....	.....	.....	7	3.84	97.5
Bridgetown	N. 13 04	W. 59 37	8.10 a.m.	28	9	30.00	762.0	30.03	762.7	79.5	26.4	72.1	.....	.....	.....	.....	.....	.....	.....	31	.....	.....	.....	4	.....	.....
Cardington	N. 52 08	W. 0 27	0.06 p.m.	109	33	.....	.....	30.31	769.9	43.2	6.2	86.7	.....	.....	13	7	8	.....	2	1	.....	.....	.....	8	.....	.....
Chatham	N. 51 25	E. 0 33	0.10 p.m.	120	37	30.24	768.1	30.38	771.6	42.5	5.8	86.9	1	1	1	13	4	1	1	.....	9	.....	.....	8	.....	.....
Falmouth	N. 50 09	W. 5 04	11.48 a.m.	211	64	30.13	765.3	30.36	771.1	46.8	8.2	82.5	2b	1	4	5	6	4	6	1	.....	.....	.....	9	.....	.....
Fort Napier	S. 30 00	E. 31 00	2.12 p.m.	2200	671	27.57	700.3	29.78	756.4	79.0	26.1	60.4	.....	.....	.....	1	.....	2	4	18	6	.....	.....	4	.....	.....
Free Town	N. 8 30	W. 13 14	11.15 a.m.	224	68	29.63	752.6	29.87	758.7	87.6	30.9	66.4	.....	18	7	4	.....	.....	.....	.....	2	.....	.....	4	.....	.....
Galway	N. 53 15	W. 9 03	11.32 a.m.	32	10	.....	.....	30.12	765.0	46.9	8.3	84.3c	1a	1	4	6	16	1	.....	1	.....	.....	.....	7	3.06	77.7
Gibraltar	N. 36 09	W. 5 21	11.47 a.m.	50	15	30.29	769.4	30.34	770.6	59.5	15.3	84.0	.....	1	2	1	.....	1	19	7	.....	.....	.....	6	.....	.....
Glasgow	N. 55 53	W. 4 17	11.51 a.m.	184	56	29.92	760.0	30.12	765.0	43.3	6.3	83.6	1	1	4	14	7	1	2	1	.....	.....	.....	8	.....	.....
Greenwich	N. 51 29	0 00	0.08 p.m.	159	48	30.19	766.8	30.37	771.4	42.5	5.8	84.7	1	.....	1	12	11	5	1	.....	.....	.....	.....	8	0.53	13.5
Guernsey	N. 49 27	W. 2 41	11.58 a.m.	275	84	30.10	764.5	30.41	772.4	44.3	6.8	90.0	.....	3	2	6	6	4	5	5	.....	.....	.....	8	0.05	1.3
Kew	N. 51 28	W. 0 19	0.07 p.m.	34	10	30.33	760.4	30.37	771.4	42.8	6.0	83.3	1	.....	5	13	7	3	2	.....	.....	.....	.....	8	.....	.....
Leicester	N. 52 39	W. 1 08	0.04 p.m.	245	75	30.04	763.0	30.30	769.6	42.9	6.1	84.7	.....	1	3	20	3	3	.....	1	.....	.....	.....	8	.....	.....
Malta	N. 36 00	E. 14 30	1.06 p.m.	70	21	30.24	768.1	30.31	769.9	56.9	13.8	36.9	3	8	.....	1	.....	2	2	15	.....	.....	.....	5	.....	.....
Nassau	N. 25 04	W. 77 22	6.58 a.m.	44	13	30.22	767.6	30.27	768.8	70.8	21.6	81.2	2	.....	.....	2	2	6	10	9	.....	.....	.....	5	.....	.....
Oscott	N. 52 28	W. 1 55	0.00 m.	483	147	29.78	756.4	30.32	770.1	41.6	5.3	88.1	.....	.....	2	10	11	4	1	2	1	.....	.....	8	.....	.....
Oxford	N. 51 46	W. 1 17	0.03 p.m.	210	64	30.11	764.8	30.34	770.6	42.6	5.9	84.8	1	.....	2	10	9	6	1	.....	2	.....	.....	8	.....	.....
Plymouth	N. 50 22	W. 4 10	11.51 a.m.	69	21	30.28	769.1	30.36	771.1	46.3	7.9	86.7	.....	1	3	7	3	8	7	1	1	.....	.....	8	.....	.....
Sandwick Manse	N. 59 05	W. 3 20	11.54 a.m.	94	29	.....	.....	30.04	763.0	43.2	6.2	85.3	1	.....	3	16	6	3	1	.....	1	.....	.....	7	.....	.....
Scutari Cemet'y	N 41 00	E. 29 03	2.04 p.m.	60	18	30.25	768.3	30.32	770.1	42.9	6.1	78.9	8	1	1	3	5	1	.....	10	2	.....	.....	8	.....	.....
Sheffield	N. 53 23	W. 1 28	0.02 p.m.	260	79	29.99	761.7	30.28	769.1	43.5	6.4	88.2	1	1	1	14	10	.....	.....	.....	4	.....	.....	7	.....	.....
Silloth Rectory	N. 54 52	W. 3 22	11.54 a.m.	28	9	30.17	766.3	30.20	767.1	43.5	6.4	84.6	.....	.....	6	17	2	.....	4	1	1	.....	.....	8	1.97	50.0
Stonyhurst	N. 53 51	W. 2 28	11.58 a.m.	361	110	.....	.....	30.28	769.1	41.9	5.5	84.5	.....	.....	12	9	7	1	1	1	.....	.....	.....	6	.....	.....
Stratfield Turgiss	N. 51 17	W. 0 53	0.04 p.m.	197	60	.....	.....	.....	.....	42.7	5.9	84.7	3	3	7	8	4	3	1	.....	2	.....	.....	8	.....	.....
Truro	N. 50 16	W. 5 04	11.53 a.m.	43	13	30.29	769.4	30.34	770.6	50.0	10.0	79.3	.....	5	2	7	1	7	7	2	.....	.....	.....	9	.....	.....
Valencia	N. 51 55	W. 10 18	11.27 a.m.	23	7	30.20	767.1	30.23	767.8	48.9	9.4	79.7	1	.....	6	3	6	11	3	1	.....	.....	.....	9	.....	.....

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Met'rs	Result of Simultaneous Observations for January, 1882. Mean Barometer. Actual. Inch.	Mill.	Reduced. Inch.	Mill.	Mean Temperature. Fah.	Cent	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	NE	C	Total Movement. Miles	Kil.	Average Cloudiness. 0-10	Total Precipitation. Inch.	Mill.
Canadian Series	° ′	° ′																								
Bathurst	N. 47 39	W. 65 43	7.45 a.m.	35	11					14.4	— 9.8	92.4		10	8	2	3	3	3	2		6617	10649	7	5.62	142.7
Charlottetown	N. 46 14	W. 63 10	7.55 a.m.	38	12	29.89	759.2	29.93	760.2	5.4	—14.8	95.3a	1	4	4	4	3			3	12	3341	5377	7	3.74	95.0
Chatham	N. 47 03	W. 65 29	7.45 a.m.	56	17	29.90	759 4	29.97	761.2																	
Cornwall	N. 45 01	W. 74 43	7.09 a.m.	175	53																					
Dalhousie	N. 48 04	W. 66 21	7.32 a.m.	150	45																					
Father Point	N. 48 31	W. 68 28	7.34 a.m.	20	6	29.93	760.2	29.95	760.7	6.4	—14.2	86.5	3	6	1	9	4		1	4	3	15533	24997	8	3.65	92.7
Fort Garry	N. 49 51	W. 97 07	5.39 a.m.	754	230	29.15	740.4	30.09	764.3	—3.3	—19.6	96.9b	2	6	1	4	5	6		4	3	5142	8275	5	1.16	29.5
Fredericton	N. 45 57	W. 66 39	7.41 a.m.	59	18																					
Granton	N. 43 12	W. 81 21	6.43 a.m.	1015	309																					
Halifax	N. 44 39	W. 63 36	7.53 a.m.	122	37	29.84	757.9	29.98	761.5	19.5	— 6.9	92.0	2	4	14	1	4	3	2	1				6	6.84	173.7
Hamilton	N. 43 16	W. 79 53	6.49 a.m.	358	109																					
Kingston	N. 44 14	W. 76 30	7.02 a.m.	307	94	29.74	755.4	30.10	764.5	18.0	— 7.8	85.1	5	4	5	4	4	2	1	6		7023	11302	8	2.74	69.6
Little Glace Bay	N. 46 12	W. 59 58	8.08 a.m.	34	10																					
Montreal	N. 45 31	W. 73 33	7.13 a.m.	187	57	29.83	757.7	30.05	763 3	11.2	—11.6	85.1	1	4	13	2	4	2	4	1				8	3.91	99.3
Moose Factory	N. 51 16	W. 80 56	6.44 a.m.	30	9																					
Parry Sound	N. 45 19	W. 80 01	6.48 a.m.	635	194	29.35	745.5	30.11	764.8	12.5	—10.8	78.6	7	2	5	1	3	3	4	1	5	7717	12419	7	2.75	69.8
Peterborough	N. 44 17	W. 78 20	6.54 a.m.	688	210																					
Port Dover	N. 42 47	W. 80 13	6.47 a.m.	635	194	29.39	746.5	30.13	765.3	22.6	— 5.2	92.5	3	3	8	4	5	1	1	2	4	7220	11619	7	2.50	63.5
Port Stanley	N. 42 40	W. 81 13	6.43 a.m.	592	180	29.44	747.8	30.13	765.3	22.8	— 5.1	84.8	2	3	13	3	1	2	4	3				7	2.34	59.4
Quebec	N. 46 48	W. 71 12	7.23 a.m.	293	89	29.66	753.4	30.00	762.0	6.3	—14.3	87.5	2	5	9	4		1	4	2	4			7	6.50	165.1
Rockliffe	N. 46 10	W. 77 48	6.57 a.m.	418	127	29.59	751.6	30.10	764.5	4.1	—15.5	84.1a		10	4			6	4		7			6	2.91	73.9
Saugeen	N. 44 30	W. 81 21	6.42 a.m.	656	200	29.32	744.7	30.09	764.3	20.1	— 6.6	92.0	3	4	3	5	5	5	1	4	1	12376	19917	9	2.82	71.6
St. Andrews	N. 43 04	W. 81 06	6.34 a.m.	47	14	29.91	759.7	29.97	761.2	15.2	— 9.3	86.5	6	11	3	3	2		1	1	2			4	4.34	110.2
St. John, N.B.	N. 45 17	W. 66 03	7.44 a.m.	150	46																					
Stratford	N. 43 23	W. 81 00	6.44 a.m.	1182	360																					
Sydney	N. 46 08	W. 60 10	8.07 a.m.	37	11	29.85	758.2	29.92	760.0	17.2	— 8.2	88.7	3	11	3	6	1	1	1	1	4	9123	14682	7	5.01	127.3
Toronto	N. 43 39	W. 79 23	6.50 a.m.	350	107	29.71	754.6	30.12	765.0	21.0	— 6.1	87.8	5	6	8	5		2	2	3		9230	14854	8	1.99	50.5
Windsor	N. 44 59	W. 63 58	7.53 a.m.	87	26																					
Woodstock	N. 43 08	W. 80 47	6.48 a.m.	980	299																					
Yarmouth	N. 43 50	W. 66 02	7.44 a.m.	61	19	29.90	759.4	29.97	761.2	24.5	—4.2	81.7	2	6	4	3	2	1	9	4		9423	15165	6	6.21	157.7
Sub-Series.																										
St. Johns, N. F.	N. 47 34	W. 52 42	8.37 a.m.	230	70	29.75	755.6	30.02	762.5	19.5	— 6.9		a	5	7	8	4	3	1	2				6	3.80	96.5
St. Pierre	N. 46 47	W. 56 08	8.24 a.m.	?	?																					
Cape Colony Series.																										
Cape St. Francis	S. 34 10	E. 24 50	1.47 p.m.	25	7	29.94	760.5	29.97	761.2	73.8	23.2	80.3			10	4	6	3	8					5	1.86	47.2
Cape Town	S. 34 02	E. 18 29	1.22 p.m.	27	8	29.92	760.0	29.96	761.0	83.4	28.6	52.4		2	3		13	13						3	0.11	2.8
Worcester	S. 33 36	E. 19 26	1.26 p.m.	?	?																					
Chinese Series.																										
Sub Series.																										
Hankow ....h	N. 30 34	E. 114 20	7.45 p.m.	260	79	30.28	769.1	30.57	776.5	40.9	4.9	80.0	7i	4				5	3	3				6i	1.23i	31.2i
Zi-Ka-Wei	N. 31 12	E. 121 26	8.14 p.m.	23	7	30.32	770.2	30.35	770.8	40.1	4.5	86.0	2	9	2		1	4	7	6				5	4.20	106.7
Costa Rican Series.																										
San José	N. 9 56	W. 84 00	6.15 a.m.	3757	1145																					
Danish Series.																										
Copenhagen	N. 55 41	E. 12 36	0.58 p.m.	43	13	30.20	767.1	30.25	768.3	38.1	3.4	87.0	1	7	9	7	3	2	1	1				7		
Fanöe	N. 55 27	E. 8 24	0.42 p.m.	20	6	30.23	767.8	30.25	768.3	39.2	4.0	93.0			13	9	6	1	1	1				7		
Godthaab	N. 64 11	W. 51 46	8.41 a.m.	36	11	29.32	744.6	29.36	745.7	4.8	—15.1	89.0j	11	6	3	2	1		1	7				8		
Stykkisholm	N. 65 05	W. 22 46	10.37 a.m.	36	11	29.27	743.5	29.32	744.6	30.2	— 1.0				5	7	7	1	7	4				9		
Thorshavn	N. 62 02	W. 6 44	11.41 a.m.	29	9	29.63	752.6	29.67	753.5	41.2	5.1	80.0		4	9	9	4	1		1	3			8		
Vestervig	N. 56 47	E. 8 20	0.41 p.m.	82	25	30.07	763.8	30.16	766.1	39.7	4.3	89.0		2	8	10	6	2		1	2			7		
French Series.																										
Agen	N. 44 12	E. 0 38	0.11 p.m.	604	184	29.79	756.6	30.46	773.7	45.0	7.2	86.8	1		2	1	1	24	2						0	0
Alençon	N. 48 26	E. 0 05	0.09 p.m.	476	145	29.91	759.8	30.47	773.8	37.4	3.0	95.3	3	1	2	8	5	1	3	8					0.86	21.9
Arras	N. 50 18	E. 2 46	0.19 p.m.	239	73	30.15	765.8	30.42	772.7	37.4	3.0	89.4		4	1	7	6	5	7		1				1.87	47.4
Avignon	N. 43 57	E. 4 48	0.27 p.m.	65	20	30.36	771.2	30.44	773.2	46.0	7.8	65.4	27	1					1	2				1	1.36	34.5
Bar-sur-Seine	N. 48 07	E. 4 22	0.25 p.m.	518	158	29.89	759.2	30.48	774.1	37.0	2.8	78.9k			2	4	8	13	4					8	0.66	16.7
Beauvais	N. 49 26	E. 2 05	0.16 p.m.	246	75	30.19	766.8	30.47	773.9	38.7	3.7	87.0a		1	4	5	4	6	8	3				8	0.60	15.2
Besançon	N. 47 14	E. 6 01	0.32 p.m.	846	258			30.47	774.0	37.6	3.1	84.8	2			2	3	5		19					0	0
Bordeaux	N. 44 50	E. 0 32	0.06 p.m.	243	74	30.17	766.4	30.45	773.3	44.2	6.8	81.4	3			2	3	9	11	3				5	0.39	9.9
Bourges	N. 47 10	E. 2 26	0.17 p.m.	510	156	29.90	759.4	30.48	774.1	40.8	4.9	89.5	12	2	2	4	2	3	2	4					0.31	7.8
Brest	N. 48 24	W. 4 30	11.50 a.m.	210	64	30.16	766.1	30.41	772.3	46.4	8.0	88.0	1	1	3	7	3	7	3	4	2			8	2.83	72.0
Caen	N. 49 11	W. 0 21	0.07 p.m.	69	21	30.34	770.6	30.41	772.5	40.8	4.9	85.2c	1	1	4	1	14	8	2					4	0.77	19.5
Châlons-sur-Marne	N. 48 57	E. 4 21	0.25 p.m.	294	90	30.10	764.4	30.43	773.0	37.6	3.1	87.5a			2	4	9	7	2	2	5			8	0.17	4.4
Charleville	N. 49 46	E. 4 49	0.27 p.m.	476	145	30.00	761.9	30.54	775.6	36.1	2.3		2		2	2	7	6	6	3				7	1.16	29.6
Clermont-Fd	N. 45 46	E. 3 05	0.20 p.m.	1273	388	29.08	738.5	30.49	774.4	42.6	5.9	67.6	9	4	7	4	2	1	4						0.18	4.7
Cluny	N. 46 26	E. 4 39	0.27 p.m.	787	240	29.61	752.1	30.51	775.0	35.6	2.0	89.8	9	1		3	4	6	2	6						
Commercy	N. 48 46	E. 5 35	0.30 p.m.	797	243	29.59	751.6	30.51	774.9	36.3	2.4	88.0		1	7	5		4	14					8	0.86	21.8
Gap	N. 44 33	E. 6 05	0.32 p.m.	2427	740	27.85	707.4	30.47	773.8	44.1	6.7	57.6	2	5	3	2	7	3		1	8				1.06	26.8
Gréasque	N. 43 25	E. 5 37	0.31 p.m.	1056	322	29.26	743.2	30.38	771.7	52.7	11.5	53.8	6				8	9	2	6				3	1.57	39.9
Grenoble	N. 45 12	E. 5 43	0.31 p.m.	715	218	29.69	754.2	30.50	774.8	36.5	2.5	83.4		1	2		5	7	15	1					0.45	11.5
Guéret	N. 46 10	E. 1 52	0.16 p.m.	1486	453	28.82	732.0	30.45	773.5	45.0	7.2	65.0		1	1	14	2	12	1					3	0.33	8.3
Lamballe	N. 48 28	W. 2 31	11.58 a.m.	252	77	30.15	765.9	30.44	773.1	42.4	5.8	88.5	3	3	2	4	4	5	4	6				6	0.78	19.7
Lescar	N. 43 20	W. 0 26	0.06 p.m.	525	160	29.80	758.5	30.44	773.1	54.1	12.3	60.2	1	1	5	5	6	1	2	10				1	0.18	4.7
Lorient	N. 47 45	W. 3 21	11.55 a.m.	86	26	30.35	771.0	30.45	773.4	45.9	7.7	89.9	1	1	3	3	4	6	3	7	3			6	1.23	31.3
Lyon	N. 45 41	E. 2 30	0.25 p.m.	981	299	29.41	747.0	30.52	775.3	35.2	1.8	88.2a	4	7		1	2	4	7	6				3	0.41	10.3
Mans	N. 48 01	E. 0 12	0.09 p.m.	285	87	30.14	765.6	30.47	773.9	37.4	3 0	93.3j	1	1	3	3	8	6	8	1				9	0.84	21.3
Marseille	N. 43 18	E. 5 23	0.29 p.m.	246	75	30.12	765.1	30.39	772.0	55.9	13.3	57.1		3	8	7	1	5	6	1					1.22	31.1
Mont-Louis	N. 42 30	E. 2 07	0.16 p.m.	5203	1586	25.08	637.1	29.93	760.1	40.3	4.6	45.6	3	2	7	9	3		6	1				2		
Montpellier	N. 43 37	E. 3 53	0.24 p.m.	102	31	30.32	770.0	30.43	772.8	52.0	11.1	65 8	17					9	3	2				2	0.86	21.8
Nancy	N. 48 42	E. 6 11	0.33 p.m.	725	221	29.66	753.4	30.49	774.4	34.5	1.4	86.2	15	2	3	6	3	2						5	0.36	9.1
Nantes	N. 47 13	W. 1 33	0.02 p.m.	134	41	30.32	770.0	30.48	774.1	41.4	5.2	85.7	1	1	1	3	5	5	5	10				8	0.82	20.9
Nice	N. 43 41	E. 7 16	0.37 p.m.	29	9																					
Perpignan	N. 42 42	E. 2 53	0.19 p.m.	98	30	30.32	770.2	30.44	773.1	52.3	11.3	63.3	5			3	2	11		6	4			3	1.67	42.4
Pic du Midi (Sum-mit.)	N. 42 56	W. 0 08	0.08 p.m.	9380	2859	21.42	544.1			28.0	— 2.2		1	2	1	10	3	4	6	4					1.76	44.6
Privas	N. 44 45	E. 4 36	0.26 p.m.	997	304	29.41e	746.9e	30.55e	775.9e	38.3	3.5	73.7l													0.04	1.0
Puy de Dome	N. 45 46	E. 2 58	0.20 p.m.	4813	1467	25.43	645.8			37.0	2.8	56.1	9	3		5	5	6		3					1.41	35.7
Rochefort	N. 45 56	W. 0 58	0.04 p.m.	29	9	30.44	773.2	30.47	774.0	43.0	6.1	87.7			2	1	9	5	7	6	1			4	2.48	63.0
Roche-sur-Yon	N. 46 40	W. 1 26	0.02 p.m.	198	60	30.25	768.4	30.47	773.8	43.0	6.1	81.1	1	4	7	4	2	7	1	5				5	0.62	15.7
Rodez	N. 44 21	E. 2 34	0.18 p.m.	2050	625	28.23	717.0	30.45	773.4	43.3	6.3	65.5	2	2	2	2	2	3	18					8	0.55	14.0
Rouen	N. 49 26	E. 1 05	0.12 p.m.	39	12	30.40	772.1	30.45	773.3	38.7	3.7	88.6	1	4	1	7	3	6	8	1					0.58	14.7
Saint Lô	N. 49 06	W. 1 05	0.04 p.m.	134	41	30.28	769.0	30.43	773.0	41.4	5.2	82.1		4	6	5	6	1	4	5				6	0.60	15.3
Saint Maur	N. 48 48	E. 2 21	0.17 p.m.	162	49	30.30	769.5	30.46	773.7	37.4	3.0	89.5	6	1	1	5	8	4	3	2	1			8	0.41	10.4
Toulouse	N. 43 37	E. 1 27	0.14 p.m.	636	194	29.75	755.6	30.48	774.2	47.5	8.6	80.7	2	4	3	2	2	16	1	1				2	0.32	8.2
Tours	N. 47 24	E. 0 41	0.11 p.m.	171	52																					
Versailles	N. 48 48	E. 2 07	0.16 p.m.	445	136	29.58	751.2	30.43	773.0	36.9	2.7	92.1		2	2	12	1	6		8				8	0.48	12.2
Sub Series.																										
Paris, Montsouris	N. 48 50	E. 2 20	0.17 p.m.	256	78	30.18	766.5	30.47	773.9	37.8	3.2	89.6	1		3	5	7	7	2	6				9	0.30	7.6

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Met'rs	Result of Simultaneous Observations for January, 1882. Mean Barometer. Actual. Inch.	Mill.	Reduced. Inch.	Mill.	Mean Temperature. Fah.	Cent.	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	NE	C	Total Movement. Miles	Kil.	Average Cloudiness. 0-10	Total Precipitation. Inch.	Mill.
GERMAN SERIES.	° ′	° ′																								
Bamberg	N. 49 54	E. 10 54	0.51 p.m.	787	240	29.60	751.7	30.46	773.7	33.6	0.9	76.0	1	1	3	5	6	6	4	.....	5	.....	.....	6	0.83	21.0
Berlin	N. 52 30	E. 13 23	1.02 p.m.	164	50	30.20	767.0	30.38	771.7	37.4	3.0	82.9	.....	9	3	8	3	3	2	3	.....	.....	.....	8	1.13	28.6
Breslau	N. 51 07	E. 17 02	1.17 p.m.	482	147	29.89	759.2	30.43	772.9	36.9	2.7	73.4	1	3	13	5	4	3	1	1	.....	.....	.....	7	0.41	10.5
Carlsruhe	N. 49 01	E. 8 25	0.42 p.m.	404	123	30.03	762.8	30.50	774.6	34.7	1.5	86.5	.....	.....	1	9	6	3	6	6	.....	.....	.....	10	1.17	29.8
Cassel	N. 51 19	E. 9 28	0.46 p.m.	669	204	29.66	753.4	30.38	771.6	34.7	1.5	83.9	1	1	2	2	22	1	1	1	.....	.....	.....	6	0.93	23.6
Frankfort on M.	N. 50 08	E. 8 41	0.43 p.m.	338	103	30.09	764.2	30.47	774.0	34.5	1.4	84.3	2	.....	1	8	7	6	3	1	3	.....	.....	8	0.55	13.9
Friedrichshafen	N. 47 39	E. 9 29	0.46 p.m.	1355	413	29.00	736.5	30.53	775.4	33.4	0.8	87.5	.....	.....	1	4	9	4	5	8	.....	.....	.....	9	1.25	31.8
Hamburg	N. 53 33	E. 9 58	0.48 p.m.	85	26	30.28	769.0	30.37	771.4	36.1	2.3	92.5	.....	1	6	14	2	5	2	1	.....	.....	.....	7	1.26	32.1
Kiel	N. 54 19	E. 10 04	0.48 p.m.	13	4	30.29	769.4	30.31	769.8	38.3	3.5	86.7	.....	1	8	9	5	.....	.....	2	6	.....	.....	8	2.00	50.9
Leipsic	N. 51 20	E. 12 24	0.58 p.m.	390	119	30.00	762.1	30.45	773.3	36.0	2.2	81.3	.....	2	3	8	11	4	1	2	.....	.....	.....	7	0.33	8.4
Magdeburg	N. 52 09	E. 11 37	0.54 p.m.	177	54	30.21	767.2	30.41	772.4	37.0	2.8	86.3	.....	1	9	5	5	4	3	2	2	.....	.....	8	0.67	17.1
Memel	N. 55 43	E. 21 07	1.32 p.m.	39	12	30.16	766.1	30.21	767.3	36.9	2.7	86.4	2	6	15	7	1	.....	.....	.....	.....	.....	.....	7	.....	.....
Munich	N. 48 09	E. 11 34	0.54 p.m.	1732	528	28.58	726.0	30.48	774.1	33.6	0.9	78.1	9	4	2	1	.....	2	1	2	10	.....	.....	6	0.92	23.5
Neufahrwasser	N. 54 24	E. 18 40	1.25 p.m.	16	5	30.27	768.9	30.29	769.3	38.1	3.4	76.4	2	6	10	6	5	.....	.....	.....	2	.....	.....	6	0.80	20.4
Neustadt	N. 49 21	E. 8 08	0.41 p.m.	479	146	29.93	760.2	30.46	773.7	34.9	1.6	79.0	3	1	10	2	3	3	2	4	3	.....	.....	9	0.58	14.7
Stuttgart	N. 48 47	E. 9 11	0.45 p.m.	833	254	29.48	748.9	30.43	772.8	36.1	2.3	83.1	7	1	5	6	2	.....	6	4	.....	.....	.....	6	0.44	11.1
Wustrow	N. 54 21	E. 12 24	0.58 p.m.	23	7	30.32	770.0	30.34	770.6	36.7	2.6	96.8	1	1	8	8	6	5	.....	2	.....	.....	.....	8	0.66	16.7
GREEK SERIES.																										
Athens	N. 37 58	E. 23 44	1.43 p.m.	360	110	29.93	760.3	30.33	770.4	50.4	10.2	.....	18	2	3	.....	.....	.....	.....	8	.....	.....	.....	5	3.00	76.3
INDIAN SERIES.																										
Kuruchee ..... b.	N. 24 47	E. 67 04	4.36 p.m.	49	15	30.01	762.2	30.06	763.5	74.0	23.3	58.	.....	1	5	15	.....	1	1	6	.....	.....	.....	4	1.04	26.4
Deesa	N. 24 16	E. 72 14	4.57 p.m.	465	142	29.51	749.5	29.99	761.7	79.0	26.1	43.	7	7	7	7	.....	.....	.....	3	.....	.....	.....	3	0.19	4.8
Bombay	N. 18 54	E. 72 49	5.00 p.m.	37	11	29.92	760.0	29.96	761.0	80.3	26.8	68.	9	21	1	.....	.....	.....	.....	.....	.....	.....	.....	1	0	0
Poona	N. 18 28	E. 74 10	5.05 p.m.	1849	564	28.09	713.5	29.93	760.2	85.6	29.8	26.	2	3	5	4	.....	1	10	6	.....	.....	.....	2	0.04	1.0
Belgaum	N. 15 52	E. 74 42	5.07 p.m.	2550	777	27.41	696.2	29.93	760.2	81.0	27.2	32.	.....	.....	1	2	1	2	7	17	1	.....	.....	2	0.11	2.8
Lahore	N. 31 34	E. 74 20	5.05 p.m.	732	223	29.28	743.7	30.06	763.5	62.3	16.8	63.	1	5	5	.....	.....	.....	2	4	14	.....	.....	5	1.43	36.3
Roorkee	N. 29 52	E. 77 56	5.20 p.m.	887	270	29.11	739.4	30.05	763.3	63.1	17.3	66.	3	15	2	2	3	1	.....	.....	5	.....	.....	5	2.07	52.6
Agra	N. 27 10	E. 78 05	5.20 p.m.	555	169	29.47	748.5	30.05	763.3	69.8	21.0	48.	5	7	13	1	.....	1	1	3	.....	.....	.....	2	0	0
Nagpur	N. 21 09	E. 79 11	5.24 p.m.	1025	312	28.94	735.1	29.98	761.5	81.2	27.3	33.	.....	.....	.....	3	2	4	1	1	20	.....	.....	2	0.42	10.7
Jubulpore	N. 23 09	E. 79 59	5.28 p.m.	1351	412	28.67	728.2	30.06	763.5	67.2	19.6	37.	1	2	.....	.....	3	2	.....	6	17	.....	.....	1	0	0
Lucknow	N. 26 50	E. 81 00	5.32 p.m.	369	112	29.65	753.1	30.04	763.0	70.6	21.4	44.	.....	2	9	7	.....	.....	.....	.....	13	.....	.....	2	0.03	0.8
Allahabad	N. 25 26	E. 81 52	5.35 p.m.	307	94	29.71	754.6	30.03	762.8	66.9	19.4	60.	.....	2	.....	1	.....	.....	1	3	24	.....	.....	1	0	0
Patna	N. 25 37	E. 85 08	5.49 p.m.	183	56	29.84	757.9	30.04	763.0	68.2	20.1	57.	.....	3	17	4	1	1	.....	1	4	.....	.....	2	0	0
Hazaribagh	N. 24 00	E. 85 24	5.50 p.m.	2007	612	27.97	710.4	30.03	762.8	69.1	20.6	36.	8	13	6	1	.....	1	1	.....	1	.....	.....	1	0.04	1.0
Cuttack	N. 20 29	E. 85 54	5.52 p.m.	80	24	29.94	760.5	30.02	762.5	76.2	24.6	56.		2	1	3	.....	.....	1	10	14	.....	.....	1	0	0
Calcutta	N. 22 32	E. 88 19	6.01 p.m.	21	7	29.99	761.7	30.01	762.2	71.5	21.9	63.	5	4	7	2	.....	.....	.....	2	1	.....	.....	0	0.13	3.3
Dhubri ..... b	N. 26 07	E. 89 50	6.08 p.m.	118	36	29.89	759.2	30.02	762.5	68.1	20.1	64.	.....	1	.....	.....	.....	.....	.....	1	27	.....	.....	0	0.06	1.5
Chittagong ..... a	N. 22 21	E. 91 50	6.15 p.m.	87	26	29.93	760.2	30.03	762.8	71.5	21.9	72.	.....	8	14	2	3	.....	.....	.....	3	.....	.....	1	0	0
Sibsagar	N. 26 59	E. 94 40	6.27 p.m.	333	112	29.70	754.4	30.06	763.5	62.0	16.7	86.	.....	2	.....	4	1	2	1	21	.....	.....	.....	4	1.63	41.4
Jeypore	N. 26 55	E. 75 50	5.05 p.m.	1431	436	28.57	725.7	30.05	763.3	70.0	21.1	46.	3	13	4	4	2	1	1	1	2	.....	.....	4	1.03	26.2
Zanzibar	S. 6 10	E. 39 11	2.45 p.m.	22	7	29.80	758.4	.....	.....	85.4	29.7	69.	12	4	.....	2	5	.....	.....	10	.....	.....	.....	5	4.31	109.5
Trichinopoly	N. 10 47	E. 78 43	5.23 p.m.	?	?	29.72	754.9	.....	.....	81.1	27.3	58.	3	.....	.....	.....	.....	2	12	6	8	.....	.....	3	0	0
Bellary	N. 15 09	E. 76 57	5.16 p.m.	1455	444	28.47	723.1	.....	.....	84.7	29.3	32.	.....	1	.....	.....	.....	7	19	4	.....	.....	.....	2	0	0
ITALIAN SERIES.																										
Udine	N. 46 04	E. 13 14	1.01 p.m.	381	116	30.03	762.7	30.45	773.5	48.0	8.9	50.	1	.....	.....	.....	.....	.....	10	3	17	.....	.....	3	0.36	9.1
Milan	N. 45 28	E. 9 11	0.45 p.m.	482	147	29.94	760.5	30.49	774.4	39.2	4.0	80.	2	1	13	9	.....	1	3	2	.....	.....	.....	5	1.65	41.9
Padua	N. 45 24	E. 11 53	0.56 p.m.	102	31	30.35	771.0	30.47	773.9	43.2	6.2	68.	11	7	3	1	1	2	2	2	2	.....	.....	3	0.39	9.9
Moncalieri	N. 45 00	E. 7 42	0.39 p.m.	853	260	29.52	749.7	30.48	774.1	38.1	3.4	77.	6	4	.....	.....	1	1	6	13	.....	.....	.....	3	1.48	37.6
Genoa	N. 44 25	E. 8 55	0.44 p.m.	157	48	30.22	767.7	30.42	772.7	53.8	12.1	56.	7	.....	1	4	.....	3	.....	5	11	.....	.....	4	2.80	71.1
Mondovi	N. 44 22	E. 7 48	0.39 p.m.	1824	556	28.48	723.4	30.48	774.3	42.6	5.9	48.	.....	1	26	.....	1	1	2	.....	.....	.....	.....	2	1.66	42.2
Pesaro	N. 43 55	E. 12 53	1.00 p.m.	46	14	30.39	771.9	30.45	773.3	44.2	6.8	72.	22	4	2	.....	.....	1	.....	2	.....	.....	.....	5	0.65	16.5
Florence	N. 43 46	E. 11 14	0.53 p.m.	240	73	30.16	766.1	30.43	772.8	47.3	8.5	61.	2	4	1	.....	1	7	6	10	.....	.....	.....	3	1.16	29.6
Leghorn	N. 43 32	E. 10 18	0.49 p.m.	79	24	30.33	770.3	30.42	772.6	50.9	10.5	65.	2	.....	.....	.....	.....	.....	4	25	.....	.....	.....	4	1.57	39.9
Rome	N. 41 54	E. 12 29	0.58 p.m.	164	50	30.19	766.9	30.37	771.4	52.3	11.3	55.	22	2	1	.....	.....	.....	2	2	2	.....	.....	4	2.07	52.6
Lecce	N. 40 21	E. 18 12	1.21 p.m.	236	72	30.10	764.4	30.36	771.1	53.6	12.0	64.	9	11	2	.....	1	2	2	4	.....	.....	.....	4	1.64	41.7
Cosenza	N. 39 13	E. 16 15	1.13 p.m.	840	256	29.45	748.1	30.37	771.5	51.1	10.6	74.	1	4	2	6	11	3	2	.....	.....	.....	.....	4	1.16	29.5
Cagliari	N. 39 13	E. 9 10	0.45 p.m.	180	55	30.14	765.5	30.34	770.6	57.0	13.9	62.	.....	11	2	2	1	3	.....	.....	12	.....	.....	2	0.08	2.0
Palermo	N. 38 07	E. 13 22	1.02 p.m.	236	72	30.10	764.6	30.36	771.1	56.8	13.8	59.	5	2	2	2	.....	.....	2	13	5	.....	.....	5	1.05	26.7
Syracuse	N. 37 03	E. 15 18	1.09 p.m.	43	13	30.28	769.1	30.33	770.3	56.3	13.5	67.	2	1	4	2	1	4	11	6	.....	.....	.....	5	2.08	52.8
Sub-Series.																										
Naples	N. 40 52	E. 14 18	1.05 p.m.	489	149	29.81	757.2	30.34	770.6	54.0	12.2	61.9	9	2	.....	1	3	2	1	13	.....	.....	.....	3	4.00	101.7
Stelvio	N. 46 32	E. 10 26	0.50 p.m.	8343	2543	22.32	566.9	.....	.....	25.3	−3.7	47.6	.....	.....	.....	2	7	11	5	6	.....	.....	.....	2	5.51	140.0
Valdobbia	N. 45 47	E. 7 54	0.40 p.m.	8360	2548	22.42	569.5	.....	.....	27.7	−2.4	45.2	5	.....	2	.....	2	10	11	1	.....	.....	.....	2	12.99	330.0
JAPANESE SERIES.																										
Aomori	N. 40 51	E. 140 45	9.31 p.m.	32	10	30.04	763.0	30.08	764.2	31.4	−0.3	84.2	1	.....	10	8	7	2	1	.....	2	4820	7757	8	2.87	73.0
Hakodate	N. 41 47	E. 140 44	9.31 p.m.	10	3	30.04	762.9	30.05	763.2	32.0	0.0	73.0	6	11	3	1	.....	1	4	.....	5	6843	11012	6	1.85	46.9
Hiroshima	N. 34 20	E. 132 27	8.58 p.m.	14	4	30.18	766.0	30.20	767.0	40.9	5.0	79.9	20	.....	4	.....	.....	.....	1	3	3	3557	5724	7	1.64	41.7
Kanazawa	N. 36 33	E. 136 40	9.14 p.m.	95	29	30.22	767.7	30.33	770.4	37.1	2.9	83.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	.....
Kioto	N. 35 01	E. 135 46	9.11 p.m.	102	49	30.01	762.2	30.19	766.9	39.3	4.0	84.9	13	7	8	2	1	.....	.....	.....	.....	2455	3951	7	3.68	93.4
Kochi	N. 33 33	E. 133 34	9.02 p.m.	20	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nagasaki	N. 32 44	E. 129 52	8.47 p.m.	189	58	30.04	762.9	30.25	768.3	44.2	6.8	82.0	8	5	2	2	1	3	1	5	4	3832	6167	5	5.23	132.9
Nemuro	N. 43 21	E. 145 35	9.50 p.m.	58	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Niigata	N. 37 55	E. 139 03	9.24 p.m.	32	10	30.10	764.6	30.14	765.5	37.2	2.9	82.0	3	.....	11	5	5	4	3	.....	.....	6919	11135	8	4.37	111.1
Nobiru	N. 38 23	E. 141 12	9.32 p.m.	15	5	30.07	763.8	30.09	764.2	34.3	1.3	83.0	23	2	5	.....	.....	1	.....	.....	.....	2796	4500	6	1.01	25.7
Supporo	N. 43 04	E. 141 23	9.33 p.m.	61	19	.....	.....	.....	.....	24.7	−4.1	80.0	1	.....	5	.....	3	1	6	3	12	.....	.....	8	2.80	71.0
Tokei	N. 35 40	E. 139 45	9.27 p.m.	63	19	30.05	763.1	30.12	764.9	38.8	3.8	75.7	17	6	1	.....	1	2	4	.....	.....	4113	6619	5	1.81	46.0
Wakayama	N. 34 14	E. 135 09	9.09 p.m.	48	15	30.14	765.4	30.19	766.8	43.1	6.1	74.7	6	3	7	.....	3	1	6	4	1	4201	6761	7	2.35	59.8
MAURITIUS SER'S.																										
Mauritius	S. 20 06	E. 57 33	3.58 p.m.	181	55	29.75	755.6	29.94	760.5	a80.7	a27.1	71.6a	2	3	6	2	3	2	9	4	.....	.....	.....	4	11.77	299.0
MEXICAN SERIES.																										
Guanajuato ..... a.	N. 21 01	W. 100 48	5.24 a.m.	6683	2037	23.70	602.1	29.92	760.1	50.0	10.0	78.	.....	.....	.....	2	.....	2	8	7	11	.....	.....	3	map.	map.
Leon	N. 21 07	W. 101 35	5.22 a.m.	5902	1799	24.46	621.3	30.24	768.4	51.1	10.6	81.	21	8	.....	.....	1	.....	.....	1	.....	.....	.....	2	0	0
Mazatlan	N. 23 11	W. 106 17	5.03 a.m.	249	76	29.74	755.5	30.00	762.0	64.6	18.1	87.	5	13	2	.....	.....	.....	5	5	1	.....	.....	6	2.95	75.0
Mexico	N. 19 26	W. 99 00	5.32 a.m.	7490	2283	23.11	587.1	30.30	769.7	44.8	7.1	72.	.....	1	.....	.....	.....	.....	.....	.....	30	.....	.....	2	0	0
Morelia	N. 19 42	W. 101 06	5.22 a.m.	6247	1940	24.29	617.0	30.53	775.6	47.8	8.8	76.	1	.....	.....	2	3	17	2	6	.....	.....	.....	1	0.12	0.3
Patzcuaro	N. 22 04	W. 102 04	5.20 a.m.	6312	1924	23.95	608.0	30.05	763.3	48.9	9.4	74.	.....	.....	.....	1	.....	.....	.....	.....	30	.....	.....	3	0	0
Puebla	N. 19 02	W. 98 03	5.36 a.m.	7113	2168	23.43	595.4	30.39	772.0	41.6	5.3	74.	4	1	.....	.....	.....	.....	.....	1	25	.....	.....	1	0	0
San Luis Potosi	N. 22 10	W. 100 51	5.25 a.m.	6211	1893	24.22	615.1	30.13	765.5	49.8	9.9	55.	1	.....	1	4	4	9	4	8	.....	.....	.....	5	0	0
Tlacotalpam	N. 18 37	W. 95 32	5.40 a.m.	13	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zacatecas	N. 22 44	W. 102 20	5.18 a.m.	8100	2469	22.56	573.0	30.30	769.6	46.9	8.3	54.0	9	.....	4	1	7	1	.....	.....	1	.....	.....	2	0	0

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Met'rs	Result of Simultaneous Observations for January, 1882. Mean Barometer. Actual. Inch.	Mill.	Reduced. Inch.	Mill.	Mean Temperature. Fah.	Cent.	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	NE	C	Total Movement. Miles	Kil.	Average Cloudiness. 0–10	Total Precipitation. Inch.	Mill.
NETHERLANDS SERIES.	° ′	° ′																								
Flushing	N. 51 24	E. 3 35	0.22 p.m.	0	0	30.40	772.1	30.40	772.1	39.9	4.4	.....	.....	1	4	8	8	7	2	1	.....	.....	.....	.....	0.56	14.1
Groningen	N. 53 12	E. 6 34	0.34 p.m.	?	?	30.28	769.2	30.34	770.6	38.3	3.5	.....	.....	2	2	14	6	3	3	1	.....	.....	.....	.....	1.24	31.6
Helder	N. 52 58	E. 4 45	0.27 p.m.	0	0	30.32	770.0	30.32	770.0	40.1	4.5	.....	2	.....	5	3	12	6	.....	3	.....	.....	.....	.....	1.60	40.5
Hellevoetsluis	N. 51 49	E. 4 08	0.25 p.m.	0	0	30.37	771.4	30.37	771.4	38.7	3.7	90.5b	.....	.....	4	10	6	5	4	1	1	.....	.....	.....	1.19	30.2
Utrecht	N. 52 05	E. 5 07	0.29 p.m.	43	13	30.34	770.6	30.39	771.8	38.5	3.6	88.3	.....	.....	1	8	12	9	.....	1	.....	.....	.....	6	1.63	41.5
NORWEGIAN SERIES.																										
Bergen	N. 60 24	E. 5 20	0.29 p.m.	56	17	29.93	760.2	29.99	761.8	39.6	4.2	85	4	1	.....	5	16	3	.....	.....	2	.....	.....	8	12.14	308.6
Brono	N. 65 28	E. 12 14	0.57 p.m.	34	10	29.63	752.7	29.67	753.7	36.1	2.3	78	1	3	4	13	4	1	2	1	2	.....	.....	9	5.41	137.3
Christiania	N. 59 55	E. 10 45	0.51 p.m.	134	41	29.84	758.0	30.00	761.9	35.1	1.7	79	3	3	6	11	3	.....	2	2	1	.....	.....	7	1.20	30.4
Gjæsvær	N. 71 07	E. 25 22	1.49 p.m.	23	7	29.23	742.5	29.26	743.1	26.8	—2.9	.....	.....	4	7	7	3	3	.....	5	2	.....	.....	9	.....	.....
Lodingen	N. 68 24	E. 16 01	1.12 p.m.	43	13	29.43	747.5	29.48	748.7	30.9	—0.6	76	1	4	6	8	2	4	2	4	.....	.....	.....	8	8.00	203.3
PORTUGUESE SERIES.																										
Angra	N. 38 39	W. 27 14	10.19 a.m.	144	44	29.97	761.2	30.13	765.2	57.9	14.4	78.1	5	4	5	3	4	8	1	1	.....	.....	.....	5	3.08	78.3
Campo Major	N. 39 02	W. 6 59	11.40 a.m.	945	288	29.32	744.8	30.34	770.7	52.9	11.6	60.9	3	.....	1	.....	2	2	12	11	.....	.....	.....	4	0.38	9.7
Funchal	N. 32 38	W. 16 55	11.00 a.m.	82	25	30.18	766.6	30.27	768.9	64.0	17.8	63.4	18	1	.....	.....	.....	1	2	9	.....	.....	.....	6	5.02	127.6
Lisbon	N. 38 42	W. 9 08	11.31 a.m.	335	102	30.04	763.0	30.41	772.4	51.1	10.6	75.1	.....	.....	.....	7	.....	5	8	3	8	.....	.....	4	0.80	20.2
Ponta Delgada	N. 37 45	W. 25 41	10.25 a.m.	66	20	30.20	767.1	30.27	768.9	59.7	15.4	76.1	3	.....	2	3	8	1	5	4	5	.....	.....	5	4.11	104.5
St. Paulde Loanda	S. 8 49	E. 13 07	1.00 p.m.	193	59	29.68	753.9	29.88	759.0	79.9	26.6	90.3	.....	4	14	10	1	.....	1	1	.....	.....	.....	6	0	0
RUSSIAN SERIES.																										
Akmolinski	N. 51 12	E. 71 23	4.54 p.m.	843?	306?	28.91	734.4	30.10	764.6	4.3	—15.4	.....	...	....	3	20	4	2	.....	1	1	.....	.....	7	0.37	9.3
Archangel	N. 64 33	E. 40 32	2.50 p.m.	16	5	29.55	750.5	29.57	751.0	16.0	—8.9	89.3	3	5	5	6	4	5	2	.....	1	.....	.....	9	1.95	49.0
Astrakhan	N. 46 21	E. 48 02	3.20 p.m.	‖68	‖21	30.27	768.8	30.19	766.7	30.4	—0.9	81.8	1	2	11	4	1	5	2	2	3	.....	.....	9	0.52	13.2
Barnaul	N. 53 20	E. 83 47	5.43 p.m.	459?	140?	29.65	753.2	30.20	767.2	8.4	—13.1	80.2	.....	.....	1	19	1	.....	.....	1	9	.....	.....	8	0.46	11.6
Dorpat	N. 58 23	E. 26 43	1.55 p.m.	223	68	29.72	754.9	29.97	761.3	33.8	1.0	87.3	2	2	16	6	3	.....	.....	2	.....	.....	.....	8	0.98	25.0
Ekaterinburg	N. 56 49	E. 60 38	4.10 p.m.	894?	272?	28.76	730.5	29.78	756.4	10.0	—12.2	80.5	3	3	5	9	5	2	1	.....	3	.....	.....	8	0.45	11.4
Kasan	N. 55 47	E. 49 08	3.24 p.m.	249	76	29.53	750.1	29.82	757.4	18.5	—7.5	85.2	4	3	3	7	9	2	1	1	1	.....	.....	9	0.56	14.2
Kertch	N. 45 21	E. 36 29	2.34 p.m.	18?	6?	30.20	767.0	30.22	767.5	35.2	1.8	87.5	5	8	9	.....	1	1	.....	1	6	.....	.....	8	0.06	1.5
Kieff	N. 50 27	E. 30 30	2.10 p.m.	600	183	29.53	750.1	30.20	767.1	31.1	—0.5	82.4	5	12	7	3	2	2	.....	.....	.....	.....	.....	8	0.31	7.8
Lugan	N. 48 35	E. 39 20	2.45 p.m.	188?	57?	29.94	760.6	30.16	766.1	31.1	—0.5	81.1	2	4	13	7	3	1	.....	1	.....	.....	.....	9	0.18	4.6
Moscow	N. 55 46	E. 37 40	2.39 p.m.	448	136	29.35	745.4	29.85	758.1	28.8	—1.8	76.1	9	1	1	4	13	2	.....	1	.....	.....	.....	7	0.48	12.1
Nikolaiev	N. 46 58	E. 31 58	2.16 p.m.	62	19	30.25	758.4	30.32	770.2	34.2	1.2	84.1	9	6	3	4	5	.....	.....	1	3	.....	.....	8	0.06	1.5
Nikolaievsk	N. 53 08	E. 140 45	9.31 p.m.	75?	23?	29.98	761.5	30.07	763.7	—8.0	—22.2	81.8	.....	2	6	.....	.....	.....	.....	.....	19	.....	.....	2	0.03	0.7
Pekin	N. 39 57	E. 116 28	7.54 p.m.	123?	38?	30.24	768.1	30.38	771.7	27.5	—2.5	53.8	1	4	.....	.....	.....	.....	.....	.....	26	.....	.....	2	0.04	1.1
St. Petersburg	N. 59 56	E. 30 16	2.09 p.m.	15	5	29.80	757.0	29.82	757.4	30.9	—0.6	83.7	1	11	10	4	2	2	.....	1	.....	.....	.....	7	0.58	14.8
Tashkend	N. 41 19	E. 69 16	4.45 p.m.	1493?	455?	28.71	729.3	30.39	771.9	28.8	—1.8	87.3	1	2	.....	.....	.....	.....	.....	.....	28	.....	.....	4	2.55	64.7
Tiflis	N. 41 43	E. 44 47	3.07 p.m.	1343	409	28.80	731.6	30.28	769.1	39.6	4.2	54.3	4	16	.....	1	1	2	1	.....	6	.....	.....	5	0.67	17.0
Warsaw	N. 52 13	E. 21 02	1.32 p.m.	392	119	29.91	759.8	30.36	771.1	33.8	1.0	83.3	1	5	12	7	4	2	.....	.....	.....	.....	.....	9	.....	.....
Wilna	N. 54 41	E. 25 18	1.49 p.m.	388	118	29.76	755.8	30.20	767.0	34.2	1.2	83.4	1	7	8	12	2	1	.....	.....	.....	.....	.....	9	0.22	5.7
Yeniseisk	N. 58 27	E. 92 06	6.16 p.m.	262?	80?	29.84	757.9	30.16	766.0	3.9	—15.6	81.7	.....	.....	9	5	3	1	5	.....	8	.....	.....	6	0.61	15.6
SCOTTISH SERIES.																										
Leith	N. 55 58	W. 3 10	11.55 a.m.	83	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Monach Lt. House	N. 57 31	W. 7 42	11.37 a.m.	150	46	.....	.....	29.92	760.0	46.8	8.2	90.5	.....	1	8	4	15	1	2	.....	.....	.....	.....	8	4.7	119.4
North Unst	N. 60 51	W. 0 53	0.04 p.m.	230	70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SPANISH SERIES.																										
Barcelona	N. 41 23	E. 2 11	0.16 p.m.	98	30	30.07	763.7	30.40	772.2	54.3	12.4	69	.....	1	4	8	3	1	10	2	2	738	1187	2	1.52	38.5
Bilbao	N. 43 15	W. 2 56	11.56 a.m.	52	16	30.37	771.4	30.43	772.9	54.9	12.7	66.8	1	1	.....	.....	3	25	1	.....	.....	2282	3672	2	1.31	33.3
Burgos	N. 42 20	W. 3 46	11.53 a.m.	2821	860	27.41	696.2	30.51	774.9	42.3	5.7	67	4	1	.....	9	3	2	.....	12	.....	3249	5228	3	0.24	6.0
Madrid	N. 40 25	W. 3 42	11.53 a.m.	2152	656	28.16	715.2	30.45	773.4	49.5	9.7	58.6	1	1	.....	1	2	3	8	15	.....	5237	8428	3	inap.	inap.
Murcia	N. 37 59	W. 1 10	0.03 p.m.	141	43	30.28	769.0	30.44	773.1	49.6	9.8	80	.....	.....	4	9	1	.....	10	7	.....	956	1539	7	2.11	53.7
Santiago	N. 42 53	W. 8 28	11.34 a.m.	863	263	29.44	747.7	30.35	771.0	52.7	11.5	69.4	4	1	.....	.....	1	8	1	2	14	4008	6450	5	1.04	26.4
Sub-Series.																										
Havana	N. 23 08	W. 82 28	7.39 a.m.	62	19	30.69	764.2	30.16	765.9	66.9	19.4	85.8	.....	1	.....	.....	.....	7	17	1	5	.....	.....	1	0.03	0.7
Manilla	N. 14 35	E. 121 00	8.12 p.m.	56	17	29.97	761.3	30.03	762.7	77.0	25.0	72.9	5	.....	.....	.....	1	1	6	18	.....	.....	.....	4	0.37	9.5
San Fernando	N. 36 28	W. 6 13	11.43 a.m.	95	29	30.25	768.4	30.35	770.9	58.1	14.5	62.5	2	2	.....	.....	.....	4	17	2	4	.....	.....	4	1.56	39.0
San Juan de Porto Rico	N. 18 30	W. 66 10	7.44 a.m.	82	25	30.03	762.8	30.12	765.1	74.1	23.4	85	.....	.....	.....	....	1	10	7	1	12	.....	.....	4	2.16	54.8
Tuguegarao	N. 17 37	E. 121 30	8.15 p.m.	125	38	29.94	760.5	30.10	764.5	72.9	22.7	81.5	2	19	1	.....	2	5	2	.....	.....	.....	.....	6	0.17	4.3
SWEDISH SERIES.																										
Haparanda	N. 65 47	E. 24 03	1.44 p.m.	29	9	29.59	751.6	29.63	752.6	22.5	—5.3	86	2	7	.....	15	.....	5	.....	2	.....	.....	.....	6	1.39	35.3
Umea	N. 63 50	E. 20 17	1.29 p.m.	39	12	29.68	753.9	29.73	755.2	26.8	—2.9	84	1	11	1	9	4	1	.....	2	2	.....	.....	6	1.39	35.2
Hernosand	N. 62 32	E. 17 57	1.20 p.m.	46	14	29.77	756.1	29.82	757.4	32.7	0.4	70	1	4	6	7	2	2	.....	1	8	.....	.....	5	0.94	23.9
Stockholm	N. 59 20	E. 18 04	1.20 p.m.	144	44	29.81	757.1	29.98	761.6	35.6	2.0	77	2	3	14	8	2	1	1	.....	.....	.....	.....	7	0.67	17.1
Wisby	N. 57 39	E. 18 19	1.20 p.m.	52	16	30.00	762.1	30.06	763.6	37.9	3.3	84	.....	1	10	14	3	.....	.....	3	.....	.....	.....	5	1.12	28.4
Sub-Series.																										
Upsala	N. 59 51	E. 17 37	1.19 p.m.	79	24	29.87	758.6	29.95	760.6	35.1	1.7	80.1	2	4	8	13	2	.....	1	1	.....	.....	.....	7	1.63	41.3
SWISS SERIES.																										
Geneva	N. 46 12	E. 6 08	0.33 p.m.	1338	408	29.03	737.3	30.52	775.1	34.5	1.4	86.6	5	2	.....	3	1	5	5	9	1	.....	.....	.....	0.45	11.5
Zurich	N. 47 22	E. 8 40	0.43 p.m.	1542	470	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
TURKISH SERIES.																										
Constantinople	N 41 00	E. 28 59	2.04 p.m.	230	70	.....	.....	30.36	771.2	42.8	6.0	75	14	6	.....	2	3	.....	2	4	.....	.....	.....	8	2.23	56.6
Valona	N. 40 27	E. 19 27	1.25 p.m.	105	32	.....	.....	30.33	770.4	54.7	12.6	.....	.....	19	8	1	.....	2	1	.....	.....	.....	.....	2	1.26	32.0
Sub-Series.																										
Beirut	N. 33 54	E. 35 28	2.30 p.m.	111	34	.....	.....	30.14	765.5	57.6	14.2	62	10	4	3	8	1	1	.....	4	.....	.....	.....	4	4.91	124.7

‖ Below sea level.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea		Result of Simultaneous Observations for January, 1882. Mean Barometer. Actual.		Reduced.		Mean Temperature.		Mean Rel. Humidity.	Wind. Directions.									Total Movement.		Average Cloudiness.	Total Precipitation.	
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
U. S. SERIES.	° ′	° ′																								
Albany	N. 42 40	W. 73 45	7.13 a.m.	75	23	30.05	763.3	30.14	765.5	25.5	—3.6	74.1	2	7	4	......	9	2	......	2	5	4668	7512	7	2.64	67.1
Alpena	N. 45 05	W. 83 28	6.34 a.m.	609	185	29.40	746.7	30.11	764.8	16.9	—8.4	81.8	1	8	7	6	5	3	......	......	1	7877	12676	8	3.70	94.0
Atlanta	N. 33 45	W. 84 23	6.31 a.m.	1131	345	28.99	736.3	30.22	767.6	45.2	7.3	84.5	.....	10	......	4	3	1	12	1	......	8088	13016	8	6.40	162.6
Atlantic City	N. 39 22	W. 74 25	7.11 a.m.	13	4	30.18	766.0	30.19	766.8	31.2	—0.4	78.0	7	6	9	4	1	......	2	1	1	6945	11177	6	6.74	171.2
Augusta	N. 33 28	W. 81 54	6.41 a.m.	183	56	30.04	763.0	30.24	768.1	48.5	9.2	80.7	.....	5	4	1	4	......	......	8	9	3038	4889	8	3.39	86.1
Baltimore	N. 39 18	W. 76 38	7.02 a.m.	45	14	30.17	766.3	30.22	767.6	32.2	0.1	75.0	3	9	4	1	3	1	4	5	1	4325	6960	7	5.38	136.7
Barnegat	N. 39 48	W. 74 09	7.12 a.m.	20	6	30.15	765.8	30.17	766.3	30.7	—0.7	83.1	1	9	7	5	......	6	3	......	......	10557	16989	7	8.29	210.6
Bismarck	N. 46 48	W.100 38	5.26 a.m.	1694	516	28.14	714.7	30.14	765.5	6.0	-14.4	80.7	1	10	......	1	2	1	8	......	8	5431	8740	4	0.23	5.8
Boise City	N. 43 46	W.116 06	4.24 a.m.	2750	838	27.26	692.4	30.19	766.8	17.7	—7.9	91.7	4	6	3	2	2	3	5	2	4	2863	4607	7	1.62	41.1
Boston	N. 42 21	W. 71 04	7.23 a.m.	142	43	29.91	759.7	30.08	764.0	23.4	—4.8	77.5	.....	4	16	7	2	1	......	1	......	8742	14068	6	3.68	93.5
Brownsville *a*	N. 26 00	W. 97 30	5.38 a.m	43	13	30.02	762.5	30.07	763.8	59.1	15.1	97.5	6	4	......	1	5	4	......	2	8	5126	8249	8	2.95	74.9
Buffalo	N. 42 53	W. 78 55	6.52 a.m.	696	212	29.34	745.2	30.14	765.5	24.7	—4.1	86.7	.....	1	6	11	2	4	1	6	......	10651	18141	8	3.29	83.6
Burlington	N. 44 29	W. 73 13	7.15 a.m.	268	82	29.76	755.9	30.07	763.8	18.0	—7.8	77.6	5	5	5	......	10	4	1	1	......	8185	13172	8	0.44	11.2
Cairo	N. 37 00	W. 89 12	6.11 a.m.	377	115	29.81	757.2	30.23	767.8	35.9	2.2	86.1	3	6	4	4	2	3	5	4	......	6446	10374	7	6.35	161.3
Campo *b*	N. 32 22	W.116 08	4.22 a.m.	2500	762	27.42	696.5	30.05	763.3	27.1	—2.7	82.9	.....	8	2	1	2	2	10	3	1	3808	6128	3	3.10	78.7
Camp Thomas *j*	N. 32 04	W.110 06	4.49 a.m.	2710	826	27.28	692.9	30.11	764.8	31.2	—0.4	85.1	.....	1	......	......	......	1	1	......	18	....	....	5	0.33	8.4
Cape Henry	N. 36 56	W. 76 00	7.04 a.m.	16	5	30.19	766.8	30.21	767.3	40.7	4.8	82.8	5	5	5	6	......	3	3	4	......	9879	15908	6	6.92	175.8
Cape May *d*	N. 38 56	W. 74 58	7.08 a.m.	27	8	30.14	765.5	30.17	766.3	33.6	0.9	78.3	.....	9	4	3	1	2	1	6	1	11310	18201	6	6.32	160.5
Castroville	N. 29 25	W. 98 50	5.33 a.m.	780	238	29.28	743.7	30.13	765.3	50.5	10.3	86.3	4	8	1	......	4	2	8	......	4	3868	6225	7	1.78	45.2
Cedar Keys	N. 29 12	W. 83 02	6.36 a.m.	22	7	30.18	766.0	30.20	767.1	59.8	15.4	84.2	2	2	1	1	7	7	7	4	......	6289	10121	4	3.19	81.0
Champaign	N. 40 07	W. 88 14	6.15 a.m.	767	234	29.32	744.7	30.20	767.1	24.9	—3.9	75.1	4	6	2	4	7	2	2	4	......	9070	14596	7	1.99	50.5
Charleston *a*	N. 32 45	W. 79 55	6.49 a.m.	52	16	30.18	766.0	30.24	768.1	51.9	11.1	84.8	3	3	4	10	......	......	1	7	2	5638	9073	4	1.69	42.9
Charlotte	N. 35 13	W. 80 51	6.45 a.m.	808	246	29.31	744.5	30.20	767.1	39.3	4.1	84.3	5	1	2	8	......	1	4	10	......	3602	5797	6	7.24	183.9
Chattanooga	N. 35 04	W. 85 15	6.27 a.m.	783	239	29.37	746.0	30.23	767.8	42.0	5.6	85.3	1	6	1	3	6	3	3	7	1	5339	8592	8	14.74	374.4
Cheyenne	N. 41 12	W.104 42	5.09 a.m.	6089	1856	23.87	606.3	30.12	765.0	20.1	—6.6	59.7	5	13	7	4	......	......	1	......	1	8328	13402	2	0.14	3.6
Chicago	N. 41 52	W. 87 35	6.18 a.m.	661	201	29.41	747.0	30.16	766.1	25.6	—3.6	83.3	.....	8	7	9	3	2	2	......	......	6926	11146	4	1.55	39.4
Chincoteague	N. 37 55	W. 75 20	7.06 a.m.	18	5	30.18	766.6	30.20	767.1	35.5	1.9	85.8	7	5	4	4	1	3	4	3	......	9301	14968	7	5.41	137.4
Cincinnati	N. 39 06	W. 84 26	6.30 a.m.	620	189	29.52	749.8	30.21	767.3	34.4	1.3	76.8	3	6	5	1	5	2	5	4	......	4916	7911	8	6.02	152.9
Cleveland	N. 41 30	W. 81 47	6.42 a.m.	690	210	29.39	746.5	30.17	766.3	26.3	—3.2	85.5	1	7	5	3	7	5	3	......	......	8609	13855	8	2.47	62.7
Coleman City *a*	N. 31 55	W. 99 10	5.32 a.m.	1709	521	28.28	718.3	....	....	40.6	4.8	88.4	10	3	1	2	4	3	3	3	1	6870	11056	7	2.36	59.9
Columbus	N. 39 57	W. 83 03	6.36 a.m.	805	245	29.29	744.0	30.19	766.8	29.8	—1.2	77.1	2	7	5	2	4	6	2	3	......	6662	10721	8	4.69	119.1
Concho	N. 31 22	W.100 20	5.26 a.m.	1900	579	28.13	714.5	30.15	765.8	41.5	5.3	88.2	5	1	3	7	1	......	2	4	8	6247	10053	6	1.48	37.6
Davenport	N. 41 32	W. 90 30	6.06 a.m.	615	187	29.48	748.8	30.20	767.1	25.2	—3.8	68.9	2	5	7	6	2	3	3	3	......	6964	11207	5	0.90	22.9
Dayton	N. 46 23	W.117 50	4.16 a.m.	1660	506	28.32	719.3	30.12	765.0	29.2	—1.6	84.0	.....	.....	1	20	3	1	......	4	2	3440	5536	7	2.56	65.0
Deadwood	N. 44 22	W.103 34	5.14 a.m.	4600	1402	25.20	640.1	30.16	766.1	18.8	—7.3	72.3	1	1	1	17	3	......	......	......	8	3274	5269	3	0.33	8.4
Decatur *e*	N. 33 10	W. 97 30	5.38 a.m.	1129	344	....	....	....	....	39.8	4.3	80.8	6	1	2	2	4	8	......	3	......	5675	9131	6	2.87	72.9
Del. Breakwater	N. 38 48	W. 75 05	7.08 a.m.	20	6	30.16	766.1	30.18	766.6	34.4	1.3	93.6	6	3	5	5	1	3	1	6	1	13423	21602	7	4.46	113.3
Denison	N. 33 50	W. 96 40	5.41 a.m.	767	234	29.31	744.5	30.15	765.8	40.4	4.7	84.2	7	1	1	2	5	4	3	4	4	5135	8264	8	3.58	90.9
Denver	N. 39 45	W.105 04	5.08 a.m.	5294	1614	24.64	625.8	30.16	766.1	23.2	—4.9	64.7	4	1	2	2	19	2	1	......	......	5099	8206	1	0.57	14.5
Des Moines	N. 41 35	W. 93 40	5.53 a.m.	849	259	29.21	741.9	30.18	766.6	22.6	—5.2	77.7	7	5	5	4	3	4	3	......	......	5663	9114	5	0.63	16.0
Detroit	N. 41 21	W. 83 07	6.36 a.m.	661	201	29.41	747.0	30.17	766.3	29.2	—1.6	84.3	1	7	7	3	7	1	5	......	......	8536	13737	7	1.97	50.0
Dodge City	N. 37 39	W.100 08	5.27 a.m.	2512	766	27.42	696.5	30.16	766.1	24.0	—4.4	82.8	6	3	4	2	10	4	......	1	1	8500	13679	5	0.52	13.2
Dubuque	N. 42 30	W. 90 44	6.05 a.m.	665	203	29.41	747.0	30.18	766.6	18.6	—7.4	69.0	.....	5	8	4	6	3	2	2	1	3798	6112	5	0.84	21.3
Duluth	N. 46 48	W. 92 08	6.00 a.m.	644	184	29.36	745.7	30.12	765.0	10.6	-11.9	81.6	.....	4	9	12	......	2	......	3	1	4366	7026	7	0.57	14.5
Eagle Pass	N. 28 40	W.100 15	5.26 a.m.	780	238	29.31	744.5	30.15	765.8	48.9	9.4	90.2	1	10	......	1	1	12	1	3	2	3421	5506	7	1.39	35.3
Eagle Rock	N. 43 30	W.112 04	4.40 a.m.	4650	1415	25.27	641.8	30.23	767.8	2.0	-16.7	75.5	15	3	3	5	2	......	......	......	3	6249	10057	6	4.41	112.0
Eastport	N. 44 55	W. 66 54	7.40 a.m.	61	18	29.91	759.7	29.98	761.5	17.6	—8.0	76.7	5	10	4	3	5	1	2	1	......	9386	15105	6	3.70	94.0
Edinburg	N. 26 03	W. 98 03	5.36 a.m.	....	....	....	....	....	....	....	....	....	.....	......	......	......	......	......	......	......	......	....	....	......	....	....
El Paso	N. 31 46	W.106 32	5.02 a.m.	3760	1146	26.28	667.5	30.16	766.1	35.1	1.7	62.4	2	8	8	1	......	2	3	4	3	4303	6925	4	0.64	16.3
Erie	N. 42 07	W. 80 10	6.47 a.m.	681	208	29.38	746.2	30.14	765.5	27.3	—2.6	80.2	1	6	4	5	6	5	1	......	3	8908	14336	9	4.00	101.6
Escanaba	N. 45 46	W. 87 14	6.20 a.m.	612	186	29.38	746.2	30.10	764.5	15.4	—9.2	83.5	3	4	9	8	4	2	....	1	......	6348	10216	6	2.60	66.0
Florence	N. 33 03	W.111 17	4.43 a.m.	1480	451	28.49	723.6	30.07	763.8	38.1	3.4	77.5	1	1	9	4	3	2	4	4	3	2177	3504	5	2.28	57.9
Fort Apache	N. 33 47	W.109 58	4.49 a.m.	5050	1539	24.99	634.7	30.11	764.8	25.3	—3.7	70.5	.....	......	1	1	2	6	9	9	3	4342	6988	5	2.82	71.6
Fort Assinnaboine	N. 48 37	W.109 43	4.49 a.m.	2710	826	27.07	687.6	30.11	764.8	14.9	—9.5	58.3	1	......	4	20	......	......	......	3	3	8040	12939	6	0.20	5.1
Fort Bennett	N. 44 42	W.100 38	5.26 a.m.	1510	457	28.41	721.6	30.15	765.8	10.2	-12.1	76.0	6	6	3	.....	2	5	......	......	9	4239	6822	5	2.01	51.1
Fort Benton	N. 47 51	W.110 40	4.45 a.m.	2700	823	27.13	689.1	30.11	764.8	15.5	—9.2	66.3	.....	......	7	7	......	......	......	3	14	7204	11594	5	0.75	19.0
Fort Buford	N. 48 03	W.103 58	5.12 a.m.	1900	579	27.96	710.2	30.16	766.1	7.3	-13.7	69.9	2	2	8	2	6	1	6	2	2	5426	8732	4	0.26	6.6
Fort Custer	N. 45 48	W.107 38	4.58 a.m.	3040	927	26.77	679.9	30.15	765.8	12.3	-10.9	81.3	3	4	......	2	4	11	3	1	3	4009	6452	4	0.40	10.2
Fort Davis	N. 30 30	W.103 45	5.13 a.m.	4940	1506	25.14	638.5	30.12	765.0	38.1	3.4	79.0	3	3	......	3	11	......	......	4	7	....	....	4	0.87	22.1
Fort Elliott	N. 35 31	W.100 27	5.28 a.m.	2650	808	27.26	692.4	30.20	767.1	25.1	—3.8	53.7	8	5	......	2	5	5	1	1	4	8301	13359	4	0.33	8.4
Fort Gibson	N. 35 43	W. 95 16	5.48 a.m.	540	165	29.56	750.8	30.16	766.1	36.8	2.7	85.1	7	1	2	......	2	8	5	1	5	5703	9178	7	2.23	56.6
Fort Grant	N. 32 25	W.109 56	4.49 a.m.	4860	1481	25.22	640.6	30.12	765.0	32.8	0.4	57.1	1	1	1	5	......	6	5	11	1	4724	7612	5	0.86	21.8
Fort Griffin *b*	N. 32 53	W. 99 21	5.33 a.m.	1260	384	28.81	731.8	30.19	766.8	38.3	3.5	81.0	8	......	......	4	6	1	1	5	4	5008	8060	5	1.63	41.4
Fort Keogh	N. 46 17	W.105 55	5.05 a.m.	2372	723	27.42	696.5	30.11	764.8	12.6	-10.8	66.4	....	3	6	10	3	4	1	3	1	5009	8061	5	0.18	4.6
Fort Macon	N. 34 42	W. 76 40	7.01 a.m.	11	3	30.19	766.8	30.20	767.1	46.6	8.1	90.7	4	7	2	9	1	1	1	6	......	9068	14593	7	3.69	93.7
Fort McKavett	N. 30 48	W. 99 58	5.28 a.m.	2240	683	27.83	706.9	30.22	767.6	43.0	6.1	80.7	2	1	1	8	2	2	1	8	6	6397	10295	6	1.42	36.1
Fort Missoula	N. 46 50	W.114 01	4.32 a.m.	3140	957	26.70	678.2	30.16	766.1	15.3	—9.3	88.5	.....	4	2	9	1	4	2	4	5	1800	2897	6	1.18	30.0
Fort St. Michael	N. 63 48	W.162 00	1.20 a.m.	30	9	29.59	751.6	29.62	752.3	8.3	-13.2	96.6	3	......	......	6	4	4	1	12	1	10767	17328	8	1.88	47.8
Fort Shaw	N. 47 29	W.111 46	4.41 a.m.	3550	1082	26.26	667.0	30.12	765.0	17.7	—7.9	67.8	1	......	12	11	1	......	......	1	5	10039	16156	4	0.78	19.8
Fort Sill	N. 34 40	W. 98 30	5.34 a.m.	1200	366	28.87	733.3	30.20	767.1	33.6	0.9	86.6	16	1	......	......	8	2	1	2	1	8097	13031	6	0.80	20.3
Fort Stevenson	N. 47 36	W.101 23	5.22 a.m.	1750	534	28.08	713.2	30.14	765.5	4.6	-15.2	73.4	2	12	2	6	2	3	......	1	3	6021	9690	5	0.43	10.9
Fort Verde	N. 34 24	W.111 53	4.38 a.m.	?	?	....	....	....	....	27.1	—2.7	70.0	3	7	13	2	3	1	1	1	......	....	....	4	2.72	69.1
Fredericksburg *g*	N. 30 20	W. 98 40	5.33 a.m.	1700	518	28.32	719.3	30.14	765.5	48.7	9.3	89.4	5	1	......	5	......	1	1	3	8	3512	5652	7	3.54	89.9
Galveston	N. 29 18	W. 94 50	5.49 a.m.	48	15	30.06	763.5	30.10	764.5	56.3	13.5	93.6	2	3	......	1	12	1	2	10	......	8597	13835	7	8.15	207.0
Grand Haven	N. 43 05	W. 86 18	6.23 a.m.	620	189	29.42	747.3	30.13	765.3	25.9	—3.4	82.5	3	3	8	3	4	5	4	1	......	10292	16563	7	3.59	91.2
Hatteras	N. 35 14	W. 75 30	7.06 a.m.	19	6	30.17	766.3	30.19	766.8	48.0	8.9	89.5	2	8	......	7	3	1	1	7	2	11501	18509	7	3.89	98.8
Helena	N. 46 33	W.112 02	4.40 a.m.	4100	1250	25.69	652.5	30.12	765.0	17.3	—8.2	65.4	2	10	7	2	......	......	......	......	10	3806	6125	7	1.08	27.4
Henrietta	N. 33 42	W. 98 00	5.36 a.m.	980	300	29.15	740.4	30.22	767.6	36.2	2.3	86.0	8	1	2	2	7	......	5	4	2	6876	11066	5	2.73	69.3
Huron	N. 44 21	W. 98 17	5.35 a.m.	1305	398	28.64	727.4	30.18	766.6	11.4	-11.4	64.6	1	11	2	......	3	12	......	2	......	8829	14209	4	0.14	3.6
Indianapolis	N. 39 47	W. 86 06	6.24 a.m.	753	229	29.33	745.0	30.17	766.3	28.8	—1.8	79.6	3	6	3	3	7	3	3	3	......	4863	7826	7	3.74	95.0
Indianola	N. 28 32	W. 96 38	5.42 a.m.	26	8	30.06	763.5	30.09	764.3	56.2	13.4	92.8	8	3	1	1	11	......	1	6	......	10135	16300	8	3.39	86.1
Jacksboro	N. 33 10	W. 98 00	5.35 a.m.	1120	341	28.94	735.1	30.18	766.6	38.5	3.6	85.2	10	1	2	4	2	4	3	3	2	5059	8142	5	1.96	59.8
Jacksonville	N. 30 24	W. 81 40	6.41 a.m.	43	13	30.17	766.3	30.22	767.6	57.4	14.1	85.8	2	3	......	6	8	5	2	4	1	4921	7919	5	2.58	65.5
Keokuk	N. 40 23	W. 91 25	6.02 a.m.	618	188	29.48	748.8	30.18	766.6	24.5	—4.2	81.4	2	5	7	2	3	4	5	2	1	6457	10391	6	1.07	27.2
Key West	N. 24 32	W. 81 48	6.41 a.m.	27	8	30.15	765.8	30.18	766.6	69.8	21.0	81.7	2	......	......	1	1	7	14	5	1	6704	10789	4	1.33	33.8
Kitty Hawk	N. 36 00	W. 75 23	7.05 a.m.	22	7	30.19	766.8	30.21	767.3	43.5	6.4	86.0	3	3	7	5	3	1	3	6	......	11436	18404	6	6.86	174.2
Knoxville	N. 35 56	W. 83 58	6.32 a.m.	980	299	29.15	740.4	30.23	767.8	39.3	4.1	87.0	2	7	1	5	1	......	3	10	2	4039	6500	9	16.98	431.3
La Crosse	N. 43 48	W. 91 23	6.03 a.m.	725	221	29.31	744.5	30.15	765.8	16.9	—8.4	75.3	5	1	5	3	12	1	1	......	3	5319	8560	6	0.75	19.0
La Mesilla	N. 32 17	W.106 48	5.01 a.m.	3900	1189	26.12	663.4	30.15	765.8	31.0	—0.6	73.5	.....	......	2	......	1	1	......	......	27	1221	1965	4	0.63	16.0
Leavenworth	N. 39 19	W. 94 57	5.48 a.m.	842	256	29.24	742.7	30.20	767.1	28.2	—2.1	74.7	1	5	1	......	4	4	1	1	14	4696	7557	6	0.83	21.1
Lewiston	N. 46 25	W.116 59	4.20 a.m.	780	238	29.27	743.4	30.14	765.5	29.6	—1.3	66.6	.....	2	4	1	3	2	14	4	1	2649	4263	7	1.46	37.1
Little Rock	N. 34 40	W. 92 12	5.59 a.m.	298	91	29.83	757.7	30.16	766.1	41.4	5.2	85.8	5	2	......	4	4	2	2	8	4	4096	6592	8	8.17	207.5
Los Angeles	N. 34 03	W.118 16	4.15 a.m.	371	113	29.71	754.6	30.11	764.8	42.5	5.8	79.2	6	5	1	......	3	3	2	11	......	4714	7586	7	1.01	25.7
Louisville	N. 38 18	W 85 52	6.25 a.m.	530	162	29.59	751.6	30.18	766.6	35.7	2.1	79.4	5	3	5	5	6	3	2	2	......	6276	10100	8	6.29	169.8
Lynchburg	N. 37 30	W. 79 02	6.52 a.m.	652	199	29.48	748.8	30.20	767.1	35.9	2.2	75.7	...	2	5	5	1	......	4	4	10	2338	3763	6	5.34	135.6
Madison	N. 43 03	W. 89 30	6.10 a.m.	949	289	29.07	738.4	30.16	766.1	18.0	—7.8	75.3	.....	7	7	5	8	1	2	1	......	7480	12038	4	1.33	33.8
Marquette	N. 46 33	W. 87 36	6.19 a.m.	673	205	29.28	743.7	30.06	763.5	18.2	—7.7	75.8	1	5	13	8	4	......	......	......	......	8134	13090	7	1.10	27.9
Mason *a*	N. 30 42	W. 99 02	5.32 a.m.	1620	494	28.43	722.1	30.17	766.3	44.6	7.0	81.0	6	3	5	3	1	3	1	1	7	5486	8827	7	3.71	94.2
Memphis	N. 35 07	W. 90 07	6.08 a.m.	321	98	29.85	758.2	30.21	767.3	40.3	4.6	87.9	4	5	5	......	3	6	2	4	2	4969	7997	8	12.87	226.9
Milwaukee	N. 43 03	W. 87 54	6.17 a.m.	697	212	29.34	745.2	30.14	765.5	21.5	—5.8	82.8	.....	6	9	7	4	4	1	......	......	8962	14422	5	1.05	26.7
Mobile	N. 30 42	W. 87 59	6.16 a.m.	41	12	30.13	765.3	30.17	766.3	55.2	12.9	87.8	5	2	......	5	6	4	4	5	......	5031	8096	7	6.77	172.0
Montgomery	N. 32 22	W. 86 23	6.23 a.m.	219	66	29.95	761.0	30.20	767.1	51.3	10.7	82.6	6	3	1	3	6	2	5	3	2	4619	7433	7	4.54	115.3
Moorhead	N. 46 52	W. 96 40	5.41 a.m.	923	281	29.04	737.6	30.14	765.5	—1.1	-18.4	89.1	5	6	3	......	7	2	1	2	5	7779	12519	5	1.34	34.0
Morgantown	N. 39 36	W. 79 52	6.48 a.m.	963	293	29.13	739.9	30.19	766.8	34.6	1.4	78.7	4	4	2	6	1	2	2	2	8	5687	9152	9	6.78	172.2
Mt. Washington	N. 44 16	W. 71 16	7.22 a.m.	6279	1914	23.37	593.6	30.00	762.0	4.0	-15.6	86.4	1	25	4	1	......	......	......	......	......	28892	46496	6	7.20	182.9
Nashville	N. 36 11	W. 86 53	6.21 a.m.	507	154	29.64	752.8	30.20	767.1	39.7	4.3	84.2	2	10	1	3	4	3	6	1	1	3711	5972	9	14.49	368.0
New Haven	N. 41 17	W. 72 57	7.16 a.m.	107	32	30.00	762.0	30.12	765.0	23.9	—4.5	78.5	7	2	8	5	......	......	......	4	5	5321	8563	6	5.91	150.1

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Met'rs	Result of Simultaneous Observations for January, 1882. Mean Barometer. Actual. Inch.	Mill.	Reduced. Inch.	Mill.	Mean Temperature. Fah.	Cent.	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	NE	C	Total Movement. Miles	Kil.	Average Cloudiness. 0–10	Total Precipitation. Inch.	Mill.
U.S. SERIES—*Continued.*	° ′	° ′																								
New London	N. 41 22	W. 72 09	7.19 a.m.	47	14	30.08	764.0	30.13	765.3	25.6	—3.0	74.4	5	5	10	5	.....	.....	1	3	2	6322	10174	7	6.90	175.3
New Orleans	N. 29 58	W. 90 07	6.08 a.m.	52	16	30.08	764.0	30.14	765.5	59.4	15.2	83.2	6	3	.....	1	7	10	3	1	.....	6640	10686	6	4.54	115.3
Newport	N. 41 29	W. 71 19	7.23 a.m.	44	13	30.06	763.5	30.11	764.8	28.7	—1.8	76.7	6	3	10	7	.....	1	1	3	.....	9612	15469	6	6.55	166.4
New River ..... *d.*	N. 34 30	W. 77 23	6.58 a.m.	.....	.....	.....	.....	.....	.....	43.9	6.6	80.0	11	1	2	8	1	.....	1	3	.....	.....	.....	6	2.27	57.7
New Shoreham	N. 41 10	W. 71 37	7.22 a.m.	27	8	30.09	764.3	30.12	765.0	30.8	—0.7	74.1	5	9	8	1	.....	4	1	1	2	13733	22101	6	8.57	217.7
New York	N. 40 43	W. 74 00	7.12 a.m.	164	50	29.99	761.7	30.18	766.6	28.0	—2.2	80.6	.....	5	9	9	.....	.....	4	4	.....	7692	12379	6	6.15	156.2
Norfolk	N. 36 51	W. 76 19	7.03 a.m.	30	9	30.18	766.6	30.21	767.3	40.4	4.7	80.6	4	5	4	3	2	1	4	7	1	4948	7963	6	6.40	162.6
North Platte	N. 41 08	W. 100 53	5.24 a.m.	2841	866	27.06	687.3	30.18	766.6	16.7	—8.5	77.0	.....	5	12	2	3	3	3	.....	3	8046	12949	4	0.46	11.7
Olympia	N. 47 02	W. 122 56	3.56 a.m.	36	11	30.01	762.2	30.05	763.3	35.5	1.9	86.0	5	.....	1	5	14	.....	.....	1	5	3174	5108	8	6.11	155.2
Omaha	N. 41 16	W. 96 00	5.45 a.m.	1113	339	28.92	734.6	30.20	767.1	23.0	—5.0	79.3	4	6	2	5	7	6	.....	1	.....	7684	12366	4	0.74	18.8
Ooglaamie	N. 71 17	W. 156 40	1.41 a.m.	17	5	29.83	757.7	29.85	758.2	-17.4*b*	-27.4	85.6*b*	1	.....	8	1	1	2	5	10	3	11975	19271	3	0.45	11.4
Oswego	N. 43 29	W. 76 35	7.01 a.m.	304	93	29.75	755.6	30.10	764.5	24.1	—4.4	72.7	3	7	3	.....	4	12	.....	2	.....	9125	14685	9	4.46	113.3
Palestine	N. 31 45	W. 95 40	5.45 a.m.	523	162	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pensacola	N. 30 25	W. 87 12	6.19 a.m.	30	9	30.15	765.8	30.18	766.6	57.3	14.1	87.9	7	1	.....	2	6	5	5	5	.....	5960	9592	6	3.31	84.1
Philadelphia	N. 39 57	W. 75 10	7.07 a.m.	52	16	30.14	765.5	30.20	767.1	28.8	—1.8	82.5	2	8	5	4	1	.....	6	3	2	7362	11848	6	4.57	116.1
Pikes Peak	N. 38 48	W. 104 59	5.07 a.m.	14134	4308	17.40	442.0	30.10	764.5	0.6	-17.4	76.0	...	9	4	15	1	1	.....	.....	1	19172	30854	2	1.78	45.2
Pioche	N. 37 57	W. 114 26	4.30 a.m.	6110	1862	24.02	610.1	30.22	767.6	20.3	—6.5	65.1	6	10	.....	4	7	1	.....	.....	3	5408	8703	3	0.38	9.7
Pittsburg	N. 40 32	W. 80 02	6.48 a.m.	762	232	29.33	745.0	30.18	766.6	30.2	—1.0	78.1	2	5	4	6	2	.....	3	8	1	5012	8068	8	4.58	116.3
Port Eads	N. 29 00	W. 89 15	6.11 a.m.	7	2	30.14	765.5	30.15	765.8	58.5	14.7	93.1	5	2	.....	.....	8	10	5	1	.....	7344	11820	3	3.50	88.9
Port Huron	N. 42 58	W. 82 29	6.38 a.m.	633	193	29.42	747.3	30.15	765.8	21.5	—5.8	87.3	1	3	8	5	9	2	2	1	.....	8160	13132	7	2.81	71.4
Portland, Maine	N. 43 40	W. 70 16	7.27 a.m.	45	14	29.97	761.2	30.02	762.5	21.2	—6.0	79.2	5	13	3	7	.....	.....	.....	2	1	6079	9783	6	4.39	111.5
Portland, Oregon	N. 45 30	W. 122 28	3.57 a.m.	67	20	30.08	764.0	30.15	765.8	37.1	2.8	87.4	1	1	2	2	12	3	3	2	5	4029	6484	7	5.06	128.5
Portsmouth	N. 35 02	W. 76 04	7.04 a.m.	40	12	.....	.....	.....	.....	48.4	9.1	74.9	5	2	1	10	1	3	.....	9	.....	9280	14934	7	4.44	112.8
Prescott	N. 34 29	W. 112 13	4.38 a.m.	5340	1628	24.71	627.6	30.09	764.3	21.0	—6.1	57.0	.....	.....	6	10	4	6	1	1	3	3224	5188	3	2.53	64.3
Punta Rassa	N. 26 36	W. 82 10	6.40 a.m.	13	4	30.18	766.6	30.18	766.6	63.7	17.6	84.5	1	.....	.....	2	2	3	12	11	.....	6486	10438	5	0.30	7.6
Red Bluff	N. 40 10	W. 122 16	3.59 a.m.	350	106	29.78	756.4	30.16	766.1	39.3	4.1	78.8	12	5	2	1	3	2	.....	2	4	4438	7142	4	2.81	71.4
Rio Grande City	N. 26 22	W. 98 45	5.33 a.m.	230	70	29.84	757.9	30.09	764.3	55.0	12.8	85.4	4	6	1	.....	.....	8	1	4	7	3078	4954	7	0.95	24.1
Rochester	N. 43 08	W. 77 51	6.58 a.m.	621	189	29.40	746.7	30.11	764.8	23.3	—4.8	82.3	.....	5	11	5	4	6	.....	.....	.....	10793	17369	6	2.04	51.8
Roseburg	N. 43 10	W. 123 16	3.55 a.m.	511	156	29.61	752.1	30.18	766.6	36.6	2.6	88.2	2	1	2	5	.....	3	4	.....	14	1762	2836	8	4.21	106.9
Sacramento	N. 38 35	W. 121 31	4.02 a.m.	70	21	30.06	763.5	30.14	765.5	40.2	4.6	79.4	10	2	...	.....	3	13	3	.....	.....	5718	9202	3	1.89	48.0
Saint Louis	N. 38 37	W. 90 15	6.07 a.m.	568	173	29.58	751.3	30.22	767.6	29.2	—1.6	83.4	4	8	3	3	8	1	3	1	.....	7680	12360	7	2.80	71.1
Saint Paul	N. 44 53	W. 93 05	5.56 a.m.	811	247	29.18	741.2	30.13	765.3	13.8	-10.1	79.5	1	5	4	4	2	11	2	1	1	6455	10388	5	0.67	17.0
Saint Vincent	N. 48 58	W. 97 03	5.40 a.m.	804	245	29.14	740.1	30.12	765.0	—4.4	-20.2	99.2	8	5	1	1	12	3	.....	.....	1	7612	12249	5	0.74	18.8
Salt Lake City	N. 41 10	W. 112 00	4.40 a.m.	4348	1325	25.64	651.2	30.21	767.3	20.6	—6.3	57.4	1	1	.....	.....	.....	10	.....	.....	19	2100	3380	4	1.50	38.1
San Antonio	N. 29 28	W. 98 22	5.34 a.m.	673	205	29.37	746.0	30.10	764.5	50.4	10.2	85.4	7	1	.....	.....	3	4	1	5	10	3850	6196	7	1.91	48.5
San Diego	N. 32 32	W. 117 08	4.20 a.m.	67	20	29.96	761.0	30.03	762.7	45.0	7.2	75.5	7	4	.....	1	.....	1	6	12	.....	4900	7886	4	4.53	115.1
Sandusky	N. 41 27	W. 82 43	6.37 a.m.	639	195	29.45	748.0	30.17	766.3	27.7	—2.4	82.7	1	5	6	4	8	4	3	.....	.....	10821	17414	8	2.46	62.5
Sandy Hook	N. 40 28	W. 74 01	7.12 a.m.	28	8	30.14	765.5	30.18	766.6	30.1	—1.1	80.2	4	10	7	1	.....	5	2	2	.....	11955	19239	6	6.47	164.3
San Francisco	N. 37 48	W. 122 26	3.58 a.m.	60	18	30.08	764.0	30.15	765.8	45.9	7.7	74.0	3	7	7	3	2	6	2	1	.....	6358	10232	4	1.68	42.7
Santa Fé	N. 35 41	W. 106 10	5.04 a.m.	7064	2153	23.18	588.8	30.19	766.8	22.4	—5.3	77.8	4	2	1	1	3	2	.....	6	12	2208	3553	4	0.47	11.9
Savannah	N. 32 05	W. 81 08	6.44 a.m.	87	26	30.13	765.3	30.23	767.8	52.5	11.4	82.4	4	4	2	4	8	2	2	4	1	5372	8647	4	1.90	48.3
Shreveport	N. 32 30	W. 93 45	5.54 a.m.	227	69	29.90	759.4	30.15	765.8	47.4	8.6	88.6	9	3	.....	.....	4	2	1	5	7	3747	6030	8	9.08	230.6
Silver City	N. 32 48	W. 108 15	4.55 a.m.	5890	1795	24.20	614.7	30.06	763.5	29.4	—1.4	72.9	15	7	.....	.....	.....	.....	.....	2	7	2541	4089	2	1.83	46.5
Sitka	N. 57 03	W. 135 19	3.07 a m.	63	19	29.78	756.4	29.85	758.2	34.7	1.5	76.4	2	2	1	1	2	8	7	5	3	7937	12773	3	14.20	360.6
Smithville	N. 33 55	W. 78 01	6.56 a.m.	34	10	30.17	766.3	30.21	767.3	46.5	8.1	87.7	7	5	6	5	1	.....	.....	7	.....	6533	10514	6	3.36	85.3
Spokane Falls	N. 47 39	W. 117 24	4.18 a.m.	1910?	582?	28.01	711.4	30.15	765.8	19.2	—7.1	83.2	.....	5	7	3	3	.....	3	4	6	3082	4960	6	4.54	115.3
Springfield, Ill.	N. 39 48	W. 89 48	6.10 a.m.	644	196	29.48	748.8	30.20	767.1	29.3	—1.5	77.8	5	7	5	1	6	3	3	1	.....	6602	10625	5	2.48	63.0
Springfield, Mass.	N. 42 06	W. 72 36	7.18 a.m.	120	37	29.99	761.7	30.13	765.3	23.2	—4.9	73.9	5	9	3	2	5	.....	1	1	5	4264	6862	6	4.70	119.4
Springfield, Mo.	N. 37 12	W. 93 18	5.55 a.m.	1351	412	28.67	728.2	30.25	768.3	33.5	0.8	84.2	5	4	2	1	5	8	2	1	1	6740	10847	5	2.65	67.3
Stockton	N. 30 50	W. 102 50	5.16 a.m.	3010	917	27.01	686.0	30.15	765.8	37.8	3.2	90.6	3	1	3	6	4	2	.....	.....	12	4828	7770	5	0.68	17.3
Thatcher's Island	N. 42 36	W. 70 34	7.26 a.m.	48	15	30.02	762.5	30.08	764.0	26.6	—3.0	81.6	2	7	12	5	.....	3	1	1	.....	12602	20280	6	5.00	127.0
Toledo	N. 41 40	W. 83 32	6.34 a.m.	651	198	29.42	747.3	30.16	766.1	28.3	—2.1	75.0	2	4	3	6	9	.....	3	2	2	7302	11751	7	1.57	39.9
Tucson	N. 32 14	W. 110 56	4.44 a.m.	2369	722	27.56	700.0	30.06	763.5	39.6	4.2	76.3	...	1	.....	3	10	3	.....	.....	4	2812	4525	4	1.75	44.4
Umatilla	N 45 55	W. 119 21	4.11 a.m.	340	103	29.79	756.7	30.18	766.6	29.7	—1.3	84.0	3	6	4	3	3	6	6	.....	.....	4936	7944	7	0.71	18.0
Uvalde	N. 29 13	W. 99 40	5.29 a.m.	930	283	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vicksburg	N. 32 23	W. 90 54	6.04 a.m.	244	74	29.90	759.4	30.17	766.3	51.1	10.6	83.4	4	4	2	1	6	5	4	4	1	4404	7087	8	13.83	351.2
Visalia	N. 36 20	W. 119 16	4.11 a.m.	348	106	29.72	754.9	30.11	764.8	35.0	1.7	79.9	1	7	.....	1	2	13	6	1	.....	2328	3746	3	0.87	22.1
Washington, D. C.	N. 38 53	W. 77 01	7.00 a.m.	106	32	30.10	764.5	30.22	767.6	30.7	—0.7	85.6	5	7	2	1	4	1	3	5	3	3580	5761	7	7.09	180.1
W. Las Animas	N. 38 04	W. 103 07	5.16 a.m.	3905	1190	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wickenburg *e.*	N. 33 58	W. 112 42	4.37 a.m.	?	?	.....	.....	.....	.....	33.4	0.8	75.8	.....	.....	4	.....	.....	1	.....	1	20	.....	.....	3	1.82	46.2
Williamsport	N. 41 15	W. 77 03	7.00 a.m.	561	171	29.50*f*	749.3*f*	30.13*f*	765.3*f*	26.4	—3.1	75.3	2	14	1	1	1	2	7	2	1	5135	8264	8	3.01	76.5
Wilmington	N. 34 11	W. 78 10	6.56 a.m.	52	16	30.15	765.8	30.21	767.3	48.4	9.1	80.3	4	3	6	5	.....	1	3	8	1	5290	8513	7	1.96	49.8
Winnemucca	N. 41 00	W. 119 21	4.17 a.m.	4327	1319	25.64	651.2	30.18	766.6	19.1	—7.2	70.3	.....	.....	.....	11	2	.....	.....	17	1	6213	9999	4	1.03	26.2
Wood's Holl *e.*	N. 41 33	W. 70 40	7.26 a.m.	35	11	30.09	764.3	30.13	765.3	29.0	—1.7	78.7	3	13	2	3	.....	3	.....	.....	2	11464	18449	5	4.22	107.2
Yankton	N. 42 45	W. 97 30	5.38 a.m.	1228	374	28.75	730.2	30.17	766.3	17.5	—8.1	69.2	2	7	.....	4	3	5	2	1	7	6554	10547	5	0.04	1.0
Yuma	N. 32 44	W. 114 36	4.30 a.m.	141	43	29.89	759.2	30.04	763.0	42.9	6.1	68.5	14	1	.....	2	.....	2	2	8	2	4068	6547	3	1.35	34.3
Sub-Series.																										
Bogota	N. 4 36	W. 74 14	7.41 a.m.	8655	2638	22.00	558.8	.....	.....	50.2	10.1	78	.....	1	2	2	3	.....	1	4	18	.....	.....	2	0.07	1.8
Bridgetown	N. 13 12	W. 59 35	8.10 a.m.	?	?	30.06	763.5	30.07	763.8	77.3	25.2	80.2	.....	.....	.....	.....	.....	30	1	.....	.....	.....	.....	9	5.39	136.9
Buenaventura	N. 3 50	W. 76 55	7.00 a.m.	18	5	29.92	760.0	29.94	760.5	77.5	25.3	88.4	1	1	.....	7	4	6	1	.....	11	.....	.....	9	22.83	574.8
Guadeloupe *b.*	N. 16 12	W. 61 40	8.01 a.m.	?	?	30.00	762.0	30.02	762.5	75.1	23.9	90.0	.....	.....	.....	.....	.....	3	24	2	.....	.....	.....	4	1.80	45.7
Havana	N. 23 09	W. 82 22	6.39 a.m.	50	15	30.15	765.8	30.20	767.1	69.8	21.0	90.7	2	.....	.....	.....	.....	7	.....	.....	22	.....	.....	3	0	0
Kingston	N. 18 58	W. 76 48	7.01 a.m.	10	3	30.09	764.3	30.10	764.5	68.8	20.4	83.5	15	.....	.....	.....	.....	.....	.....	.....	16	.....	.....	3	0.47	11.9
Navassa	N. 18 25	W. 75 03	7.43 a.m.	77	23	29.98	761.5	30.06	763.5	77.3	25.2	67.8	.....	.....	.....	.....	.....	4	27	.....	.....	.....	.....	9	1.45	36.8
Paramaribo	N. 5 50	W. 55 13	8.27 a.m.	6	2	30.04	763.0	30.04	763.0	77.1	25.1	89.0	.....	.....	.....	.....	.....	1	28	2	.....	.....	.....	9	22.07	560.6
Puerto Berrio	N. 6 32	W. 74 28	7.10 a.m.	542	165	29.36	745.7	29.91	759.7	80.3	26.8	84.8	7	.....	.....	.....	1	.....	1	1	21	.....	.....	6	1.42	36.1
Rivas	N. 11 26	W. 85 47	6.25 a.m.	150	46	.....	.....	.....	.....	73.3	22.9	.....	.....	.....	.....	.....	.....	.....	.....	31	.....	.....	.....	2	0.02	0.5
Santiago de Cuba	N. 19 55	W. 75 50	7.04 a.m.	21	6	30.09	764.3	30.12	765.0	74.0	23.3	74.3	21	1	.....	.....	.....	.....	.....	4	5	.....	.....	2	0.51	13.0
St. Thomas	N. 18 20	W. 64 56	7.48 a.m.	110	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
York Factory	N. 57 02	W. 92 26	5.58 a.m.	51	15	30.00	762.0	30.06	763.5	—29 5	-34.2	.....	3	11	5	9	2	.....	.....	1	.....	.....	.....	6	1.70	43.2

OCEAN SQUARE DATA FOR JANUARY 1882.

Location of centre of each square.		No. of days.	No. of ob's.	Barometer.		Temperature.		Wind Frequency.										Wind force 0–10.
				Inch.	Mill.	Fah.	Cent.	N.	NW.	W.	SW.	S.	SE.	E.	NE.	Calm.	Blank.	
°	°																	
N. 2.5	W. 22.5	11	13															
2.5	27.5	23	31															
2.5	32.5	7	9															
2.5	37.5	1	1															
7.5	22.5	2	2															
7.5	27.5	5	6															
7.5	32.5	10	11															
7.5	37.5	2	2															
12.5	22.5	2	2	29.97	761.2	77.8	25.4								31			2.3
12.5	27.5	8	9	30.02 a	762.5 a	77.4c	25.2c								30		1	2.4
12.5	32.5	5	5	30.02 g	762.5 g	76.6g	24.8g							2	23		6	2.7
12.5	37.5	9	9	30.03 m	762.7 m	76.8m	24.9							3	16		12	2.5
12.5	42.5	1	1															
12.5	52.5	1	1															
12.5	57.5	1	1															
17.5	22.5	7	7	30.06	763.5	73.7	23.2								31			2.4
17.5	27.5	8	8	30.06 b	763.5 b	73.4	23.0							1	28		2	2.5
17.5	32.5	2	2	30.10 k	764.5 k	70.3j	24.6j							2	21		8	2.0
17.5	37.5	11	12	30.11 k	764.8 k	73.2j	22.9j					1		7	14		9	2.4
17.5	42.5	3	3															
17.5	47.5	2	2															
22.5	22.5	4	4	30.13 a	765.3 a	70.9	21.6	1					3	9	16		2	2.4
22.5	27.5	3	3	30.11 a	764.8 a	70.5	21.4	1	1		1	1	7	11	8		1	2.3
22.5	32.5			30.12 g	765.0 g	70.5d	21.4d		1	1			8	7	7		7	2.5
22.5	37.5	9	10	30.14 f	765.5 f	71.0e	21.7e		3		2	2	9	6	4		5	2.1
22.5	42.5	15	20	30.15 k	765.8 k	71.2e	21.8e		1		1	1	3	7	7		11	2.1
22.5	62.5			30.13 e	765.3 e	74.0b	23.7b	1	2				4	8	12		4	1.8
22.5	67.5			30.16 f	766.1 f	71.8b	22.1b		1	1			2	7	15		5	2.0
22.5	72.5			30.17	766.3	71.9	22.2	1	1				1	5	23			2.4
27.5	22.5	3	3	30.20 a	767.1 a	66.7	19.3		1		2	1	9	9	8		1	2.7
27.5	27.5	1	1	30.17 a	766.3 a	66.9	19.4	1		1	2	5	9	7	5		1	2.9
27.5	32.5	2	2	30.18 f	766.6 f	66.8b	19.3b	1	1	1		2	13	3	5		5	2.9
27.5	37.5	4	4	30.17 g	766.3 g	66.5c	19.2c	1	3		2	4	10	4	1		6	2.7
27.5	42.5	10	11	30.20 k	767.1 k	66.7e	19.3e	1	2	1		2	9	3	3		10	2.0
27.5	47.5	5	5															
27.5	52.5			30.12 m	765.0 m	65.7j	18.7j		7		3	2	2		5		12	1.6
27.5	62.5			30.19 d	766.8 d	67.1a	19.5a	6	3	1	1	1	1	2	11		5	1.9
27.5	67.5			30.22 c	767.6 c	67.8a	19.9a	4	3			2	1	4	13		4	2.1
27.5	72.5			30.23 b	767.8 b	66.5	19.2	2	3		1	5	3	3	13		1	2.0
27.5	77.5			30.23	767.8	64.9	18.3	2	2		2	3	11	5	5	1		1.9
32.5	12.5	2	2	30.29	769.4	63.3	17.4			1	1	2	11	3	13			1.6
32.5	17.5	4	4	30.27	768.8	63.2	17.3			1	6	2	11	1	3	7		1.1
32.5	22.5	1	1	30.25	768.3	63.9	17.7	1			4	3	12	1	10			2.6
32.5	27.5			30.22	767.6	63.8	17.7	2	1	1	1	5	14	2	4		1	2.2
32.5	32.5	8	9	30.19	766.8	63.5	17.5		3	1	4	5	12	2	3	1		2.6
32.5	37.5	6	6	30.14 a	765.5 a	62.6	17.0		5		5	9	8	2	1		1	2.8
32.5	42.5	3	3	30.13 b	765.3 b	62.1a	16.7a	1	4	3	7	5	4	1	4		2	3.0
32.5	47.5	4	5	30.14 b	765.5 b	63.5a	17.5a		8	2	6	5	2	1	5		2	2.8
32.5	52.5	3	4	30.11 a	764.8 a	61.3	16.3	2	10	6	3	4	1		4		1	2.3
32.5	57.5	2	2	30.14	765.5	63.0	17.2	3	13	2	6	2	1		4			2.5
32.5	62.5	4	4	30.18	766.6	61.7	16.5	6	8	3	2	6		1	5			1.8
32.5	67.5	9	17	30.20	767.1	60.9	16.1	9	10	1	3	4		1	3			1.8
32.5	72.5	13	15	30.22	767.6	58.7	14.8	4	7		3	9	2		5	1		2.3
32.5	77.5	17	25	30.23	767.8	53.8	12.1	3	5	2	10	2	2	1	6			1.8
37.5	12.5	17	17	30.34	770.6	57.5	14.2	3	1			5	7	2	13			2.2
37.5	17.5	5	5	30.29	769.4	59.0	15.3	2	3	1	3	8	9	2	3			2.2
37.5	22.5	3	3	30.27	768.8	59.9	15.5	2	4		4	7	10		4			2.3
37.5	27.5	4	5	30.22	767.6	59.3	15.2	5	4	2	2	8	7		3			2.2
37.5	32.5	4	5	30.13	765.3	57.7	15.4	2	3	2	11	8	4		1			2.9
37.5	37.5	4	4	30.06 a	763.5 a	50.0	13.3		5	1	11	9	3		1		1	3.1
37.5	42.5	5	5	30.02 b	762.5 b	54.3a	12.4a	2	6	4	12	3	2				2	3.3
37.5	47.5	5	5	30.01 a	762.2 a	51.8	11.0	4	10	5	3	7			1		1	3.3
37.5	52.5	3	3	30.02	762.5	50.0	10.0	4	9	7	5	2	2		2			3.5
37.5	57.5	6	6	30.05	763.3	48.8	9.3	4	12	3	5	2	3		2			3.6
37.5	62.5	7	8	30.07	763.8	46.9	8.3	5	14	3	4	2		1	2			3.1
37.5	67.5	8	9	30.13	765.3	46.0	7.8	5	9	3	4	2	6	1	1			2.7
37.5	72.5	22	35	30.15	765.8	41.2	5.1	4	10		8		4	1	3	1		2.3
42.5	12.5	8	8	30.35	770.9	56.4	13.6	1	3	2	5	9	5	1	5			2.4
42.5	17.5	3	3	30.29	769.4	57.2	14.0		3	5	6	11	4	1	1			3.1
42.5	22.5	7	9	30.20	767.1	57.2	14.0	1	1	5	9	15						3.0
42.5	27.5	5	5	30.14	765.5	50.0	13.3		4	4	8	13	1		1			3.0
42.5	32.5	6	6	30.12	765.0	53.7	12.1		4	3	14	9	1					3.3
42.5	37.5	7	7	30.01	762.2	51.0	10.6		11	4	11	4	1					4.0
42.5	42.5	11	12	29.94	760.5	49.0	9.4	2	9	7	9	3	1					4.1
42.5	47.5	13	22	29.95	760.7	44.4	6.9	2	14	3	7	2	2		1			3.8
42.5	52.5	21	33	29.95	760.7	41.0	5.0	1	12	3	7	2	3		3			3.8
42.5	57.5	19	37	29.98	761.5	37.8	3.2	2	13	3	5	3	4		1			4.0
42.5	62.5	19	42	30.01	762.2	35.9	2.2	4	13	4	4	3	2		1			3.5
42.5	67.5	22	43	30.05	763.3	32.7	0.4	4	15	3	7	1	1					2.6
47.5	12.5	17	22	30.27	768.8	52.3	11.3		4	3	5	13	5		1			3.4
47.5	17.5	18	28	30.18	766.6	52.4	11.3		2	7	3	17	2					3.8
47.5	22.5	16	23	30.09	764.3	51.7	10.9		4	4	8	13	2					3.6
47.5	27.5	12	20	29.97	761.2	50.0	10.0	1	4	4	11	10		1				4.0
47.5	32.5	17	27	29.87	758.7	47.3	8.5		3	7	15	4	2					4.5
47.5	37.5	20	38	29.79	756.7	43.5	6.4		8	8	8	4	1		2			4.7
47.5	42.5	19	37	29.76	755.9	37.4	3.0	1	9	4	10	3	2	1	1			4.5
47.5	47.5	17	30	29.72	754.9	30.6	— 0.8	2	11	4	6	4	1	2	1			3.5
52.5	12.5	17	21	30.18	766.6	47.9	8.8	1	1	7	4	13	4		1			3.8
52.5	17.5	15	20	30.06	763.5	49.5	9.7		3	6	8	11	3					4.0
52.5	22.5	15	27	29.98	761.5	48.3	9.1		3	6	8	11	3					4.1
52.5	27.5	10	15	29.86	758.4	45.7	7.6		4	8	8	6	4		1			4.3
52.5	32.5	9	11	29.74	755.4	42.5	5.8		4	4	14	2	6		1			4.1
52.5	37.5	7	7	29.70 a	754.4 a	37.2	2.9	2	7	3	11	2	2	2	1		1	4.3
52.5	42.5	2	2	29.66	753.4	32.2	0.1	1	10	7	7	1	3		2			4.0
52.5	47.5			29.67	753.6	24.4	— 4.2	1	12	6	4	1	1	2	4			3.1
57.5	12.5	2	2	29.79	756.7	43.7	6.5		8	2	11	6	3	1				3.8
57.5	17.5	3	3	29.74	755.4	41.1	5.1		9	2	10	5	5					3.6
57.5	22.5	3	3	29.66	753.4	38.4	3.6		10		10	7	3	1				3.4
57.5	27.5	1	1	29.60	751.8	34.8	1.6	1	10	1	8	4	3	3			1	3.5
57.5	32.5	1	1	29.57 a	751.1 a	30.7	— 0.7		12	3	4	3	4	3	1		1	3.2
57.5	37.5			29.52 c	749.8 c	25.6	— 3.6	2	13		4	3	1	3	2		3	3.2
57.5	42.5			29.50 a	749.3 a	21.4	— 5.9	3	10	2	7	1	1	1	5		1	3.6
57.5	47.5			29.50 a	749.3 a	16.0	— 8.9	6	14	2	2			1	5		1	3.1

NOTE.—See General Remarks, page 9.

OOGLAAMIE, POINT BARROW, ALASKA.

DATE.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Rel. Hum. Per cent.	Wind. Direction. From.	Wind. Velocity. Miles pr hour	Wind. Velocity. Mtrs p. sec	Wind. Force 0-10	Clouds. Amount. Upper. 0-10	Clouds. Amount. Lower. 0-10	Clouds. Direction. Up'er From	Clouds. Direction. Lo'er From	Rainfall or melted snow in the past 24 hours. Inch.	Rainfall or melted snow in the past 24 hours. Mill.	WEATHER.
1881.																		
October 17	29.97	761.2	29.99	761.7	35.0	1.7	90	sw.					10 s			0	0	cloudy.
" 18	29.78	756.4	29.80	756.9	32.8	0.4	100	ssw.					10 n					raining.
" 19	29.83	757.7	29.84	757.9	35.8	2.1	93	wnw.	24	10.7			10 s			inap.	inap.	cloudy.
" 20	29.93	760.2	29.95	760.7	29.6	— 1.3	100	se.	22	9.8			fg.		se.	inap.	inap.	cloudy.
" 21	29.83	757.7	29.85	758.2	25.8	— 3.4	99	s.	6	2.7			10 s			inap.	inap.	cloudy.
" 22	29.86	758.4	29.88	758.9	16.8	— 8.4	100	ne.	18	8.0			10 s			inap.	inap.	cloudy.
" 23	29.72	754.9	29.74	755.4	18.8	— 7.3	92	ne.	24	10.7			10 n			0.03	0.8	light snow.
" 24	29.69	754.1	29.71	754.6	11.3	—11.5	94	n.	13	5.8			10 n			0.10	2.5	light snow.
" 25	29.49	749.0	29.51	749.5	8.3	—13.2	98	n.	32	14.3			10 n			0.33	8.4	light snow.
" 26	29.43	747.5	29.45	748.0	10.5	—11.9	100	n.	20	8.9			10 n			0.15	3.8	light snow.
" 27	29.72	754.9	29.74	755.4	9.6	—12.4	94	se.	10	4.5			9 s			0.21	5.3	cloudy.
" 28	29.74	755.4	29.76	755.9	16.4	— 8.7	93	nne.	21	9.4			10 s			0	0	cloudy.
" 29	29.70	754.4	29.72	754.9	16.2	— 8.8	98	e.	2	0.9			10 n			0.10	2.5	light snow.
" 30	29.83	757.7	29.85	758.2	15.0	— 9.4	100	se.	12	5.4			10 s			0.04	1.0	fair.
" 31	30.03	762.7	30.05	763.3	15.6	— 9.1	97	e.	7	3.1			10 s			0	0	cloudy.
November 1	30.14	765.5	30.16	766.1	13.8	— 9.6	89	e.	18	8.0			10 n			0.10	2.5	light snow.
" 2	29.75	755.6	29.77	756.1	10.1	—12.2	96	ne.	24	10.7			10 s			0.09	2.3	cloudy.
" 3	29.60	751.8	29.62	752.3	8.8	—12.9	100	ne.	36	16.1			10 n			0.20	5.1	snowing.
" 4	29.58	751.3	29.60	751.8	2.5	—16.4	100	ene.	21	9.4			10 s		ne.	0.10	2.5	cloudy.
" 5	29.48	748.8	29.50	749.3	2.0	—16.7	86	ene.	24	10.7			10 s		ne.	0	0	cloudy.
" 6	29.79	756.7	29.81	757.2	—10.4	—23.6	96	ene.	30	13.4		0	4 s			0	0	fair.
" 7	30.14	765.5	30.16	766.1	— 7.8	—22.1	92	ne.	20	8.9		0	2 s			0	0	clear.
" 8	30.12	765.0	30.14	765.5	— 6.6	—21.4	100	ene.	14	6.3			10 s			0.01	0.3	cloudy.
" 9	29.89	759.2	29.91	759.7	— 1.7	—18.7	97	nne.	28	12.5			10 s			0.03	0.8	cloudy.
" 10	30.01	762.2	30.03	762.7	—5.8	—21.0	100	ne.	21	9.4		0	4 s			0	0	fair.
" 11	30.32	770.1	30.34	770.6	— 6.5	—21.4	90	ene.	20	8.9		0	5 s		ne.	0	0	fair.
" 12	30.59	777.0	30.61	777.5	—19.6	—28.7	93	ene.	10	4.5		0	0			0	0	clear.
" 13	30.67	779.0	30.69	779.5	—25.0	—31.7	81	e.	5	2.2		0	0			0	0	clear.
" 14	30.31	769.9	30.33	770.4	— 2.3	—19.1	92	se.	18	8.0			10 s			inap.	inap.	cloudy.
" 15	29.94	760.5	29.96	761.0	23.3	— 4.8	98	sw.	27	12.1			10 s			0.04	1.0	cloudy.
" 16	30.03	762.7	30.05	763.3	14.8	— 9.6	96	wnw.	22	9.8		0	7 s			0	0	fair.
" 17	30.32	770.1	30.34	770.6	—19.1	—28.4	100	nne.	10	4.5		0	0			0	0	clear.
" 18	30.02	762.5	30.04	763.0	— 9.0	—22.8	100	ne.	28	12.5		0	4 s			0	0	fair.
" 19	29.58	751.3	29.60	751.8	0.6	—17.4	88	ene.	34	15.2			10 s			0	0	cloudy.
" 20	29.39	746.5	29.41	747.0	2.0	—16.7	100	sse.	16	7.2		hz.	4 s			0.02	0.5	fair.
" 21	29.71	754.6	29.73	755.1	1.8	—16.8	100	nw.	31	13.9			10 s			0.05	1.3	clo dy.
" 22	30.38	771.6	30.41	772.4	—10.6	—23.7	96	nw.	6	2.7		0	0			0	0	clear.
" 23	30.23	767.8	30.25	768.3	—27.7	—33.2	46	ssw.	4	1.8		0	0			0	0	clear.
" 24	29.89	759.2	29.91	759.7	—14.0	—25.6	100	ene.	16	7.2		hz.	0			0	0	clear.
" 25	29.70	754.4	29.72	754.9	— 5.6	—20.9	85	ene.	27	12.1		0	0			0	0	clear.
" 26	29.61	752.1	29.63	752.6	2.1	—16.6	97	e.	25	11.2			10 s			0	0	cloudy.
" 27	29.35	745.5	29.37	746.0	3.6	—15.8	90	ene.	8	3.6		0	hz.			0.05	1.3	hazy.
" 28	29.20	741.7	29.22	742.2	10.6	—11.9	92	sse.	16	7.2		0	0			0	0	clear.
" 29	29.12	739.6	29.14	740.1	22.8	— 5.1	100	s.	14	6.3			10 n			0.04	1.0	light snow.
" 30	29.46	748.3	29.48	748.8	— 7.8	—22.1	92	n.	9	4.0		4 cs	3 s			0	0	fair.
Mean	29.88	758.9	29.90	759.4	— 2.0	—18.9	93.1						5			0.73	18.5	
December 1	30.08	764.0	30.10	764.5	— 4.3	—20.2	93	wsw.	8	3.6		0	0			0	0	clear.
" 2	29.91	759.7	29.93	760.2	2.6	—16.3	97	wnw.	12	5.4		3 ck	hz.			0.14	3.6	hazy.
" 3	29.29	744.0	29.31	744.5	— 3.0	—19.4	100	ne.	40	17.9			10 n			0.21	5.3	light snow.
" 4	29.83	757.7	29.85	758.2	—19.2	—28.4	93	ene.	5	2.2			10 s			0	0	cloudy.
" 5	29.72	754.9	29.74	755.4	—10.0	—23.3	100	ne.	12	5.4		hz.	hz.			0	0	hazy.
" 6	29.96	761.0	29.98	761.5	—18.4	—28.0	81	calm	0	0		hz.	hz.			inap.	inap.	hazy.
" 7	30.03	762.7	30.05	763.3	—12.4	—24.7	95	w.	6	2.7		0.	1 s			0.01	0.3	clear.
" 8	30.15	765.8	30.17	766.3	—12.1	—24.5	95	w.	7	3.1			9 s			0	0	cloudy.
" 9	30.17	766.3	30.19	766.8	—26.7	—32.6	70	se.	5	2.2		0	0			inap.	inap.	clear.
" 10	30.05	763.3	30.06	763.5	4.8	—15.1	95	sw.	7	3.1			10 s			inap.	inap.	cloudy.
" 11	30.10	764.5	30.12	765.0	—13.4	—25.2	69	n.	5	2.2		0	3 s			0.01	0.3	fair.
" 12	29.78	756.4	29.80	756.9	—14.0	—25.6	89	nnw.	14	6.3		0	5 s			0	0	fair.
" 13	29.71	754.6	29.73	755.1	—16.8	—27.1	88	wnw.	11	4.9		hz.	4 s			0	0	fair.
" 14	29.85	758.2	29.87	758.7	—19.2	—28.4	86	s.	5	2.2			10 s			0	0	cloudy.
" 15	29.78	756.4	29.80	756.9	—25.4	—31.9	64	ssw.	4	1.8		hz.	hz.			0	0	hazy.
" 16	29.67	753.6	29.69	754.1	—22.7	—30.4	84	ssw.	8	3.6			10 n			0.03	0.8	light snow.
" 17	29.59	751.6	29.61	752.1	—23.2	—30.7	76	nne.	3	1.3		0	0			0	0	clear.
" 18	29.92	760.0	29.94	760.5	—45.7	—43.2	100	ene.	6	2.7		0	0			0	0	clear.
" 19	30.13	765.3	30.15	765.8	—52.0	—46.7	100	ene.	8	3.6		0	0			0	0	clear.
" 20	29.98	761.5	30.00	762.0	—40.2	—40.1		ene.	12	5.4		hz.	hz.			0	0	hazy.
" 21	30.10	764.5	30.12	765.0	—37.1	—38.4	100	ne.	12	5.4		hz.	hz.			0	0	hazy.
" 22	29.77	756.1	29.79	756.7	—35.7	—37.6	100	ese.	4	1.8		hz.	0			0	0	clear.
" 23	29.40	746.7	29.42	747.3	—34.4	—36.9		ene.	11	4.9		hz.	hz.			0.03	0.8	hazy.
" 24	29.45	748.0	29.47	748.5	—25.2	—31.8	72	calm	0	0		hz.	4 s			0	0	fair.
" 25	29.32	744.7	29.34	745.2	—30.2	—34.6	52	calm	0	0		0	1 s			0	0	clear.
" 26	29.23	742.4	29.24	742.7	—25.7	—32.1	71	w.	5	2.2		hz.	5 s			0	0	fair.
" 27	29.55	750.6	29.57	751.1	—21.0	—29.4	93	wnw.	5	2.2		hz.	hz.			0	0	hazy.
" 28	30.20	767.1	30.22	767.6	—27.5	—33.1	68	wnw.	6	2.7		0	0			0	0	clear.
" 29	30.26	768.6	30.28	769.1	—31.0	—35.0	87	se.	16	7.2		0	1 s			0	0	clear.
" 30	29.95	760.7	29.97	761.2	—18.7	—28.2	86	se.	4	1.8			10 s			0.01	0.3	cloudy.
" 31	30.05	763.3	30.07	763.8	— 5.4	—20.8	86	ssw.	12	5.4			9 s		n.	0	0	cloudy.
Mean	29.84	757.9	29.86	758.4	—21.4	—29.7	85.9b						3			0.44	11.2	

NOTE.—The above observations, taken at 7 a. m., Washington time, and commencing with the opening of station, were received too late for publication in the DAILY BULLETIN.

REVIEW.

The following review refers to three international charts which continue the series of chart iv. begun in January, 1877, and heretofore described in the MONTHLY WEATHER REVIEW.

They exhibit the mean pressure, mean temperature, and the prevailing direction of the wind over the northern hemisphere for the months of November and December, 1880, and for January, 1881, as determined from one observation taken simultaneously each day at 7.35 a. m. Washington, or 0.43 p. m. Greenwich mean time.

For the description of these charts, much valuable information has been obtained from the "Monatliche Uebersicht der Witterung," published by Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg; from the the reports of the Meteorological Society of Great Britain, and from the "Bulletin Mensuel," published by Mr. Marc Dechrevens, of Zi-Ka-Wei, China.

During November, 1880, the most marked area of low barometer, indicated by the isobar of 29.3 (744.2), occupied the Arctic ocean between Greenland and Nova Zembla, and included within its limits the extreme northern part of the Scandinavian peninsula, the lowest monthly mean, 29.29 (743.9) being reported from Tromsoe, Norway. The barometric gradient increases somewhat rapidly in a southerly and easterly direction, until the isobaric line of 30.1 (764.5) in southwestern Siberia and central Europe is reached.

Three areas of barometric maxima appear on the chart for November.

The most marked of these includes Toorkistan and the Caspian sea, the greatest mean pressure 30.55 (776.0) being reported at Nukuss.

The second area of high mean pressures is shown near the northwestern coast of Africa and extends westward to the Madeira islands and to Azores; within this area, the greatest mean pressure was 30.24 (768.1).

The third area of barometric maxima covers the United States from the Atlantic coast westward to the hundredth meridian and south of the forty-second parallel of latitude; within this area, the mean pressures range from 30.22 (767.6) to 30.29 (769.4).

For the Pacific coast, the mean atmospheric pressure ranges from 30.08 (764.0) in southern California to 30.33 (770.4) in Oregon.

Compared with the preceding month, (October, 1880,) the barometric pressure over the United States has increased in all parts of the country; in Canada it has increased .1 inch. In Europe, the atmospheric pressure has decreased in the Scandinavian peninsula and in northern Russia.

In all other parts of the continent, there has been an increase of pressure.

In Greenland, the pressure has decreased about .5 inch, the mean of the month at Godthaab being 29.57 (751.1); the decrease extends eastward to Iceland, where the mean pressure is .67 inch below that of October.

In the Azores, and over the Atlantic ocean south of N. 40°, the pressure has increased about .25 inch; north of the fortieth parallel, the increase is less marked.

In British India, the barometric pressure has increased .15 inch, and in China and Japan, the increase ranges from .05 to .15 inch.

Compared with the corresponding month of previous years, the mean atmospheric pressure is very decidedly above the normal in the United States, the excess ranging from .1 inch on the Atlantic to .2 inch on the Pacific coasts.

In Canada, the mean pressure is everywhere above the normal.

The following table shows the mean pressure and the mean temperature, with corresponding departures, for the month of November, 1880, in the several countries of Europe and Asia, compared with the means as determined from observations taken during the years 1877, 1878, and 1879:—

Countries.	Mean Pressure.			Mean Temperature.		
	Nov., 1877, 1878, and 1879	Nov., 1880.	Departure.	Nov., 1877, 1878, and 1879.	Nov., 1880.	Departure.
				°	°	°
Algeria	30.05	30.13	+0.08	62.8	66.3	+3.5
Austria	29.97	30.11	+0.14	42.9	46.7	+3.8
British Isles	29.88	29.91	+0.03	44.3	45.8	+1.5
Denmark	29.76	29.80	+0.04	41.6	40.5	−1.1
France	29.93	30.07	+0.14	46.0	48.3	+2.3
Germany	29.87	30.01	+0.14	41.1	42.5	+1.4
India	29.92	30.00	+0.08	75.1	72.8	−2.3
Italy	29.96	30.10	+0.14	55.6	57.0	+1.4
Norway	29.80	29.57	−0.23	43.3	37.0	−6.3
Portugal	30.04	30.14	+0.10	58.0	56.7	−1.3
Russia	29.97	29.99	+0.02	39.1	35.9	−3.2
Spain	29.98*	30.10	+0.12	57.3*	57.8	+0.5
Sweden	29.74	29.62	−0.12	33.1	29.1	−4.0

* Mean for two years only.

The accompanying table shows the deviations in pressure and temperature at isolated stations during the month of November, 1880, as compared with the means of three years:

STATION.	Mean Pressure.			Mean Temperature.		
	Nov., 1877–78–79.	Nov. 1880.	Departure.	Nov., 1877–78–79.	Nov., 1880.	Departure.
				°	°	°
San José, Costa Rica, C. A.	.....	.....	.....	67.0	68.6	−0.4
Gibraltar	30.01	30.11	+0.10	*65.2	61.9	−3.3
Malta, Mediterranean Sea	29.97	30.06	+0.09	67.2	72.8	+5.6
Sandwick Manse, Orkney Islands	29.77	29.70	−0.07	42.5	41.9	−0.6
Bridgetown, Barbadoes	29.91	29.97	+0.06	81.1	79.0	−2.1
Cape Town, Cape Good Hope	30.02	30.01	−0.01	72.8	73.9	+1.1
Fort Napier, Natal, South Africa	29.80	29.82	+0.02	77.2	71.7	−5.5
Freetown, Sierra Leone	29.93	29.89	−0.04	86.1	82.9	−3.2
Mauritius, Indian Ocean	30.03	30.09	+0.06	78.1	75.9	−2.2
Melbourne, New South Wales	29.91	29.94	+0.03	56.2	56.9	+0.7
Nassau, Bahamas	30.04	30.12	+0.08	75.2	77.9	+2.7
Godthaab, Greenland	29.72	29.57	−0.15	28.1	24.8	−3.3
Stykkisholm, Iceland	29.78	29.50	−0.28	33.0	28.2	−4.8
Thorshavn, Faroe Islands	29.75	29.54	−0.21	40.1	38.7	−1.4
Fort-de-France, Martinique	29.87	30.16	+0.29	79.1	76.1	−3.0
Zi-Ka-Wei, China	30.29	30.31	+0.02	56.5	45.0	−11.5
Athens, Greece	30.04	30.12	+0.08	62.4	65.1	+2.7
Lahore, British India	29.99	30.03	+0.04	67.8	67.4	−0.4
Cagliari, Sardinia, Italy	29.96	30.01	+0.05	62.8	66.4	+3.6
Tokei, Japan	30.10	30.01	−0.09	47.4	47.5	+0.1
Tromsoe, Norway	29.59	29.29	−0.30	31.1	37.0	+5.9
Angra, Azores	30.06	30.24	+0.18	62.4	64.9	+2.5
Funchal, Madeira Islands	30.02	30.24	+0.22	69.9	69.6	−0.3
Ponta Delgado, Azores	30.09	30.24	+0.15	65.2	65.5	+0.3
Archangel, Russia	29.79	29.43	−0.36	25.5	22.3	−3.2
Tiflis, Russia	30.28	30.22	−0.06	55.0	57.7	+2.7
Astrakhan, Russia	30.23	30.26	+0.03	43.4	41.4	−2.0
Ekaterinburg, Russia	30.13	29.89	−0.24	25.8	25.7	−0.1
Nukuss, Toorkistan, Asia	30.26	30.55	+0.29	42.1	47.3	+5.2
Tashkend, Toorkistan, Asia	30.39	30.32	−0.07	42.1	44.8	+2.7
Barnaul, Siberia, Asia	30.31	30.24	−0.07	18.8	31.6	+12.8
Pekin, China	30.31	30.28	−0.03	36.5	37.0	+0.5
Nikolaievsk on the Amoor, Asia	.....	.....	.....	10.4	18.1	+7.7
San Juan de Puerto Rico, W. I.	29.93	30.08	+0.15	78.6	79.7	+1.1
Mexico, Mexico	30.04	30.03	−0.01	72.4	73.9	+1.5
Beirut, Turkey in Asia	30.26	30.43	+0.17	48.4	51.4	+3.0
Havana, Cuba, W. I.	29.97	30.12	+0.15	74.9	70.3	−4.6
Paramaribo, D. Guiana, S. A.	29.96	29.98	+0.02	83.0	80.5	−2.5
York Factory, B. A.	30.00	30.01	+0.01	11.0	−1.0	−12.0

* Mean for two years only.

In the United States and Canada, the mean temperature of the air was below the normal, the most noteworthy deficiencies occurring in Texas and the Rocky mountain regions. In many sections, this was the coldest November recorded since the establishment of the Signal Service stations. In Europe, the mean temperature was generally above the normal, except in the Scandinavian peninsula and in Denmark. In British India, the temperature is below the mean of the last three years.

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

Highest.	Degrees.	Lowest.	Degrees.
Freetown, Africa	82.9	York Factory, British America	−1.0
Puerto Berrio, South America	81.1	Nertchinsk, Siberia	+3.6
Paramaribo, South America	80.5	Jacobshavn, Greenland	12.4
Navassa, West Indies	79.6	Upernavik, Greenland	16.2

In the United States, the prevailing directions of the wind were: northerly in Texas, and northerly and northeasterly on the Atlantic coast and in the Gulf states; elsewhere, the winds were westerly and northwesterly. In Canada, the prevailing winds were westerly and southwesterly. In Europe, the winds were mostly southwesterly, except in the southern

peninsulas, where they were northerly and northeasterly. In Japan, northerly winds prevailed; at Zi-Ka-Wei, China, the prevailing direction was northwesterly. Over the Atlantic ocean, between the meridians of 40° and 60° west longitude and north of the fortieth parallel, strong northwesterly winds prevailed. From the fortieth meridian eastward, brisk to strong westerly and southwesterly winds were general. The rainfall during the month was below the average in the New England and middle Atlantic states and in the Pacific coast region; elsewhere in the United States it was in excess of the average. In Canada, the rainfall was above the average, except in the Maritime Provinces, where it was about 1.50 inches below the average. In Europe, the rainfall was normal, or slightly above the average.

During the month of December, 1880, the region of least mean pressure was in northern Norway, where the mean barometric reading was 29.39 (746.5). The barometric gradients were somewhat steep to the southeastward of the above region, but in the southern and western quadrants the gradients were of moderate inclination. A second area of low pressure, enclosed by the isobar of 29.7 (754.4), occupied the north Atlantic ocean between the meridians of 30° and 50° west longitude and between 50° and 60° north latitude.

The areas of barometric maxima are distributed as follows: The first, indicated by the isobaric line of 30.6 (777.2) occupies eastern Siberia; the pressure gradually diminished in a southerly direction, the isobars of 30.4 (772.1) and 30.3 (769.6) covering the Chinese Empire. The second area of high pressures covers the Iberian peninsula and northwestern Africa, and extends westward to the Madeira Islands. In the United States, the area of greatest pressures occupies the states of Missouri and Arkansas, northern Louisiana, northeastern Texas, and the eastern parts of Kansas and Nebraska. The isobar of 30.2 (767.1) also covers Montana and the northwest territories of British America.

Compared with the corresponding chart of the preceding month (November, 1880), no change has occurred in the position of the area of absolute low pressures. For December, the isobaric lines present a somewhat elongated form, the pressure having increased on the eastern and western sides of the depression, while it has decreased in the southern quadrants. In Greenland and in Iceland, the pressure has increased about .25 inch, while a corresponding decrease has occurred in southern Russia. The high area, which, in November occupied the Western Islands, has extended eastward, and now covers Algeria, Tunis, and the Iberian peninsula. In the North American continent, there has been a general decrease of pressure, except over the region near Hudson's bay and in Manitoba, where the pressure has increased. In the United States, the decrease of pressure averages about .12 inch over the country east of the Rocky mountains; in the Pacific coast regions, the decrease is more marked, where it averages from .05 inch in the south Pacific coast region to .45 inch in Washington Territory and Oregon. In Canada, the mean atmospheric pressure has decreased .1 inch. In Asia, the barometric pressure has increased throughout the continent, except in Toorkistan, where it has decreased about .15 inch. The highest mean reported was 30.7 (779.8) at Nertchinsk, Siberia.

Compared with the corresponding month of previous years, the mean atmospheric pressure is slightly below the normal in that part of the United States lying between the Atlantic and the ninetieth meridian. Between the Rocky mountains and the above-mentioned meridian, the pressure was slightly above the normal. In southern California, the pressure was normal, and in the central and northern districts, it was from .1 to .2 inch below the normal. In Canada, the mean atmospheric pressure was everywhere below the normal.

The following table shows the mean pressure and the mean temperature, with corresponding departures, for the month of December, 1880, in the several countries of Europe and Asia, compared with the means as determined from observations taken during the years 1877, 1878, and 1879:—

Countries.	Mean pressure.			Mean temperature.		
	Dec., 1877, 1878, 1879.	Dec., 1880.	Departure.	Dec., 1877, 1878, 1879.	Dec., 1880.	Departure.
				°	°	°
Algeria	30.10	30.26	+0.16	56.8	60.2	+3.4
Austria	30.08	30.00	−0.08	29.0	41.5	+12.5
British Isles	29.97	29.89	−0.08	36.5	44.9	+8.4
Denmark	29.90	29.65	−0.25	33.4	37.3	+3.9
France	30.10	30.14	+0.04	39.1	49.2	+10.1
Germany	30.03	29.88	−0.15	30.7	40.2	+9.5
India	29.99	30.05	+0.06	68.4	67.5	−0.9
Italy	30.02	30.08	+0.06	46.6	51.7	+5.1
Norway	29.80	29.50	−0.30	31.0	28.2	−2.8
Portugal	30.18	30.29	+0.11	61.1	53.7	−7.4
Russia	30.07	29.76	−0.31	27.4	28.2	+0.8
Spain *	30.07	30.24	+0.17	49.1	55.5	+6.4
Sweden	29.82	29.53	−0.29	26.5	19.9	−6.6

* Means for two years only.

The accompanying table shows the deviations in pressure and temperature at isolated stations during the month of December, 1880, as compared with the means of three years:—

Station.	Mean pressure.			Mean temperature.		
	Dec., 1877, 1878, 1879.	Dec., 1880.	Departure.	Dec., 1877, 1878, 1879.	Dec., 1880.	Departure.
				°	°	°
San José, Costa Rica, C. A	.....	.....	.....	65.8	64.0	−1.8
Gibraltar *	30.10	30.26	+0.16	58.7	60.3	+1.6
Malta, Mediterranean Sea	30.00	30.08	+0.08	61.1	64.1	+3.0
Sandwick Manse, Orkney Islands	29.78	29.61	−0.17	38.5	37.9	−0.6
Bridgetown, Barbadoes	29.95	30.00	+0.05	79.3	79.4	+0.1
Cape Town, Cape Good Hope *	30.03	29.98	−0.05	75.5	80.0	+4.5
Fort Napier, Natal, South Africa	29.77	29.80	+0.03	76.1	77.0	+0.9
Free Town, Sierra Leone *	29.92	29.86	−0.06	86.2	84.7	−1.5
Mauritius, Indian Ocean	29 94	30.04	+0.10	80.3	78.1	−2.2
Melbourne, New South Wales	29.90	29.97	+0.07	59.5	59.0	−0.5
Nassau, Bahamas	30.12	30.08	−0.04	71.8	71.2	−0.6
Godthaab, Greenland	29.61	29.77	+0.16	20.5	21.6	+1.1
Stykkisholm, Iceland	29.61	29.83	+0.22	28.3	17.8	−10.5
Thorshavn, Faroe Islands	29.71	29.92	+0.21	38.1	33.6	−4.5
Fort-de-France, Martinique	29.93	30.18	+0.25	77.2	73.0	−3.3
Zi-Ka-Wei, China	30.30	30.45	+0.15	39.7	35.4	−4.3
Athens, Greece	30.02	30.08	+0.06	54.6	56.8	+2.2
Lahore, British India	30.04	30.08	+0.04	57.6	58.2	+0.6
Cagliari, Sardinia, Italy	29.96	30.08	+0.12	52.7	62.2	+9.5
Tokei, Japan	29.99	29.99	normal	41.7	34.9	−6.8
Tromsoe, Norway	29.55	29.39	−0.16	29.3	22.5	−6.8
Angra, Azores	30.04	30.03	−0.01	59.9	61.7	+1.8
Funchal, Madeira Islands	30.11	30.24	+0.13	66.4	66.4	normal
Ponta Delgado, Azores	30.07	30.12	+0.05	63.1	63.3	+0.2
Archangel, Russia	29.87	29.56	−0.31	16.9	13.3	−3.6
Tiflis, Russia	30.20	30.19	−0.01	43.1	39.9	−3.2
Astrakhan, Russia	30.24	30.12	−0.12	29.0	32.2	+3.2
Ekaterinburg, Russia	30.27	30.08	−0.19	8.1	16.2	+8.1
Nukuss, Toorkistan, Asia	30.32	30.36	+0.04	28.3	34.0	+5.7
Tashkend, Toorkistan, Asia	30.46	30.24	−0.22	32.7	39.7	+7.0
Barnaul, Siberia, Asia	30.41	30.44	+0.03	−2.4	11.5	+13.9
Pekin, China	30.34	30.48	+0.14	24.6	24.4	−0.2
Nikolaievsk on the Amoor, Asia	.....	.....	.....	−8.1	2.8	+10.9
San Juan de Puerto Rico, W. I	30.01	30.07	+0.06	76.1	76.3	+0.2
Beirut, Turkey in Asia	30.03	30.01	−0.02	65.7	62.6	−3.1
Mexico, Mexico	30.29	30.45	+0.16	45.9	46.8	+0.9
Havana, Cuba, W. I	30.08	30.11	+0.03	71.3	71.6	+0.3
Paramaribo, D. Guiana, S. A	29.98	30.00	+0.02	80.8	78.4	−2.4
York Factory, B. A	29.95	30.10	+0.15	−13.1	−21.8	−8.7

* Means for two years only.

In the United States, the mean temperature of the air, in December, 1880, ranged from 1° to 6° below the normal in all parts of the country, except in the Pacific coast districts and in Arizona, where it was from 1° to 4° above the normal. At the close of the month, the minimum temperatures were the lowest ever recorded in the southern states, since the establishment of the Signal Service stations. In Canada, the mean temperature was below the normal, except in the Maritime Provinces, where it was above the normal. In Europe, the mean temperature of the air was above the normal, except in the Scandinavian peninsula, where it was about 4° below the normal. The greatest departures from the normal occurred in Germany, France, Austria, and the British Isles; elsewhere the departures were less marked. In British India, the temperature was about normal; the highest mean, 79°.2 F. (26°.2 C.), was reported at Bombay; and the lowest, 58°.2 F. (14°.6 C.), at Lahore.

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

HIGHEST.	Degrees.	LOWEST.	Degrees.
Fort Napier, South Africa	84.7	York Factory, British America	—28.4
Cape Town, Cape of Good Hope	80.0	Nertchinsk, Siberia	—13.4
Bridgetown, Barbadoes	79.4	Yeniseisk, northwestern Siberia	— 0.8
Puerto Berrio, South America	79.4	Upernavik, Greenland	+ 0.7
Paramaribo, South America	78.4		

The prevailing directions of the wind, in the United States, were northerly and northwesterly, except in the lake region, where they were southwesterly. On the Pacific coast, the winds were mostly southeasterly. In central Europe, the prevailing winds were westerly and southwesterly; in European Russia they were generally southerly; in Italy and on the northern shores of the Mediterranean they were mostly northwesterly. In Japan, the winds were northerly, and at Zi-Ka-Wei, China, the prevailing direction during the month was north-northwesterly. Over the north Atlantic ocean, the prevailing winds were northwesterly, from the coast of the United States eastward to the fifty-fifth meridian; between 30° and 50° north latitude, and from 55° west longitude eastward to the European coasts, the winds were mostly southwesterly; north of the fifty-fifth parallel northeasterly winds prevailed.

The rainfall (including melted snow), during December, 1880, was below the average in the United States, except in the states adjoining the Atlantic ocean and in Minnesota, where it was slightly in excess of the average. On the Pacific coast, the rainfall was much above the average, the largest excess, 7.25 inches, occurring in the central Pacific coast region. In Canada, the rainfall was below the average, the greatest deficiency occurring in the province of Ontario. In Europe, the rainfall was in excess of the average.

During the month of January, 1881, the atmospheric pressure over the northern hemisphere was distributed as follows: A large area of low pressure occupied the north Atlantic ocean, the region of least pressure, enclosed by the isobar of 29.5 (749.3), being near W. 35° and 40°, and between N. 40° and 50°. A second area of low pressures occupied that part of northern Russia situated near the White sea; within which area, the lowest mean pressure reported was 29.49 (749.0), at Archangel. From this region southward, the pressure increased slowly, while, from the Ural mountains eastward to the Sea of Okhotsk, the increase of pressure was more rapid. In the United States, the mean pressure ranged from 30.15 (765.8) to 30.35 (770.9) from the Atlantic westward to the Pacific.

Compared with the corresponding chart for the preceding month (December, 1880), it will be observed that the area of low pressure which then covered northern Scandinavia, has moved to the eastward with slightly increased pressure. The barometric gradients have become somewhat steeper over the Scandinavian peninsula, but in the eastern part of Europe the changes have been slight and unimportant. The area of low-pressures, which, in December, was central near the fortieth meridian and to the north of N. 50°, has apparently moved southeastward with decreased pressure and is now shown near N. 45°, W. 35°. Under the influence of this depression the mean pressure has decreased slightly over western Europe, and the area of high pressures which covered the Azores, the Iberian peninsula, and the western part of the Mediterranean, has given way and is now shown near the eastern shores of that sea. In the United States, the mean atmospheric pressure has increased. The most noteworthy increase of pressure is shown in Oregon, Washington Territory and Idaho, where the increase averages .23 inch; elsewhere it averages .1 inch. In Canada, the mean pressure has increased about .12 inch. It has also increased in Greenland and in Iceland. In Asia, the pressure has remained unchanged, except over the eastern part of Japan, where a slight decrease has occurred.

Compared with the corresponding month of previous years, the mean atmospheric pressure over the United States is slightly above the normal, except in Georgia and the Carolinas, where it is about .05 inch below the normal. In the north Pacific coast region, the pressure is .15 inch above the mean for the month. In Canada, the pressure was above the normal, except in the Maritime Provinces, where it was .1 inch below.

In Europe, the mean pressure was everywhere below the normal, the deviation being most marked in the southern parts of the continent.

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

Countries.	Mean pressure.			Mean temperature.		
	Jan., 1877, 1878, 1879, 1880.	January, 1881.	Departure.	Jan., 1877, 1878, 1879, 1880.	January, 1881.	Departure.
				°	°	°
Algeria	30.17	30.02	—0.15	55.9	62.3	+6.4
Austria	30.19	29.96	—0.23	33.4	28.2	—5.2
British Isles	30.02	29.90	—0.12	41.0	33.9	—7.1
Denmark	30.04	29.89	—0.15	31.4	27.6	—3.8
France	30.15	29.88	—0.27	42.7	36.8	—5.9
Germany	30.11	29.93	—0.18	32.5	26.5	—6.0
India *	29.90	30.03	+0.13	73.8	70.8	—3.0
Italy	30.09	29.89	—0.20	48.6	44.8	—3.8
Norway	29.85	29.77	—0.08	29.9	23.5	—6.4
Portugal	30.22	29.88	—0.34	52.1	51.9	—0.2
Russia	30.15	29.87	—0.28	20.9	19.4	—1.5
Spain	30.19	29.87	—0.32	52.8	51.5	—1.3
Sweden	29.97	29.73	—0.24	25.7	17.5	—8.2

* Means for three years only.

The accompanying table shows the deviations in pressure and temperature at isolated stations, during the month of January, 1881, as compared with the means of four years:—

Stations.	Mean pressure.			Mean temperature.		
	Jan., 1877, 1878, 1879, 1880.	Jan., 1881.	Departure.	Jan., 1877, 1878, 1879, 1880.	Jan., 1881.	Departure.
				°	°	°
San José, Costa Rica, C. A*	.....	.....	.....	63.8	62.4	— 1.4
Gibraltar	30.18	29.99	—0.19	59.5	61.0	+ 1.5
Malta, Mediterranean Sea	30.05	29.91	—0.14	58.5	65.1	+ 6.6
Sandwich Manse, Orkney Islands	29.92	29.89	—0.03	39.1	34.0	— 5.1
Bridgetown, Barbadoes	30.01	30.03	—0.02	80.0	80.3	+ 0.3
Cape Town, Cape Good Hope	29.98	29.93	+0.05	77.7	81.4	+ 3.7
Fort Napier, Natal, South Africa	29.80	29.80	normal	78.2	78.0	— 0.2
Free Town, Sierra Leone	29.90	29.87	—0.03	85.8	85.1	— 0.7
Mauritius, Indian Ocean	29.95	29.93	—0.02	82.1	79.8	— 2.3
Melbourne, New South Wales	29.98	29.94	—0.04	62.8	64.0	+ 1.2
Nassau, Bahamas *	30.14	30.11	—0.03	71.1	71.9	+ 0.8
Godthaab	29.41	30.02	+0.61	15.3	27.5	+12.2
Stykkisholm, Iceland	29.52	30.13	+0.61	30.4	17.2	—13.2
Thorshavn, Faroe Islands	29.76	29.87	+0.11	38.5	34.4	— 4.2
Zi-Ka-Wei, China	30.42	30.30	—0.12	33.8	34.2	+ 0.4
Athens, Greece	30.10	29.96	—0.14	51.8	56.5	+ 4.7
Lahore, British India *	30.05	30.08	+0.03	59.0	64.8	+ 5.8
Cagliari, Sardinia, Italy *	30.13	29.82	—0.31	53.0	57.7	+ 4.7
Tokei, Japan	30.10	29.88	—0.22	34.9	33.6	— 1.3
Angra, Azores *	30.20	29.56	—0.64	58.0	55.9	— 2.1
Funchal, Madeira Islands	30.23	29.93	—0.30	64.8	65.5	+ 0.7
Ponta Delgado, Azores	30.18	29.61	—0.57	61.1	59.0	— 2.1
Archangel, Russia	29.94	29.49	—0.45	9.5	0.1	— 9.4
Tiflis, Russia	30.21	30.08	—0.13	38.3	43.3	+ 5.0
Astrakhan, Russia	30.26	30.06	—0.20	23.1	28.2	+ 5.1
Ekaterinburg, Russia	30.27	29.87	—0.40	4.7	5.5	+ 0.8
Nukuss, Toorkistan, Asia	30.29	30.25	—0.04	24.3	39.2	+14.9
Tashkend, Toorkistan, Asia	.....	.....	.....	.....	.....	.....
Barnaul, Siberia, Asia	30.52	30.22	—0.30	— 3.4	14.5	+17.9
Pekin, China	30.45	30.27	—0.18	20.9	23.5	+ 2.6
Nikolaievsk on the Amoor, Asia	.....	.....	.....	— 5.8	—12.6	— 6.8
San Juan de Puerto Rico, W. I *	30.04	30.11	+0.07	75.5	74.7	— 0.8
Beirut, Turkey in Asia	30.08	30.22	+0.14	60.1	59.9	— 0.2
Mexico, Mexico	.....	.....	.....	.....	.....	.....
Havana, Cuba, W. I *	30.09	30.10	+0.01	71.6	72.4	+ 0.8
Paramaribo, D. Guiana, S. A.	29.98	30.01	+0.03	79.4	76.7	— 2.7
York Factory, B. A	30.01	29.91	—0.10	—22.3	—32.9	—10.6

* Mean for three years only.

In the United States, the mean temperature of the air was below the normal from the Rocky mountains eastward to the Atlantic; the departures ranging from normal in Florida to 10° below the normal in Dakota, Nebraska, Kansas, and Missouri. At Washington, District of Columbia, the mean temperature of the month, 26°.7, was the lowest recorded since the establishment of the Signal Service; the minimum temperature of the month, —14°, has been equaled only once during a period of forty-six years, namely: In January, 1835, when the temperature fell to —14°. In most districts, the

mean temperature was the lowest on record, excepting that of January, 1875. At stations west of the Rocky mountains, the mean temperature of the month was about 2° above the normal, except in southern California, where it was below the normal.

It is worthy of note that, while the mean temperature was unusually high in Greenland, being about 12° above the mean as determined from simultaneous observations taken during the last four years, the mean temperature in Iceland was correspondingly low, being about 13° below the mean as determined from the same series of observations. (See table of comparative temperatures at isolated stations.) The weather of January, 1881, in Iceland, is said to have been the most severe known for years; large numbers of sheep perished; ponies were killed to save hay, and much suffering was experienced by the people.

In Europe, the temperature of the air was everywhere below the normal; the departure being more marked in western Europe than in the eastern and southern sections. The following extracts referring to the frost of January, 1881, in the British Isles, are taken from "Symons' Monthly Meteorological Magazine," for February, 1881:—

From January 7th to 26th, an intensely severe frost prevailed over the whole of the United Kingdom, which for severity has not been equalled since the winter of 1814; but that was more remarkable for its long continuance, than for its extreme severity. On every day from the 7th to the 12th, the temperature fell below 10° at several places in the south of Scotland, the northwest of England, and the central part of Ireland, and the frost occurred all over the United Kingdom, except at a few of the extreme sea-coast stations. On the 13th, the lowest reading registered was, —2° at Cardigan. Temperatures below 20° prevailed over almost the whole of Scotland, the western half of England, and the greater part of Ireland. On the 14th, readings below zero occurred in several parts of the country, the lowest being, —4° at Corwen, —3° at Cardigan, and —1° at Alston. * * * On the 16th, the frost became more intense, temperatures below zero being registered in the south of Scotland, and in the north and northwest of England. The lowest readings were, —10° at Stobo, —8° at Kelso and Corwen, —7° at Scaleby and Alston, —1° at Blackpool, and 0° at Chester, * * * On the 17th, the temperature fell below zero over the south of Scotland and north of England, the lowest readings being, —16° at Kelso, —15° at Stobo, —11° at Lauder, and —10° at Melrose. On the 18th, the lowest readings registered were, —15° at Stobo, —12° at Blackadder and Kelso, —10° at Melrose, and —4° at Wick. The temperature fell below 10° over the greater part of Scotland, and the north, east, and west of England, while readings below 20° prevailed all over the United Kingdom. Temperatures ranging from zero to 20°, prevailed over the British Isles until the 27th, when the temperature began to rise, and ultimately a thaw set in.

In Holland, the lowest temperature of the month, —5°.8 F. (—21° C.), occurred on the 25th and 26th. In northern Germany, the minimum temperature, —0°.4 F. (—18° C.) to —16° F. (—27° C), occurred generally from the 25th to the 27th, while in central and southern Germany, the periods of greatest cold were the 15th and 16th, and 22d to 24th. In France, the coldest days were the 16th, and from the 21st to 26th. In European Russia, the temperature was below the normal; the Baltic ports were blocked with ice, and navigation was generally suspended.

In British India, the temperature was below the normal; the highest mean temperature, 82°.8 F., (28.2° C.,) was reported from Poona, and the lowest, 60°.6 F., (15°.9 C.,) at Sibsagar.

In Siberia, the temperature was above the normal; at Barnaul, the mean for January, 1881, was about 17° above the January normal. In Toorkistan, the temperature was considerably above the normal, and in China, it was slightly above. At Zi-Ka-Wei, China, the coldest day of the month was the 10th, when the temperature at 7 a. m., Washington mean time, was 22°.1 F., (—5°.5 C.,) and the warmest days were the 27th and 31st, when the thermometer registered 45°.1 F., (7°.3 C.,) and 48°.9 F., (9°.4 C.,) respectively.

In Algeria, the mean temperature was about 6° above the normal.

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

Highest.	Degrees.	Lowest.	Degrees.
Freetown, South Africa	85.1	York Factory, British America	—32.9
Puerto Berrio, South America	82.0	Nertschinsk, Siberia	—20.4
Cape Town, Cape Good Hope	87.4	Nikolaivsk on the Amoor	—12.6
Manila, Philippine Islands	79.8	Archangel, Russia	+ 0.7

In the United States, the prevailing winds were northerly and northwesterly, from the Rocky mountains eastward to the Atlantic ocean, except in the lake region, where the winds were westerly and southwesterly. On the Pacific coast, the winds were generally from east to south. In Canada, the prevailing winds were westerly and southwesterly in the western part of the Dominion, and northwesterly in the Maritime Provinces. In the continent of Europe, the winds were generally variable; in the several countries they were as follows: Northerly and northeasterly in the British Isles; northerly in northern Scandinavia, and westerly at stations in the southern part of the peninsula; northeasterly and westerly in Denmark, and southerly and southwesterly in Germany; in France and Austria, the winds were mostly northeasterly; in Spain and Portugal, they were southwesterly, except on the coast, where the wind was northeasterly; in Russia, the prevailing wind was southwesterly; in Japan, the wind was northwesterly. Over the north Atlantic ocean, north of the forty-fifth parallel, the prevailing wind was northeasterly; from the coast of the United States eastward to the forty-fifth meridian, the wind was northwesterly; between N. 40° and 50° and W. 35° and 45°, it was northeasterly; from W. 30° to W. 10° and between the parallels of 40° and 45° N., it was southeasterly; between N. 25° and 40° and east of the fortieth meridian, the prevailing wind was southwesterly.

The rainfall, including melted snow, was in excess of the average in the Atlantic coast districts of the United States. In the districts lying between the Mississippi river and the Alleghany mountains, it was below the average. On the Pacific coast, the rainfall was above the average, except in the southern district, where there was a deficiency. In Europe, the precipitation, mostly in the form of snow, was generally below the average in all parts of the continent.

GENERAL REMARKS.

All data which appears in the DAILY BULLETIN OF SIMULTANEOUS METEOROLOGICAL OBSERVATIONS are copied from the regular exchanges of this office. The barometer readings for land stations, in the first and second columns, are reduced to freezing and their respective standards; those in the third and fourth columns to sea-level. When necessary, corrections for instrumental error, temperature and reduction to sea-level are applied at this office. In the Naval and Marine Series, corrections for temperature and reduction to sea-level are always applied, while those for instrumental error, only when such corrections can be ascertained with close approximation, as by comparison when vessels are at or near land stations. Relative humidity generally requires computation from the hygrometrical observations. When rain has fallen, but neither the amount nor duration is recorded, the word "blank" is published in the rainfall column. The weather is generally published as given. The following symbols and abbreviations are common to all series, viz.: †, aneroid; *, instrumental error not known; c, cirrus; k, cumulus; s, stratus; n, nimbus; d, scud; f, fracto; p, pallio; hz, haze; fg, fog; sk, smoke; inap, inappreciable; d, clouds, detached clouds. The movement of the air is published as given on the originals, when indicated by velocity in miles per hour, in meters per second, or by force, all variations of the latter being reduced to the common scale of 0 to 10. Those stations reporting the movement in pounds pressure per square foot are reduced to force on the common scale, and those in kilometers per hour, to meters per second and miles per hour. The distinction between upper and lower clouds is carefully made in the United States and a portion of the Canadian series, and the various formations are indicated by the letters

above given and their combinations. In the MONTHLY SUMMARY OF INTERNATIONAL SIMULTANEOUS METEOROLOGICAL OBSERVATIONS the position of stations (latitude and longitude) are obtained from Keith Johnson's Index Geographicus, except where more exact information is furnished. The elevations of stations are obtained either from the annual, semi-annual and monthly publications of the various meteorological bureaus here represented, or from the original forms, upon which are entered the daily observations. In the United States series the elevations are computed from the latest surveys, and are carefully revised each month, in order to note any change in the elevation of the barometer cistern at any station. It is believed for the most part, that throughout the European and other series, the elevations as given represent the height of the barometer cistern above sea-level; at least this should be the case. The local time, where omitted or not given correctly in the originals, is carefully computed at this office. Generally, all conversions are made at this office. A letter placed opposite the name of a station or some portion of the data credited thereto, indicates that a certain number of observations are missing, corresponding to the relative position in the alphabet of the letter so used. The following remarks relate to the individual peculiarities in the *methods* of recording and the *times* of taking the international simultaneous meteorological observations, under the auspices of the various Meteorological Bureaus:

ALGERIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level; temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The rainfall is measured at 7 a. m., local time, and the amount indicated in millimeters.

AUSTRALIAN SERIES.—At Melbourne the conversions are published as given in the originals. The movement of the air is indicated by velocity in miles per hour. The kind of clouds is not given except by inference from general weather terms.

AUSTRO-HUNGARIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. At the following stations rainfall is measured at local time: Lemburg, 7 p. m.; Vienna, 2 p. m.; Trieste, 7 a. m. The weather is given by the Vienna symbols or in general terms.

BELGIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The weather is occasionally given by the Vienna symbols. Except for Brussels, the distinction between upper and lower clouds is not made. At Furnes, observations are taken at 12.26 p. m., local time, and at Maeseyck at 1 p. m., local time.

BRITISH SERIES.—In general the originals do not give rainfall or distinction between upper and lower clouds. Relative humidity, except for Bradford and Silloth Rectory, is not given on the originals, but is computed from hygrometrical observations. At Cardington, Galway, Oxford and Sandwick Manse the barometers are given as read off. At Free Town the barometer is reduced to freezing on the originals, but not to sea-level. The movement of the air is indicated by force, on a scale of 0 to 12, except pounds pressure per square foot at Greenwich. At the following stations rainfall is measured at local time: Bradford, 9 a. m.; Nottingham, 6 p. m.; and Aberdeen, 10 a. m. The wind direction is given to 32 points and weather by the Beaufort notation.

CANADIAN SERIES.—The originals give the barometer reduced to sea-level in English inches and the temperature in Fahrenheit.

CAPE COLONY SERIES.—At Cape Town the barometer is given on the original as corrected for temperature only. Upper and lower clouds are given on a scale of 0 to 10 and the kind occasionally indicated by abbreviating Poëy's classification.

CHINESE SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is given in meters per second and the directions to 16 points. The kind of clouds is occasionally given, and the degree of cloudiness on the scale of 0 to 10; distinction between upper and lower clouds is sometimes made. The weather is given in general (French) terms. The rainfall is given in millimeters and measured at the moment of simultaneous observation.

DANISH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 6. The weather is occasionally given by the Vienna symbols, but it is not certain that they always refer to the moment of simultaneous observations, except at Copenhagen. No distinction is made between upper and lower clouds and the direction of movement, together with the rain-fall, is entirely omitted.

FRENCH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in meters per second, for Mont Louis and Perpignan. In general, the rain-fall is measured at 9. a. m., local time, but at Lyons at the moment of simultaneous observation. The direction of upper and lower clouds is given, but no distinction is made as to kind. The degree of cloudiness is given on a scale of 0 to 4 at Clermont-Ferrand, Commune de Greasque and Puy de Dome, while at other stations the scale of 0 to 10 is employed, or general weather terms, from which the amount of cloudiness is inferred. The weather is given in general terms, except occasionally by the Vienna symbols at Mont Louis and Perpignan. At Guéret the observations are taken at 12.00, instead of 12.16. At Gap the observations are taken at 12.03 p. m., instead of 12.32 p. m.

GERMAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. No distinction is made between upper and lower clouds except at Magdeburg where distinction is also made as to direction and kind, but not as to amount. The amount is given on a scale of 0 to 10, but the kind is rarely given. The weather is given in Vienna symbols or in general terms. At Berlin, observations are taken at 2.00 p. m., instead of 1.02 p. m.

GREEK SERIES.—The originals give the barometer corrected for temperature only and the thermometer in Centigrade. Hygrometrical observations are not given. The kind of clouds is occasionally given, and the amount is inferred from the general weather terms. The movement of the air is indicated by force on the scale of 0 to 10.

INDIAN SERIES.—The barometric observations refer to the Calcutta standard, which requires a correction of —0.011 inch, or 0.28 m. m. as compared with the Kew standard. The wind-velocity given is the average rate of wind since the observation of the preceding day. All conversions are published as given in the originals, where the data are recorded to an additional decimal. The weather is given by the Beaufort notation, Vienna symbols, or special symbols.

ITALIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometers per hour or by force on a scale of 0 to 4 as at Mondovi, Florence and Cagliari. No distinction is made between upper and lower clouds and the amount is given on a scale of 0 to 10.

JAPANESE SERIES.—The rainfall is measured at 9.30 a. m., local time, and the conversions are all published as given in the originals. Distinction is generally made between upper and lower clouds and the amount is given on the scale of 0 to 10. The weather is given in general terms.

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

MEXICAN SERIES.—All conversions (subject to correction at this office) are published as given in the originals. The kind of clouds is given, and also the direction and amount of both upper and lower. The degree of cloudiness is indicated on the scale of 0 to 10.

NETHERLANDS SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by pressure in kilograms per square meter, except at Hellevoetsluis, which gives force on the scale of 0 to 12. The humidity is not given on the originals, but for two stations it is computed from the hygrometrical observations. The weather is only given for Utrecht, from which the amount of cloudiness at that station is inferred.

NORWEGIAN SERIES.—The originals give the barometer in millimeters, reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in meters per second or by force on a scale of 0 to 6. The weather is occasionally given by Vienna symbols. At Bergen, observations upon the weather and degree of cloudiness are made at 2 p. m., local time. At Brono the observations are taken at 2.00 p. m., instead of 12.57 p. m.

PORTUGUESE SERIES.—In the originals the barometer is given in millimeters and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometers per hour, except at Angra, which gives force on the scale of 0 to 9. The weather is occasionally given by the Vienna symbols. The rainfall is measured at noon of each day.

RUSSIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. At Astrakhan, the barometer cistern is below sea-level. The movement of the air is indicated by velocity in meters per second. No distinction is made between upper and lower clouds; the amount is given on the scale of 0 to 10 and the kind occasionally. The weather is occasionally given by the Vienna symbols. At Barnaul, observations are taken at 6.18 p. m., local time.

SCOTTISH SERIES.—The originals give the barometer as read off and the movement of the air as indicated by force on a scale of 0 to 6. Distinction is made between upper and lower clouds as to degree, and the amount of cloudiness is given on a scale of 0 to 10. The direction of upper clouds is given separately. The rainfall, temperature and humidity are not given at North Unst. The wind direction is given to 32 points.

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

SWEDISH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in meters per second for Upsala. The kind of clouds is not given, but the degree of cloudiness is indicated on a scale of 0 to 10. The rainfall is measured at 8 a. m., local time, and the weather is occasionally given by the Vienna symbols.

SWISS SERIES.—The originals give the barometer in millimeters, corrected for temperature only, and the thermometer in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10, and at Zurich on a scale of 0 to 4. The rainfall at Zurich is measured at 9 a. m., local time, and the remainder of the observation is taken at 1.13 p. m., local time.

TURKISH SERIES.—The originals give the barometer in millimeters reduced to sea-level. The temperature is given in Centigrade. The movement of the air is indicated by force on a scale of 0 to 7 for Valona, and on a scale of 0 to 12 for Beirut. At Constantinople the velocity is given in meters per second. The kind of clouds is not given, but the amount is indicated on a scale of 0 to 10, except at Valona, at which station it is inferred from the general weather terms.

UNITED STATES SERIES.—The originals generally give the barometer reduced to sea-level and the temperature in Fahrenheit. At Bogota the barometer is corrected for temperature only; at Navassa and Puerto Berrio is given as read off, and at Rivas is omitted. The movement of the air is generally indicated by velocity in miles per hour, except on a scale of 0 to 10 for Bogota, Paramaribo and Rivis, and 0 to 12 for Puerto Berrio. The wind direction is generally given to 16 points, except 8 points for Bogota and 32 points for Rivas. On January 1st, elevation of barometer cistern at Bogota changes to 8,655 feet or 2,638 meters.

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

PORTUGUESE NAVAL SERIES.—The originals give the barometer in millimeters, corrected for temperature only and the thermometer in Centigrade. The movement of the air is indicated by force on the scale of 0 to 10. The humidity is not given, but is computed from the hygrometrical observations. The kind of clouds is not given, but the amount is indicated on the scale of 0 to 10; the direction of movement is given without distinction between upper and lower. The height of sea-disturbance is given on the scale of 0 to 9, and the weather by the Beaufort notation. The rainfall is not measured, but the duration is generally given in hours and minutes.

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

UNITED STATES NAVAL SERIES.—The originals give the barometer as read off. The humidity is not given, but is computed from the hygrometrical observations. The sea-swell and weather are given in general terms. The direction of the wind is compass direction, corrected for variation.

MERCHANT-MARINE SERIES.—Same as U. S. Naval.

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

ERRATA.

DAILY BULLETIN, January 5th, 1882, page 2, Canadian series, Parry Sound, actual barometer 29.88 inches, should read 29.87 inches.

9th, page 10, British Meteorological Office, s. s. "Humboldt," N. 11° 05′, should read S. 11° 05′.

10th, page 2, Cape Colony series, Cape Saint Francis Lighthouse, actual barometer 761.5 mm., should read 762.5 mm.

11th, page 10, Allan Line, s. s. "Prussian," barometer 764.3 mm., should read 743.4 mm.

19th, page 5, Russian series, Archangel, velocity 43 miles, should read 4 miles.

Page 11, North German Lloyd, s. s. "Oder," temperature, Fahrenheit 74.6°, should read 44.6°.

The following corrections should be applied to all barometric readings from stations in the United States series, given

below, for the period stated: Atlanta, Georgia, from December 19, 1881, to February 1, 1882, +0.01 inches, or +0.3 mm.; Dayton, Washington, from December 18, 1881, to February 1, 1882, —0.02 inches, or —0.5 mm.; Olympia, Washington, from October 1, 1879, to February 1, 1882, +0.02 inches, or +0.5 mm.; Montgomery, Alabama, from December 16, 1881, to February 1, 1882, +0.01 inches, or +0.3 mm.; Portland, Oregon, from December 26, 1881, to February 1, 1882, —0.03 inches, or —0.8 mm.; Indianapolis, Indiana, from November 24, 1881, to February 1, 1882, +0.01 inches, or +0.3 mm.; Roseburg, Oregon, from December 29, 1881, to February 1, 1882, +0.01 inches, or +0.3 mm.

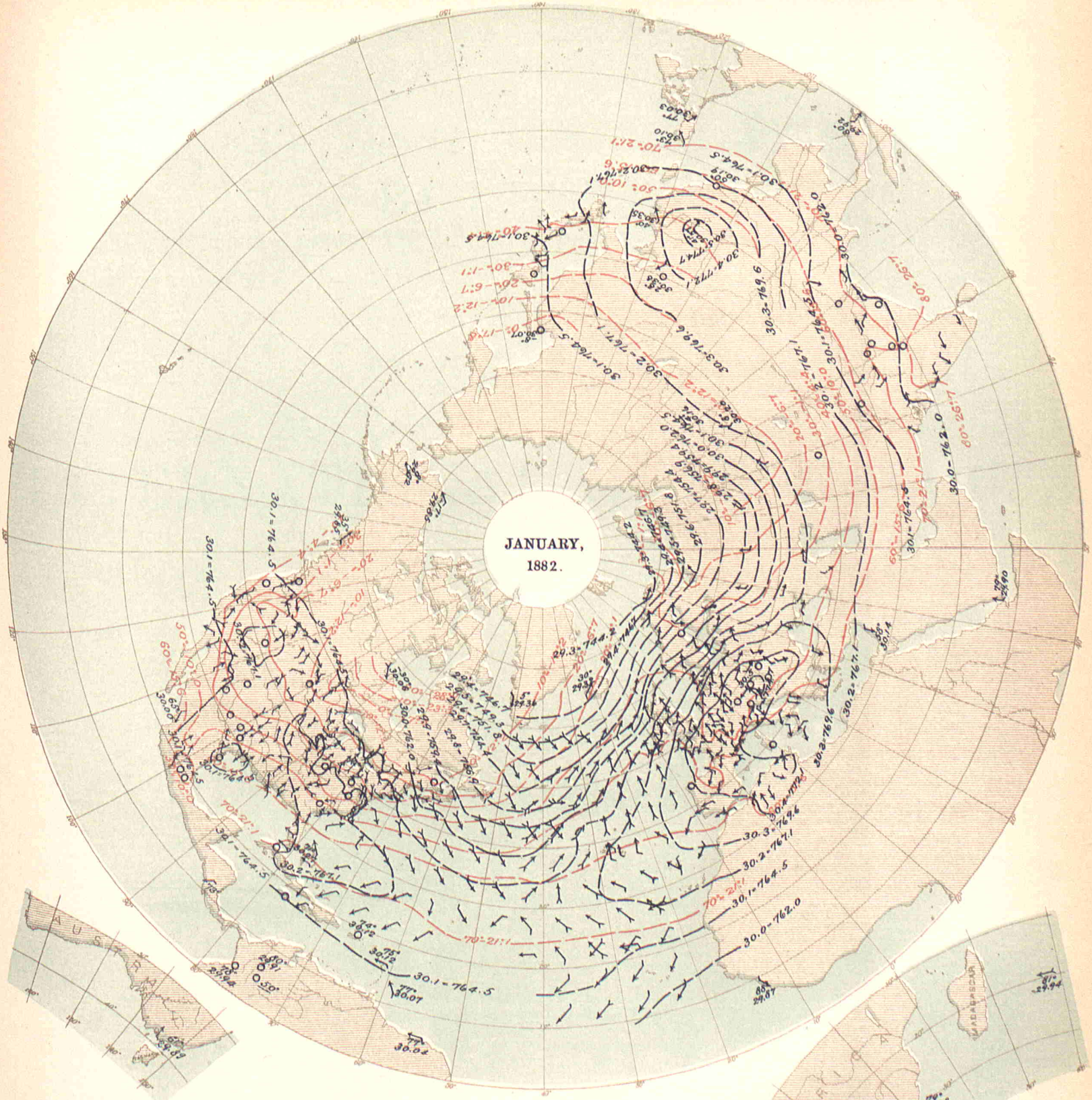
W. B. HAZEN,

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Office of the Chief Signal Officer,

UNITED STATES ARMY.

Charted from Actual Observations taken Simultaneously, Series commencing January, 1877.



PREVAILING WINDS.

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

Symbols.	Force.	Velocity.	
		Miles per hour.	Metres per second.
○	0	0	0
→	1, 2	0 to 9	0 to 4.0
→	3, 4	9.1 to 22.5	4.1 to 10.1
→	5, 6	22.6 to 40.5	10.1 to 18.1
→	7, 8	40.6 to 67.5	18.1 to 30.2
→	9, 10	67.6 up.	30.2 & over.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

ISOBARS AND ISOTHERMS.

Isobars in *black;* detached barometer means in English inches.

Isotherms in *red;* detached temperature means in degrees Fahrenheit.

Broken lines, are doubtful.

INTERNATIONAL MONTHLY CHART.

Showing mean pressure, mean temperature, mean force and prevailing direction of winds at 7:00 A. M., Washington mean time, for the month of January, 1882, based on the daily charts of the International Bulletin.

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

BULLETIN

OF

INTERNATIONAL METEOROLOGY

FOR THE MONTH OF FEBRUARY, 1882.

PRINTED FOR EXCHANGE WITH CO-OPERATING OBSERVERS.

WASHINGTON, D. C.:
MARCH, 1883.

OIE

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 1, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.27	768.8	67.6	19.8	87	sw.			3		0			0	0	clear	Moiroud.
Algiers			30.25	768.4	57.6	14.2	74	nne.			1		0			0	0	clear	Nicolas.
La Calle			30.32	770.0	62.2	16.8	77	ene.			2		4			0	0	cloudy	Fonfréde.
Tunis			30.37	771.3															Jacques.
Sfax																			Gau.
Saida			30.28	769.1	58.3	14.6	48	ssw.			4		1			0	0	very fair	Dumas.
Tebessa			30.35	770.8	50.7	10.4	56	n.			2		5			0	0	cloudy	Derché.
Geriville					51.4	10.8	25	s			4		2			0	0	fair	Lonchamp.
Laghouat			30.37	771.4	52.2	11.2	75	w.			2		0			0	0	clear	Herbin.
Biskra			30.37	771.5	58.3	14.6	53	nw.			1		6			0	0	cloudy	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.18	766.6	30.27	768.8	60.1	15.6	87	se.	11	4.9			1			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	30.26	768.5	30.85	783.6	30.2	— 1.0	51	ne.			3		2			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	30.08	763.9	30.91	785.1	27.0	— 2.8	96	n.	4.9	2.2			10			0	0		Dr. Wierzbiski.
Eperies	29.84	757.9	30.80	782.2	25.5	— 3.6	43	n.			3	1 cs	0			0	0		Julius Mikolik.
Grutz	29.52	749.8	30.88	784.4	27.5	— 2.5	44	e.			2		0			0	0		Andreas Rospini.
Hermannstadt	29.12	739.7	30.71	779.9	17.4	— 8.1	82	n.			2		1			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.42	747.2	30.89	784.6	22.6	— 5.2	96	e.			3		0			0	0	clear	The Staff.
Lemberg	29.67	753.5	30.74	780.9	22.8	— 5.1	48	ne.			2		1			0	0		Dr. T. Stanecki.
Pola	30.62	777.7	30.74	780.8	34.3	1.3	66	ene.			4		0			0	0	foggy	I. R. Hydrographic Office.
Szathmar	30.19	766.9	30.67	778.9	27.3	— 2.6	74	n.			3		0			0	0		Joseph Midlinszky, S. J.
Szegedin	30.46	773.6	30.76	781.4	28.6	— 1.9	94	ne.			4		0			0	0		Karl Stancel.
Trieste	30.67	779.1	30.78	781.7	34.2	1.2	46	ne.			4		0			0	0		Rieder.
Vienna	30.14	765.6	30.92	785.3	29.3	— 1.5	62	n.			2		2			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.41	772.4	30.51	774.9	43.6	6.4	79	s.	10	4.5			6			0	0	misty	W. Boswell.
Armagh, Observatory	30.26	768.6	30.52	775.2	43.5	6.4	77	sse.	14	6.3			7					d. clouds	S. Call.
Bidston, Liverpool Obs'y			30.60	777.2	39.3	4.1	76	se.	17	7.6			4					d. clouds	John Hartnup.
Bolton, Sharples	30.06	763.5	30.61	777.5	38.0	3.3	71	sse.	6	2.7			8					d. clouds	Thomas Mackereth {A.S.
Bradford, Yorkshire	30.13	765.3	30.53	775.4	39.0	3.9	84	se.			1		7			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	80.0	26.7	74	ne.			2		3					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			30.61	777.5	39.2	4.0	70	e.			0.6		1					blue sky	John McLaren.
Chatham, School M. E.	30.55	776.0	30.69	779.5	41.9	5.5	66	e.			1		1					d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.31	769.9	30.55	776.0	44.2	6.8	75	se.			4		10					overcast	The Staff.
Fort Napier, Natal	27.68	703.1	29.90	759.4	79.0	26.1	60	se.			1		3					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.60	751.8	29.84	757.9	88.0	31.1	62	nw.			1		5						Sergt. John Robinson.
Galway, Queen's College			30.37	771.4	47	8.3	77	s.			4		10					overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.18	766.6	30.24	768.1	59.4	15.2	87	ne.			2		6					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.34	770.6	30.55	776.0	39.2	4.0	80	s.			4		10 k					gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.50	774.7	30.68	779.3	38.5	3.6	67	ese.			1		0					blue sky	The Staff.
Guernsey	30.25	768.3	30.56	776.2	41.0	5.0	69	ene.			1		2					blue sky	A. Collenette, F. M. S.
Kew, Observatory	30.63	778.0	30.67	779.0	37.5	3.1	67	e.	11	4.9			0					misty	The Staff.
Leicester, Museum	30.39	771.9	30.66	778.7	41.0	5.0	62	se.			1		0					blue sky	J. C. Smith.
Malta, Mediterranean	30.16	766.1	30.24	768.1	56.0	13.3	62	ne.			4		8					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.11	764.8	30.15	765.8	75.0	23.9	92	sw.			2		8					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.10	764.5	30.65	778.5	40.3	4.6	63	ese.			2		1					d. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.40	772.1	30.63	778.0	38.4	3.6	67	ese.			3		0					misty	The Staff.
Plymouth	30.48	774.2	30.56	776.2	44.3	6.8	77	ese.			4		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.33	770.4	46	7.8	91	sse.	29	13.0			5					d. clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.23	767.8	30.30	769.6	29.2	— 1.6	88	n.			3		9					snowy	W. H. Lyne.
Sheffield	30.34	770.6	30.63	778.0	39.9	4.4	71	sse.			1		1			0	0	blue sky	W. F. Cooper.
Silloth Rectory	30.56	776.2	30.59	777.0	38.2	3.4	81	calm			0		6			0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.62	777.7	37.0	2.8	78	se.	2	0.9			7					d. clouds	I. New.
Strathfield Turgiss	30.43	772.9	30.66	778.7	38.8	3.8	71	se.			1.5		0					blue sky	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.46	773.7	30.52	775.2	46	7.8	76	e.			4		10					gloomy	W. Newcombe.
Valencia, Observatory	30.37	771.4	30.40	772.1	48.7	9.3	83	se.	30	13.4			10					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.85	758.2	29.88	758.9	77.0	25.0	75	se.	11.6	5.2		0	6 k			0	0		John Duthie.
Cape Town, C. G. H. Obs'y	29.92	760.0	29.96	761.0	78.5	25.8	67	s.	36	16.1		0	2			0	0		The Staff, for D. Gill
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.47	748.5	29.55	750.6	13	—10.6	100	ne.	25	11.2			10 n			0.150	3.8	light snow	H. J Cundall, C. E.
Chatham, N. B*	29.75	755.6	29.81	757.2	5	—15.0	100	n.	17	7.6			10 n		n.	0.05	1.3	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.94	760.5	29.96	761.0	0	—17.8	83	ne.	30	13.4			10 n		calm	0.03	0.8	cloudy	J. McWilliams.
Fort Garry, Manitoba*	28.91	734.3	29.83	757.7	— 6	—21.1		nw.	4	1.8		8 k	8 ks	nw.	nw.	0.190	4.8	fair	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	29.12	739.6	29.25	742.9	27	— 2.8	100	ne.	21	9.4			10 n			0.38	9.7	heavy snow	A. Allison.
Hamilton. Ontario																			Geo. Dickson, B. A
Kingston, Ontario*	29.49	749.0	29.85	758.2	21	— 6.1	80	ne.	1	0.4			10 ks		sw.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.63	752.6	29.85	758.2	14	—10.0	91	n.	6	2.7			10 n			inap.	inap.	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.03	737.3	29.75	755.6	28	— 2.2	88	e.	8	3.6		5 k	5 n	sw.	sw.	0.06	1.5	cloudy	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.15	740.4	29.85	758.2	28	— 2.2	88	sw.	9	4.0		10 k	0	sw.		0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.20	741.7	29.87	758.7	29	— 1.7	88	s.	20	8.9			10 n		sw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.52	749.8	29.87	758.7	6	—14.4	100	e.			6		10 n		e.	0.65	16.5	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.27	743 4	29.75	755 6	20	— 6.7	84	calm	0	0			10 n			inap.	inap.	light snow	W. H. McIntyre
Saugeen, Ontario*	29.03	737.3	29.77	756.1	28	— 2.2	100	sw.	7	3 1			10 ks			0	0	cloudy	
St. Andrews, N .B.	29.52	749.8	29.58	751.3	12	—11.1	90	ne.	23	10.3			10 n			0.01	0.3	light snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.35	745.5	29.41	747.0	26	— 3.3	100	n.	23	10.3			10 n			0.20	5.1	heavy snow	T. C. Hill, C. E.
Toronto, Ontario*	29.44	747.8	29.85	758.2	21	— 6.1	91	sw.	5	2.2			10 ks		w.	0	0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.21	741.9	29.28	743.7	28	— 2.2	80	ne.	14	6.3			10 n			0.96	24.4	heavy snow	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.72	754.9	29.98	761.5	26	— 3.3		se.	5	2.2			10			0.40	10.2	snowing	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.52	775.2	30.82	782.8	32.1	0.1		nnw.			2		10			1.64	41.7		N. Titoushkin.
Sung-shu-chwang†	24.88	632.0			19.4	— 7.0		calm			0		10			0.79	20.		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.45	773.5	30.48	774.2	37.9	3.3	95	nnw.	3.8	1.7			10 n			0.13	3.3	raining	M. Marc Dechevrens, S. J.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.87	784.0	30.91	785.2	32.5	0.3	83	w.	11	5			6						Oversergent Fischer.
Fanöe	30.86	783.9	30.88	784.4	33.3	0.7	96	s.			4		9						Overloerer Lauridsen.
Godthaab, Greenland	28 94	735.1	28.98	736.2	0.5	—17.5		nw.			5		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.01	736.9	29.06	738.0	36.1	2.3		s.			8		10					raining.	A. O. Thorlacius.
Thorshavn	29.91	759.7	29.95	760.6	48.9	9.4	89	ssw.	36	16			10					raining	Overloerer Bergh.
Vestervig	30.71	780.0	30.80	782.3	34.3	1.3	82	s.			4		9						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.76	756.0	30.43	772 8	50.0	10	84	se.			2	0	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	30.08	764.0	30.63	778.0	34.2	1.2	96	ne.			2					0	0		M. Nicot, Director.
Arras, Engineer School	30.41	772.4	30.69	779.6	34.7	1.5	89	e.			2		0			0	0	clear	M. Klein, Commandant.
Avignon, Normal School	30.45	773.5	30.53	775.5	50.0	10	66	n.			1		0			0.08	2.	clear	M. Giraud, Director.
Bar-sur-Seine	30.09	764.2	30.68	779.2	36.1	2.3	64	se.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.38	771.7	30.67	779.0	33.3	0.7	100	e.			2		0			0	0	clear	M. Frère Eugène Marié
Besançon, Normal School			30.55	776.0	37.8	3.2	97	sw.			3		10 n		sw.	0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	30.14	765.6	30.41	772.4	52.2	11.2	56	ese.			2		0			0	0	clear	M. Rayet, Director.
Bourges, Normal School	29.93	760.3	30.55	776.0	41.0	5	54	ne			2		0			0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.24	768.1	30.48	774.3	42.1	5.6	84	ne.			1		0			0	0	clear.	M. de Kennaree, Dir.
Caen, Normal School	30.53	775.4	30.61	777.4	37.0	2.8	75	e.			1		0			0	0	clear	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.20	768.6	30.60	777.2	38.7	3.7	95	se.			1		0			0	0	clear	M. Judot, Director.
Charleville, Normal School	30.13	765.2	30.66	778 8	41.7	5.4	58	ene.			2		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.12	739.6	30.52	775.2	45.3	7.4	66	nw.			1	0	0			0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.71	754.7	30.61	777.5	35.6	2	64	nw.			1				w.	0	0		M. de Villemontée, Dir.
Commercy, Normal School.	29.76	755.8	30.68	779.3	34.7	1.5	73	e.			3		2 s	e.	e.	0	0	slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.84	707.0	30.40	772.2	52.5	11.4	34									0	0		M. Jeangirard, Director.
Gréasque, du Rhone	29.35	745.4	30.50	774.7	52.0	11.1	41	e.			2		5		ne.	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.70	755.9	30.57	776.4	41.5	5.3	85	ese.			1	2 cs	0			0	0	slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.82	732.0	30.56	776.1	48.2	9	62	se.			1	0	0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.23	767 9	30.53	775.4	40.1	4.5	79	e.			1		1		e.	0	0	clear	M. Ollitrault, Director.
Lescar, Normal School	29.71	754.7	30.28	769.2	51.8	11	63	nw.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.43	772.8	30.53	775.4	43.7	6.5	91	e.			3		0			0	0	clear	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.50	749.2	30.62	777.7	35.6	2.0	93	e.			1		mist			0	0	misty	M. André, Director.
Mans, Normal School	30.25	768.4	30.59	776.9	36.1	2.3	89	w.			3		0			0	0	clear	M. Piboen, Director.
Marseille, Observatory	30.23	767 8	30.50	774.8	56.1	13.4	52	se.			1		5		ene.	0.079	2.0		M. Stephan, Director.
Montlouis l'Instituteur	25.05	636.3	29.89	759.3	30.2	—1.0	100	ne.	3.8	1.7			10			0.094	2.4	foggy	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.39	771.9	30.50	774.8	50.0	10	70	nne.			3		5			0	0	fair	M. Galzin, Director.
Nancy, Normal School	29.87	758.8	30.72	780.2	35.2	1.8	85	nne.			1	0	0			0	0	clear	M. Hasse, Director
Nantes, Observatory	30.37	771.3	30.53	775.4	43.5	6.4	70	e.			1-2	0	0			0	0	clear	M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.37	771.5	30.49	774.5	48.2	9.0	78	s.	13.0	5.8			10		se.	0.358	9.1	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.33	541.7			23.2	—4.9		se.			1		1		se.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.43	747.5	30.53	775 5	40.4	8	94	n.			1		5		n.	0	0	foggy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.48	647.2			35.6	2.0	68	se.			1		0			0.035	0.9	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.43	773.0	30.47	773.8	49.1	9.5	71	e.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.22	767.6	30.44	773.2	42.8	6	85	ne.			1		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.28	718.2	30.48	774 3	46.8	8.2	44	e.			2		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.60	777.3	30.65	778.5	34.5	1.4	69	ese.			3		0			0	0	clear	M. Platrier, Director.
Saint Lô, Normal School	30.44	773.2	30.60	777 2	38.5	3.6	61	ese.			2		0			0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.47	773.8	30.63	778.0	37.4	3.0	59	ene.			1		0			0	0	clear	M. Renou, Director.
Toulouse, Observatory	29.70	754.4	30.43	773.0	52.5	11.4	58	sse.			4		1		se.	0	0	clear	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.12	765 0	30.61	777.4	35.6	2.0	64	e.			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.35	770.9	30.64	778.3	35.6	2.0	65	e.			1		0			0	0	clear	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.92	760.0	30.80	782.3	29.7	—1.3	60	ese.			3		0			0	0		Prof. Dr. Hoh.
Berlin	30.74	780.7	30.93	785.5	33.8	1.0	65	se.			1		2			0	0		Prof. Dr. Arndt.
Breslau	30.40	772.1	30.95	786.0	30.0	—1.1	54	nne.			1		10			0	0		Royal University Obs'y.
Carlsruhe	30.28	769.1	30.76	781.2	32.7	0.4	52	ne.			3		0			0	0		Albert Senz.
Cassel	30.02	762.6	30.74	780.8	33.1	0.6	85	se.			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.41	772.4	30.80	782.4	33.1	0.6	54	ene.			2		0			0	0		Physical Society.
Friedrichshafen	29.15	740.4	30.69	779.4	30.9	—0.6	56	ne.			6		0			0	0		Wilhelm, Chief Tel.
Hamburg	30.81	782.6	30.91	785.0	31.6	—0.2	92	se.			4		3	nne.		0	0		E. Preller.
Kiel	30.88	784.3	30.89	784.7	32.9	0.5	71	se.			2		8			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.47	774.0	30.93	785.5	30.4	—0.9	58	ese.			3		1			0	0		H. Leppig, Asst.
Magdeburg	30.71	780.1	30.92	785.4	33.3	0.7	61	se.			1		0			0	0		Dr. Assmann.
Memel	30.74	780.8	30.79	782.0	34.9	1.6	89	nw.			5	0	7k						Issermann.
Munich	28.80	731.5	30.71	779.9	24.6	—4.1	56	e.			4		0			0	0		Central Station.
Neufahrwasser	30.87	784.2	30.89	784.6	36.9	2.7	67	nw.			2		4			0	0		A. Lothes.
Neustadt, Palatinate	30.19	766.7	30.72	780.3	32.7	0.4		ene.			2		0			0	0		Dicknether.
Stuttgart	29.73	755.2	30.69	779.4	33.4	0.8	81	e.			2		0			0	0		Prof. Dr. Schoder.
Wustrow	30.94	785.8	30.96	786.4	32.9	0.5	94	sw.			2	0	3s			0	0		Profs. Brandes & Reimer.
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.85	758.3	30.27	768.8	34.5	1.4		ne.			3.1		9			0	0	covered	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	30.09	764.2	30.14	765.6	74.2	23.4	28	ene.	9	4.0			4	wsw.		0	0	d. clouds	
Deesa	29.53	750.1	30.02	762.4	74.1	23.4	56	nnw.	7.4	3.3			4	s.		0	0	d. clouds	
Bombay	29.94	760.5	29.98	761.4	79.1	26.2	66	nnw.	21	9.4			0			0	0	blue sky	
Poona, Yarrowda.	28.08	713.2	29.91	759.6	87.5	30.8	20	w.	15	6.7			1	ne.		0	0	d. clouds	
Belgaum	27.40	695.9	29.90	759.4	84.9	29.4	18	n.	5	2.2			4	sw.		0	0	d. clouds	
Lahore	29.36	745.8	30.14	765.5	62.2	16.8	54	nw.	1.9	0.8			0			0	0	blue sky	
Roorkee	29.13	739.8	30.06	763.6	63.2	17.3	68	nw.	3.2	1.4			2			0.20	5.1		
Agra	29.50	749.4	30.09	764.3	67.3	19.6		w.	7.2	3.2			0			0	0		
Nagpur	28.90	734.1	29.94	760.4	85.7	29.8	21	calm	3.1	1.4			0			0	0	blue sky	
Jubbulpore	28.64	727.6	30.01	762.2	80.2	26.8	17	w.	1.6	0.7			0			0	0	blue sky	
Lucknow	29.62	752.3	30.00	762.1	73.2	22.9	45	wnw.	5.6	2.5			5		wnw.	0.01	0.3	d. clouds	
Allahabad	29.68	754.0	30.01	762.1	71.8	22.1	58	n.	2.1	0.9			10		nw.	0	0	overcast	
Patna	29.78	756.4	29.97	761.3	72.3	22.4	60	w.	4.0	1.8			6	w.	w.	0	0	d. clouds	
Hazaribagh	27.92	709.1	29.96	761.0	71.8	22.1	36	n.	8.3	3.7			0			0	0	blue sky	
Cuttack	29.86	758.3	29.94	760.4	85.2	29.6	37	calm	0	0			0			0	0	blue sky	
Calcutta, Alipore	29.88	758.8	29.90	759.4	80.4	26.9	46	ssw.	5.0	2.2			0			0	0	blue sky	
Dhubri	29.77	756.0	29.89	759.2	72.8	22.7	55	calm	4.6	2.1			0			0	0	blue sky	
Chittagong	29.86	758.4	29.95	760.7	74.6	23.7	73	w.	1.8	0.8			1			0	0	blue sky	
Sibsagar	29.60	751.9	29.95	760.7	63.7	17.6	85	ne.	1.7	0.8			10	w.	w.	0	0	d. clouds	
Jeypore	28.62	726.9	30.12	765.0	63.7	17.6	49	n.	3.3	1.5			7		n.	0	0	d. clouds	
Zanzibar, Africa	29.83	757.7			80.6	27.0	79	n.	6.3	2.8			8k;pfk		nne.	1.16	29.5	threatening.	
Trichinopoly	29.71	754.6			80.1	26.7	58	e.	2	0.9			0			0	0	blue sky	
Bellary	28.47	723.1			86.0	30.0	22	ene.	1.9	0.8		4 c	6	s.		0	0	overcast	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	30.35	771.0	30.78	781.8	35.1	1.7	50	calm	0	0			0			0	0		Prof. Giovanni Clodig.
Milan	30.25	768.4	30.76	781.4	39.4	4.1	50	se.	3.1	1.4			6	nne.		0	0		Prof. Schiaparelli.
Padua	30.67	779.1	30.79	782.0	36.3	2.4	43	ene.	3.1	1.4			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.83	757.6	30.78	781.8	36.0	2.2	66	n.	3.1	1.4			9	ne.		0	0		Prof. P. F. Denza.
Genoa	30.45	773.3	30.65	778.4	42.4	5.8	44	nw.	11.9	5.3			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.76	730.4	30.78	781.8	31.1	—0.5	82	w.			4		9			0.177	4.5		Prof. D. C. Bruno.
Pesaro	30.68	779.3	30.73	780.6	36.7	2.6	52	ne.	26.2	11.7			2	ne.		0	0		Prof. Luigi Guidi.
Florence	30.37	771.4	30.64	778.2	38.8	3.8	40	ne.			8		0			0	0		Prof. Costantino Pitter.
Leghorn	30.49	774.5	30.58	776.8	41.4	5.2	24	ne.	19.9	8.9			0			0	0		Prof. P. Monte.
Rome	30.26	768.5	30.44	773.1	50.4	10.2	24	n.	15.0	6.7			0			0	0		Prof. P. S. Ferrari.
Lecce	30.18	766.6	30.44	773.2	40.1	4.5	36	ne.	37.4	16.7			0			0	0		Prof. C. de Giorgi.
Cosenza	29.52	749.7	30.45	773.3	40.3	4.6	68	nw.	11.9	5.3			4	n.		0	0		Prof. D. Conti.
Cagliari	30.12	765.1	30.32	770.1	53.2	11.8	76	se.			2		10			0.059	1.5		Prof. A. Pacinotti.
Palermo	30.11	764.9	30.37	771.5	51.4	10.8	52	ne.	10.5	4.7			9	ne.		0	0		Prof. G. Ciacciatore.
Syracuse	30.26	768.6	30.31	769.8	52.7	11.5	64	ene.	13.6	6.1			10	ene.		0.079	2.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	29.88	758.9	30.43	772.9	44.6	7.0	48	ne.	17.4	7.8			1	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.42	569.5			18.5	—7.5	72	s.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.46	570.6			21.6	—5.8	60	e.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.37	771.4	30.40	772.1	28.0	—2.2	76	sw.	11.3	5.0			10 n			0.097	2.5	light snow	
Hakodate	30.37	771.4	30.38	771.6	25.3	—3.7	55	nw.	10.2	4.6			4			0	0		
Hiroshima, I. M. Obs'y	30.35	770.9	30.36	771.1	43.3	0.3	65	ne.	11.6	5.2		10 ck;cs	0			0	0	very cloudy	K. Sasaki.
Kanazawa	30.40	772.1	30.51	774.9	36.8	2.7	75	ene.	2.2	1.0		ck;cs	10 s			0	0	cloudy	S. Endo.
Kioto	30.23	767.8	30.41	772.4	40.9	4.9	71	nw.	6.3	2.8		ck;cs	7 s			0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.08	764.0	30.29	769.3	48.5	9.2	66	ne.	8.5	3.8			10 s			0.230	5.8	overcast	S. Takehayashi.
Niigata	30.48	774.2	30.52	775.2	36.1	2.3	68	nnw.	10.7	4.8		10 ck	0			0	0	covered	
Nobiru	30.39	771.9	30.41	772.4	33.8	1.0	71	nw.	12.5	5.6		cs	10 s			0	0	cloudy	H. Midzushina.
Sapporo					23.0	—5.0	35	calm	0	0			2			0.070	1.8	clear	
Tokei Obs'y, Yeddo	30.34	770.6	30.41	772.4	39.6	4.2	89	ne.	2.0	0.9			10 s			0.085	2.2	covered	The Staff.
Wakayama	30.32	770.1	30.38	771.6	43.1	6.2	70	ne.	7.5	3.3		ck	10 s		nne.	0.076	1.9	cloudy	Y. Kuwamura.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.41	619.9	30.25	768.3	46.9	8.3	80	ssw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.72	754.8	29.98	761.6	58.5	14.7	76	nnw.	5.2	2.3		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.05	585.6	30.19	766.9	47.3	8.5	72	calm	0	0		0	0			0	0		The Staff.
Morelia	24.25	616.0	30.47	774.0	50.7	10.4	76	s.			4	2 c	2 k	s.	se.	0	0		M. Tena, M. D.
Pabellon, Aguascalientes	23.90	606.9	29.98	761.4	48.9	9.4	70	calm			0	0	0			0	0		M. V. de Leon, M. E.
Puebla, Catholic Institute	23.42	594.8	30.28	769.0	49.1	9.5	94	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.18	614.3	30.32	770.1	46.5	8.1	47	wsw.			1	0	0			0	0	fine	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.46	570.4	30.14	765.5	48.6	9.3	67	s.	12.6	5.6		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.68	753.9	29.87	758.7	81.0	27.2	68	ese.	23.0	10.3		0	4 ks;k		ese.	0.10	2.5	fair	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.75	781.1	30.75	781.1	34.3	1.3		ese.			3					0	0		
Groningen	30.74	780.7	30.79	782.1	32.5	0.3		se.			2					0	0		
Helder	30.77	781.6	30.77	781.6	33.1	0.6		ese.			2					0	0		
Hellevoetsluis	30.74	780.8	30.74	780.8	33.6	0.9	71	e.			2					0	0		
Utrecht	30.73	780.6	30.78	781.8	34.0	1.1	71	e.			4		2			0	0	lightly cl'dy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.55	776.0	30.61	777.6	36.3	2.4	89	sse.	27	12			10			0.134	3.4	raining	
Brono	30.39	771.8	30.43	772.8	39.2	4.0	52	sw.	18	8			9			0.126	3.2		
Christiania	30.57	776.5	30.73	780.6	23.4	— 4.8	84	calm	0	0			10			0	0		
Gjæsvær	29.93	760.2	29.95	760.8	34.0	1.1		sw.			4		10						
Lodingen	30.22	767.5	30.26	768.7	38.1	3.4	92	wsw.			6		10			0.327	8.3		
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					55.8	13.2	75	nne.	17.4	7.8			6			0	0		Dr. J. A. Sampaio.
Campo Major	29.18	741.2	30.20	767.0	56.5	13.6	60	ne.	4.9	2.2			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.13	765.3	30.22	767.6	62.6	17.0	59	calm	0	0			4			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.88	758.9	30.24	768.1	59.0	15.0	77	sse.	1.8	0.8			6			0.114	2.9		The Staff.
Ponta Delgada, Azores	30.24	768.0	30.31	769.8	60.1	15.6	89	s.	7.4	3.3			10			0	0		
Saint Paul de Loando	29.68	753.9	29.88	758.9	82.0	27.8	73	w.	1.3	0.6			2	s.		0	0		
Serra da Estrella	25.39	645.0	30.20	767.0	43.3	6.3	69	se.	12.5	5.6			7			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.10	739.2	30.26	768.7	17.4	— 8.1		sw.	13	6			10 n			0.039	1.0		Major K. Lasarew.
Archangel	29.76	756.0	29.78	756.5	28.0	— 2.2	87	w.	18	8			10			0.102	2.6	snow-drift	Capt. Sseliwerstow.
Astrakhan	30.32	770.0	30.23	767.9	20.7	— 6.3	71	wnw.	4	2			10 s			blank	blank		Capt. Wisganow.
Barnaul	29.99	761.7	30.54	775.6	14.4	— 9.8	69	sw.	4	2			7			0	0		Meteorological Obs'y.
Dorpat	30.28	769.2	30.54	775.8	31.6	— 0.2	81	wnw.	9	4		1 c	0			0	0		Observatory.
Ekaterinburg	28.90	734.1	29.96	760.9	4.5	—15.3	70	sw.	4	2			2 n			0	0		Meteorological Obs'y.
Kasan	29.75	755.7	30.06	763.4	0.3	—17.6	65	nw.	2	1			0			0.051	1.3		Observatory.
Kertch	30.30	769.6	30.32	770.1	22.5	— 5.3	78	n.	4	2		0	5 ks			0	0		Lagorio & Sastyrez.
Kieff	29.88	758.9	30.58	776.6	16.9	— 8.4	40	n.	11	5		c	5 ks			0	0		Observatory.
Lugan	30.14	765.5	30.36	771.2	14.5	— 9.7	68	nw.	13	6			3			0	0		Meteorological Obs'y.
Moscow	29.69	754.1	30.21	767.4	16.5	— 8.6	64	s.	4	2			10 s					snowing	Meteorological Obs'y.
Nikolaiev	30.50	774.8	30.58	776.6	19.4	— 7.0	62	nne.	45	20		0	2 kn			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.29	769.4	30.38	771.6	— 8.0	—22.2	75	calm	0	0			4			0	0		Lieut. Iwanow.
Pekin, China	30.53	775.4	30.67	779.0	26.6	— 3.0	46	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	30.35	770.8	30.36	771.2	25.0	— 3.9	89	wnw.	13	6		2 ck	0			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.71	729.2	30.37	771.4	32.9	0.5	64	calm	0	0			0			0	0		Teich, A. M.
Tiflis	28.59	726.1	30.06	763.4	37.8	3.2	71	calm	0	0			10 s			0.134	3.4		Physical Observatory.
Vladivostok	30.59	776.9	30.65	778.6	14.9	— 9.5	72	n.	2	1		0	0			0	0		
Warsaw	30.40	772.2	30.86	783.8	30.7	— 0.7	66	nnw.	2	1			9 ks						Astronomical Obs'y.
Wilna	30.25	768.4	30.70	779.8	30.0	— 1.1	81	w.	4	2			8			0	0	heavy cld's	Berg, Assistant.
Yeniseisk	30.32	770.0	30.64	778.3	— 3.3	—19.6	83	e.	2	1			0			0.189	4.8		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restairig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.22	767.6	48	8.9	92	s.			6		10			0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.25	768.4	30.35	771.0	51.8	11.	77	e.	4.5	2.0			10			1.984	50.4		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.28	769.0	30.34	770.5	59.7	15.4	60	s.	1.8	0.8		1	0	s.		0	0	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.29	693.1	30.36	771.1	44.6	7.0	69	ne.	4.5	2.0		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.04	712.1	30.31	769.8	52.5	11.4	61	e.	13.2	5.9		0	8			0	0	almost cov'd	The Staff.
Murcia, Met. Obs'y	30.13	765.3	30.29	769.3	50.5	10.3	95	w.	2.5	1.1		5	5			0.047	1.2	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.29	744.0	30.20	767.1	54.9	12.7	72	nw.	3.1	1.4		0	4			0	0	cloudy	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.00	762.0	30.07	763.6	69.2	20.7	87	sw.	2.7	1.2		0	0			0.039	1.0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.96	760.9	30.02	762.4	76.1	24.5	89	ne.	3.4	1.5		0	3 ck		e.	0.591	15.0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.10	764.4	30.20	766.9	58.8	14.9	60	e.	13.4	6.0			10		e.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.04	763.0	30.13	765.3	72.7	22.6	82	calm	0	0		3 c	4 k	sw.	sw.	0	0		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.92	760.0	30.06	763.5	74.9	23.8	88	sse.	1.8	0.8			9 ks		sse.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.27	768.8	30.31	769.8	27.3	— 2.6	84	w.			2		8			0	0		
Umea	30.43	773.0	30.48	774.3	33.8	1.0	81	nw.			2		3			0	0		
Hernosand	30.51	775.0	30.56	776.3	35.4	1.9	69	calm			0		0			0	0		
Stockholm	30.54	775.7	30.72	780.2	26.6	— 3.0	91	w.			4		10			0	0		
Wisby	30.67	778.9	30.72	780.4	34.5	1.4	82	n.			2		10			0	0		
SUB SERIES.																			
Upsala	30.97?	786.6?	31.06?	788.8?	27.3	— 2.6	73	wsw.	9.4	4.2			0			0	0		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.13	740.0	30.62	777.8	34.3	— 1.3	81	ene.			4					0	0	covered	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.38	771.7	27.9	— 2.3	96	n.	27	12.0			10		n.	0.197	5.0	snowing	The Observatory.
Valona			30.34	770.6	41.4	5.2		n.			2		0			0	0	clear	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.91	759.7	59.0	15.0	70	ssw.			3	0	5 n		sw.	0.36	9.1		Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Albany, New York	29.73	755.1	29.82	757.4	27	— 2.8	88	nw.	6	2.7		0	0			0.38	9.7	clear	
Alpena, Michigan	29.02	737.1	29.73	755.1	28	— 2.2	88	s.	6	2.7			10 s			0	0	cloudy	
Atlanta, Georgia	28.94	735.1	30.16	766.1	34.0	1.1	75	nw.	12	5.4			10 s		calm	0.69	17.5	cloudy	
Atlantic City, New Jersey	29.88	758.9	29.89	759.2	29.3	— 1.5	90	nw.	16	7.2		0	0			0.89	22.6	clear	
Augusta, Georgia	29.98	761.5	30.18	766.6	34.0	1.1	88	calm	0	0		0	sk.			0.11	2.8	clear	
Baltimore, Maryland	29.94	760.5	30.00	762.0	30	— 1.1	68	nw.	8	3.6		0	fg.			0.48	12.2	clear	
Barnegat, New Jersey	29.84	757.9	29.86	758.4	29.0	— 1.7	77	nw.	16	7.2		0	0			1.30	33.0	clear	
Bismarck, Dakota	28.00	711.2	29.98	761.5	21	— 6.1	87	nw.	12	5.4			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.40	695.9	30.36	771.1	5	—15.0	91	ne.	4	1.8		0	0			0	0	clear	
Boston, Massachusetts	29.50	749.3	29.66	753.4	26.0	— 3.3	88	nw.	18	8.0		5 k	0			1.44	36.6	fair	
Brownsville, Texas	29.96	761.0	30.00	762.0	54	12.2	93	e.	4	1.8		0	0			0	0	clear	
Buffalo, New York	29.11	739.4	29.91	759.7	27.8	— 2.3	90	s.	12	5.4			10 s		s.	0	0	cloudy	
Burlington, Vermont	29.51	749.5	29.82	757.4	16.7	— 8.5	84	n.	15	6.7			10 n		n.	inap.	inap.	light snow	
Cairo, Illinois	29.75	755.6	30.17	766.3	32.5	0.3	85	s.	8	3.6		0	0			0	0	clear	
Campo, California	27.25	692.1	29.89	759.2	33	0.6	88	sw.	8	3.6			10 s		w.	0.54	13.7	cloudy	
Camp Thomas, Arizona	27.10	688.3	29.94	760.5	25	— 3.9	88	calm	0	0		0	0			0	0	clear	
Cape Henry, Virginia	30.01	762.2	30.03	762.7	34	1.1	85	nw.	28	12.5		0	0			0.61	15.5	clear	
Cape May, New Jersey	29.90	759.4	29.94	760.5	33	0.6	57	nw.	35	15.6		0	0			0.77	19.6	clear	
Castroville, Texas	29.20	741.7	30.04	763.0	36	2.2	89	nw.	2	0.9		0	0			0	0	clear	
Cedar Keys, Florida	30.12	765.0	30.14	765.5	42	5.6	82	n.	10	4.5		0	0			0.53	13.5	clear	
Champaign, Illinois	29.12	739.6	29.99	761.7	24.0	— 4.4	73	sw.	13	5.8		0	hz.			0.06	1.5	clear	
Charleston, S. Carolina	30.12	765.0	30.18	766.0	36	2.2	89	w.	5	2.2		0	0			0.80	20.3	clear	
Charlotte, N. Carolina	29.22	742.2	30.11	764.8	32.0	0.0	88	n.	2	0.9		0	fg.			0.12	3.0	clear	
Chattanooga, Tennessee	29.35	745.5	30.21	767.3	31.5	— 0.3	63	n.	4	1.8			10 ks		n.	0.05	1.3	cloudy	
Cheyenne, Wyoming	23.88	666.5	30.13	765.3	18.2	— 7.7	87	n.	1	0.4			10 s			0.01	0.3	cloudy	
Chicago, Illinois	29.12	739.6	29.87	758.7	32.7	0.4	82	sw.	14	6.3		0	1 s			0	0	clear	
Chincoteague, Virginia	29.94	760.5	29.96	761.0	33	0.6	68	nw.	24	10.7		0	2 s			1.70	43.2	clear	
Cincinnati, Ohio	29.42	747.3	30.11	764.8	33.9	1.1	71	sw.	8	3.6			10 s			0.06	1.5	cloudy	
Cleveland, Ohio	29.22	742.2	30.01	762.2	24	— 4.4	88	sw.	18	8.0		0	5 s		w.	0	0	fair	
Coleman City, Texas																			
Columbus, Ohio	29.16	740.7	30.06	763.5	25	— 3.9	80	s.	6	2.7		5 ck	0	sw.		0.27	6.9	fair	
Concho, Texas	27.97	710.4	29.99	761.7	35	1.7	89	sw.	8	3.6		0	0			0	0	clear	
Davenport, Iowa	29.22	742.2	29.92	760.0	31	— 0.6	68	sw.	12	5.4			10 s		sw.	0	0	cloudy	
Dayton, Washington T'y	28.50	723.9	30.31	769.9	15.7	— 9.1	77	calm	0	0		3 c	0	sw.		0.07	1.8	clear	
Deadwood, Dakota	25.21	640.3	30.13	765.3	16	— 8.9	64	s.	4	1.8		0	0			0	0	clear	
Decatur, Texas					33	0.6	50	s.	14	6.3		0	0			0	0	clear	
Delaware Breakwater, Del.	29.91	759.7	29.93	760.2	32	0.0	88	nw.	26	11.6		0	0			0.62	15.7	clear	
Denison, Texas	29.19	741.4	30.03	762.7	33.3	0.7	78	se.	6	2.7		0	5 s			0	0	fair	
Denver, Colorado	24.66	626.4	30.18	766.6	22.5	— 5.3	94	n.	5	2.2			10 n		calm	0.08	2.0	light snow	
Des Moines, Iowa	29.03	737.3	30.00	762.0	30	— 1.1	78	nw.	8	3.6		0	3 s			0	0	clear	
Detroit, Michigan	29.16	740.7	29.91	759.7	39.0	3.9	73	s.	17	7.6			10 s		sw.	0	0	cloudy	
Dodge City, Kansas	27.25	692.1	29.99	761.7	21.2	— 6.0	83	ne.	6	2.7		0	0			0	0	clear	
Dubuque, Iowa	29.11	739.4	29.87	758.7	26.7	— 2.9	64	sw.	6	2.7		3 c	2 s	w.	calm	0	0	fair	
Duluth, Minnesota	28.90	734.0	29.66	753.4	23	— 5.0	88	sw.	7	3.1		0	0			0.01	0.3	clear	
Eagle Pass, Texas	29.20	741.7	30.04	763.0	42.0	5.6	92	calm	0	0		0	0			0	0	clear	
Eagle Rock, Idaho	25.26	641.6	30.16	766.1	—18	—27.8	100	n.	3	1.3			fg			0.69	17.5	dense fog	
Eastport, Maine	29.47	748.5	29.54	750.3	13.5	—10.3	80	n.	30	13.4			10 s		ne.	0.00	1.5	cloudy	
El Paso, Texas	26.16	664.5	30.04	763.0	25	— 3.9	88	calm	0	0		0	0			0	0	clear	
Erie, Pennsylvania	29.18	741.2	29.95	760.7	28	— 2.2	88	sw.	8	3.6		5 cs	0	sw.		0.01	0.3	fair	
Escanaba, Michigan	28.94	735.1	29.66	753.4	26	— 3.3	88	s.	13	5.8			10 s		sw.	inap.	inap.	threatening.	
Fort Apache, Arizona	24.80	629.9	29.90	759.4	21	— 6.1	76	e.	5	2.2		0	0			0	0	clear	
Fort Assinnaboine, Montana	26.93	684.0	29.97	761.2	14	—10.0	66	sw.	20	8.9		0	0			0	0	clear	
Fort Bennett, Dakota	28.34	719.8	30.07	763.8	20	— 6.7	73	nw.	10	4.5		0	0			0	0	clear	
Fort Benton, Montana	26.97	685.0	29.97	761.2	21	— 6.1	61	sw.	10	4.5		0	0			0	0	clear	
Fort Buford, Dakota	27.81	706.4	29.99	761.7	15	— 9.4	67	w.	10	4.5		0	0			0	0	clear	
Fort Custer, Montana	26.71	678.4	30.07	763.8	2	—16.7	48	se.	5	2.2		0	0			0	0	clear	
Fort Davis, Texas	25.00	635.0	29.96	761.0	42	5.6	70	nw.	4	1.8		0	0			0	0	clear	
Fort Elliott, Texas	27.04	686.8	29.94	760.5	21	— 6.1	61	calm	0	0		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.44	747.8	30.04	763.0	32.2	0.1	78	e.	7	3.1		0	0			0	0	clear	
Fort Grant, Arizona	25.03	635.8	29.89	759.2	31.5	— 0.3	80	nw.	7	3.1		0	0			0	0	clear	
Fort Griffin, Texas	28.64	727.4	30.01	762.2	33	0.6	88	calm	0	0		0	0			0	0	clear	
Fort Keogh, Montana	27.39	695.7	30.07	763.8	10	—12.2	60	sw.	4	1.8		0	0			0	0	clear	
Fort Macon, North Carolina	30.08	764.0	30.09	764.3	36	2.2	69	nw.	15	6.7		hz.	0	calm		0.22	5.6	clear	
Fort McKavett, Texas	27.72	704.1	30.10	764.5	39.1	3.9	73	se.	12	5.4		0	0			0	0	clear	
Fort Missoula, Montana	26.79	680.5	30.22	767.6	9	—12.8	80	sw.	3	1.3			10 ks			0	0	cloudy	
Fort St. Michaels, Alaska	29.31	744.5	29.35	745.5	— 9	—22.8	100	nw.	6	2.7		0	8 ks			0.14	3.6	fair	
Fort Shaw, Montana	26.16	664.5	30.01	762.2	23	— 5.0	64	sw.	23	10.3		2 cs	0			0	0	clear	
Fort Sill, Indian Territory	28.69	728.7	30.00	762.0	24	— 4.4	84	calm	0	0		0	0			0	0	clear	
Fort Stevenson, Dakota	27.95	709.9	29.97	761.2	14	—10.0	66	w.	6	2.7		0	3 s		w.	0.03	0.8	clear	
Fort Verde, Arizona					36	2.2	82	w.			1		10 s		w.	0	0	cloudy	
Fredericksburg, Texas	28.25	717.5	30.05	763.3	37	2.8	82	w.	3	1.3		0	0			0	0	clear	
Galveston, Texas	30.06	763.5	30.10	764.5	51	10.6	79	se.	6	2.7		2 c	0	nw.		0	0	clear	
Grand Haven, Michigan	29.10	739.1	29.81	757.2	33.5	0.8	88	sw.	18	8.0			10 s		sw.	0	0	cloudy	
Hatteras, North Carolina	30.01	762.2	30.03	762.7	38	3.3	73	nw.	20	8.9		0	3 k			0.68	17.3	clear	
Helena, Montana	25.72	653.3	30.12	765.0	22	— 5.6	48	sw.	16	7.2		0	5 s		w.	0	0	fair	
Henrietta, Texas	29.02	737.1	30.07	763.8	28	— 2.2	77	s.	7	3.1		0	0			0	0	clear	
Huron, Dakota	28.52	724.4	30.04	763.0	14	—10.0	70	w.	8	3.6		0	5 s			0	0	fair	
Indianapolis, Indiana	29.18	741.2	30.03	762.7	30	— 1.1	88	s.	8	3.6			10 s		s.	0.29	7.4	cloudy	
Indianola, Texas	30.04	763.0	30.08	764.0	53.2	11.8	80	se.	8	3.6		0	2 s		w.	0	0	clear	
Jacksboro, Texas	28.75	730.2	29.99	761.7	36	2.2	79	se.	5	2.2		0	0			0	0	clear	
Jacksonville, Florida	30.14	765.5	30.18	766.6	40	4.4	73	nw.	7	3.1		3 cs	0	w.		0.65	16.5	clear	
Keokuk, Iowa	29.25	742.9	29.95	760.7	27.5	— 2.5	77	sw.	10	4.5		0	1 s			0	0	clear	
Key West, Florida	30.05	763.3	30.08	764.0	72.0	22.2	90	n.	10	4.5			10 n ks			0.51	13.0	threatening	
Kittyhawk, North Carolina	30.00	762.0	30.02	762.5	35	1.7	69	n.	15	6.7		hz.	1 s			0	0	dense haze	
Knoxville, Tennessee	29.13	739.9	30.21	767.3	30.5	— 0.8	88	sw.	4	1.8			10 s			0.22	5.6	cloudy	
La Crosse, Wisconsin	28.95	735.3	29.79	756.7	30	— 1.1	68	sw.	4	1.8		0	4 s		w.	0	0	fair	
La Mesilla, New Mexico	26.09	662.7	30.10	764.5	25.8	— 3.4	84	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.12	739.6	30.07	763.8	27	— 2.8	64	calm	0	0		3 cs	0			0	0	clear	
Lewiston, Idaho	29.53	750.0	30.40	772.1	14.5	— 9.7	56	e.	2	0.9		1 cs	0	e.		0	0	clear	
Little Rock, Arkansas	29.77	756.1	30.10	764.5	30	— 1.1	88	calm	0	0			fg.			0	0	dense fog	
Los Angeles, California	29.51	749.5	29.91	759.7	41.3	5.2	82	n.	8	3.6			9 s		ne.	0.37	9.4	cloudy	
Louisville, Kentucky	29.53	750.0	30.12	765.0	36	2.2	69	s.	7	3.1			10 s			0.03	0.8	cloudy	
Lynchburg, Virginia	29.34	745.2	30.06	763.5	34.0	1.1	48	sw.	4	1.8		0	0			0.06	1.5	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	28.72	729.5	29.81	757.2	31	— 0.6	78	sw.	10	4.5		2 c	0	w.		0	0	clear	
Marquette, Michigan	28.80	731.5	29.58	751.3	27	— 2.8	77	s.	5	2.2		0	6 s		w.	0.01	0.3	fair	
Mason, Texas	28.31	719.1	30.04	763.0	40	4.4	67	sw.	1	0.4		0	0			0	0	clear	
Memphis, Tennessee	29.82	757.4	30.17	766.3	29	— 1.7	77	se.	4	1.8		0	0			0	0	clear	
Milwaukee, Wisconsin	29.00	736.6	29.80	756.9	30	— 1.1	88	sw.	12	5.4			10 s		sw.	0	0	cloudy	
Mobile, Alabama	30.15	765.8	30.19	766.8	37.0	2.8	82	ne.	4	1.8		0	0			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	29.92	760.0	30.16	766.1	33.5	0.8	79	n.	3	1.3		0	0			inap.	inap.	clear	
Moorhead, Minnesota	28.82	732 0	29.92	760.0	0	—17.8	68	nw.	6	2.7		0	1 s			0.03	0.8	clear	
Morgantown, W. Virginia	29.07	738.4	30.14	765.5	29.0	— 1.7	84	sw.	7	3.1			10 s		sw.	0.16	4.1	cloudy	
Mt. Washington, N. H.	23.19	589 0	29.81	757.2	8.3	—13.2	81	ne.	4	1.8		5 cs	5 s		ne.	0.13	3.3	cloudy	
Nashville, Tennessee	29.62	752.3	30.18	766.6	34.0	1.1	74	sw.	2	0.9		10 cs	0			inap.	inap.	cloudy	
New Haven, Connecticut	29.64	752.8	29.76	755.9	29	— 1.7	67	n.	14	6.3		4 c	0	w.		0.80	20.3	fair	
New London, Connecticut	29.65	753.1	29.70	754.4	29	— 1.7	67	nw.	5	2.2		0	2 s		nw.	1.05	26.7	clear	
New Orleans, Louisiana	30.09	764.3	30.15	765.8	41.5	5.3	65	ne.	8	3.6		2 c	0			0	0	clear	
Newport, Rhode Island	29.62	752.3	29.67	753.6	28.2	— 2.1	83	nw.	18	8.0		5 c	1 s	nw.	calm	0.75	19.0	fair	
New River, N. Carolina					34	1.1	80	n.			1	0	0			0.07	1.8	clear	
New Shoreham, Rhode I'd.	29.65	753 1	29.68	753.9	29.0	— 1.7	67	n.	30	13.4		0	2 k		nw.	0.57	14.5	clear	
New York, New York	29.66	753.4	29.85	758.2	29	— 1.7	67	w.	13	5.8		2 cs	0			1.34	34.0	clear	
Norfolk, Virginia	30.02	762.5	30.05	763.3	36	2.2	61	nw.	8	3.6		0	0			0.64	16.3	clear	
North Platte, Nebraska	27.05	687.1	30.15	765.8	25.6	— 3.6	82	nw.	4	1.8		0	5 s			0	0	fair	
Olympia, Washington T'y	30.30	769.6	30.34	770.6	34.0	1.1	96	s.	8	3.6			10 s		s.	0	0	cloudy	
Omaha, Nebraska	28.81	731.8	30.08	764.0	30.0	— 1.1	77	nw.	14	6.3		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.45	748.0	29.47	748.5	—38.8	—39.3	74	n.	6	2.7		0	0			0	0	clear	
Oswego, New York	29.51	749.5	29.86	758.4	28.4	— 2.0	82	s.	3	1.3		5 k	0	nw.		0	0	fair	
Palestine, Texas																			
Pensacola, Florida	30.17	766.3	30.20	767.1	37.4	3.0	81	n.	5	2.2		1 cs	0			0	0	clear	
Philadelphia, Pa	29.82	757.4	29.93	760.2	31	— 0.6	88	nw.	7	3.1		0	0			0.63	16.0	clear	
Pike's Peak, Colorado	17.29	439.2	30.01	762.2	— 3.5	—19.7	89	sw.	14	6.3		0	8 s			0	0	cloudy	
Pioche, Nevada	23.86	606.0	30.02	762.5	17	— 8.3	73	n.	10	4.5		3 k	7 ks	n.	n.	0.16	4.1	cloudy	
Pittsburg, Pennsylvania	29.19	741.4	30.05	763.3	22.0	— 5.6	84	w.	9	4.0			10 s			0.58	14.7	cloudy	
Port Eads, Louisiana	30.16	766.1	30.17	766.3	47.5	8.6	77	n.	11	4.9		hz	4 s		n.	0	0	fair	
Port Huron, Michigan	29.15	740.4	29.88	758.9	29.6	— 1.3	85	sw.	12	5.4			10 s		calm	0	0	cloudy	
Portland, Maine	29.58	751 3	29.63	752.6	29	— 1.7	77	n.	20	8.9			10 s		n.	0.18	4.6	cloudy	
Portland, Oregon	30.30	769.6	30.37	771.4	32.9	0.5	88	s.	2	0.9			10 s		s.	0	0	cloudy	
Portsmouth, N. Carolina					38	3.3	53	n.	22	9.8		0	0			0.71	18.0	clear	
Prescott, Arizona	24.50	622.3	29.86	758.4	29	— 1.7	70	e.	2	0.9			10 s		calm	0	0	cloudy	
Punta Rassa, Florida	30.06	763.5	30.07	763.8	63	17.2	84	n.	10	4.5		5 c	0	w.		0.07	1.8	fair	
Red Bluff, California	29.84	757.9	30.22	767.6	39.8	4.3	42	n.	27	12.1		0	0			0.04	1.0	clear	
Rio Grande City, Texas	29.74	755 4	29.99	761.7	45	7.2	93	se.	2	0.9		0	0			0	0	clear	
Rochester, New York	29.18	741.2	29.89	759.2	23	— 5.0	88	sw.	9	4.0		2 cs	hz		n.	0	0	clear	
Roseburg, Oregon	29.80	756.9	30.37	771.4	34	1.1	92	nw.	2	0.9			10 s			0.14	3.6	cloudy	
Sacramento, California	29.98	761.5	30.06	763.5	38.2	3.4	62	n.	16	7.2		0	0			0.40	10.2	clear	
St. Louis, Missouri	29.41	747.0	30.05	763.3	25.9	— 3.4	88	s.	10	4.5		0	0			inap.	inap.	clear	
St. Paul, Minnesota	28.84	732.5	29.78	756.4	23.0	— 5.0	88	w.	16	7.2		0	0			0	0	clear	
St. Vincent, Minnesota	28.88	733.5	29.85	758.2	— 5	—20.6	100	n.	11	4.9		0	7 s		calm	0.15	3.8	fair	
Salt Lake City, Utah	25.59	650.0	30.15	765.8	12	—11.1	64	calm	0	0		0	0			0.04	1.0	clear	
San Antonio, Texas	29.30	744.2	30.02	762.5	36.7	2.6	89	calm	0	0		0	0			0	0	clear	
San Diego, California	29.82	757.4	29.89	759.2	50.2	10.1	55	w.	24	10.7		5 k	0	w.		0.15	3.8	fair	
Sandusky, Ohio	29.26	743.2	29.98	761.5	26	— 3.3	88	sw.	16	7.2		0	5 s		sw.	0	0	fair	
Sandy Hook, New Jersey	29.79	756.7	29.83	757.7	30.0	— 1.1	88	nw.	21	9 4		0	0			0.62	15.7	clear	
San Francisco, California	30.01	762.2	30.08	764.0	45	7.2	37	nw.	17	7.6		0	0			0.18	4.6	clear	
Santa Fé, New Mexico	23.01	584.4	30.05	763.3	12.4	—10.9	68	se.	5	2.2		0	0			0	0	clear	
Savannah, Georgia	30.08	764.0	30.17	766.3	37	2.8	72	nw.	6	2.7		0	0			0.42	10.7	clear	
Shreveport, Louisiana	29.86	758.4	30.11	764.8	.35	1.7	89	e.	3	1.3		0	0			0	0	clear	
Silver City, New Mexico	24.06	611.1	29.91	759.7	15	— 9.4	70	n.	4	1.8		0	0			0	0	clear	
Sitka, Alaska	29.60	751.8	29.67	753.6	38.1	3.4	77	w.	8	3.6			10 ks		w.	0.93	23.6	threatening	
Smithville, North Carolina	30.08	764.0	30.12	765.0	35	1.7	89	nw.	4	1.8		0	0			0.20	5.1	clear	
Spokane Falls, Wash. Ter.	28.20	716.3	30.34	770.6	5.5	—14.7	89	s.	1	0.4			10 s		sw.	0.01	0.3	cloudy	
Springfield, Illinois	29.28	743.7	30.01	762.2	27	— 2.8	77	sw.	8	3.6		0	0			0.02	0.5	clear	
Springfield, Massachusetts	29.61	752.1	29.75	755.6	29.0	— 1.7	84	nw.	8	3.6		2 c	0			2.35	59.7	clear	
Springfield, Mo	28.55	725.2	30.12	765.0	28.1	— 2.2	77	s.	8	3.6		0	0			0	0	clear	
Stockton, Texas	26.88	682.7	30.01	762.2	30.1	— 1.1	80	sw.	6	2.7		0	0			0	0	clear	
Thatcher's Island, Mass	29.57	751.1	29.63	752.6	29.0	— 1.7	100	n.	35	15.6		5 ck	4 k	n.	n.	1.80	45.7	cloudy	
Toledo, Ohio	29.22	742.2	29.96	761.0	29	— 1.7	77	s.	12	5.4			10 s		sw.	0	0	cloudy	
Tucson, Arizona	27.37	695.2	29.85	758.2	38	3.3	65	se.	4	1.8		0	0			0	0	clear	
Umatilla, Oregon	30.00	762.0	30.38	771.6	16.5	— 8.6	89	se.	10	4.5			10 s		sw.	0	0	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.91	759.7	30.18	766.6	34	1.1	79	se.	8	3.6		0	0			0	0	clear	
Visalia, California	29.56	750.8	29.94	760.5	42	5.6	88	sw.	1	0.4			10 s		sw.	0.38	9.7	cloudy	
Washington, D. C.	29.91	759.7	30.03	762.7	29	— 1.7	77	nw.	8	3.6		0	0			0.50	12.7	clear	
West Los Animas, Colorado	25.95	659.1	30.08	764.0	20	— 6.7	91	nw.	6	2.7		0	0			0	0	clear	
Wickenburg, Arizona					35	1.7	78	calm			0		10 ks		w.	0	0	cloudy	
Williamsport, Pa	29.32	744.7	29.95	760.7	23	— 5.0	88	w.	5	2.2		hz.	0			0.81	20.6	dense haze	
Wilmington, N. Carolina	30.06	763.5	30.12	765.0	39	3.9	73	nw.	4	1.8		0	0			0.06	1.5	clear	
Winnemucca, Nevada	25.66	651.8	30.18	766.6	4	—15.6	76	ne.	8	3.6		0	0			0.30	7.6	clear	
Wood's Holl, Mass																			
Yankton, Dakota	28.64	727.4	30.06	763.5	25	— 3.9	88	w.	9	4.0		4 cs	0			0	0	fair	
Yuma, Arizona	29.69	754.1	29.84	757.9	48.8	9.3	71	nw.	9	4.0			10 s		nw.	0	0	cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559 3			52.5	11.4	79	calm	0	0		3 cs; k	2 s			0.63	16.0	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.06	763.5	30.07	763.8	78	25.6	86	e.				2 k	2 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.95	760.7	29.97	761.2	77	25.0	90	sw.	2	0.9			10 ks		s.	0.10	2.5	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.01	762.2	30.03	762.7	78	25.6	83	e.				2 k	0			0.039	1.0	clear	B. Bigar.
Havana, Cuba, W. I.	30.07	763.8	30.12	765.0	74	23.3	85	calm	0	0		0	2 ks		calm	c	0	fair	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.08	764.0	30.09	764.3	69.4	20.8	73	n.	1	0.4		2ck; cs	2 s	e.	e.	0	0	fine	Robert Johnstone
Navassa, W. I.	29.97	761.2	30.05	763.3	77	25.0	70	ne.	12	5.4		5 ck	2 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.03	762.7	30.03	762.7	78	25.6	86	e.			2	5 k	8 ps	e.		0.800	20.3		Dr. O. J. Hering.
Puerto Berrio, U. S. Col'mba	29.53	750.0	29.99	761.7	79	26.1	85	calm			0	7 ck	3 s	calm	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua							92	ne.			1	1 ks	0	ne.		0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.09	764.3	30.12	765.0	74	23.3	76	calm	0	0		1 c	0			0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.82	757.4	29.87	758.7	—46.0	—43.3		e.	10	4.5		3 c	0	e.		0	0	fair	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt																			
H. M. S. Albatross, N. 20° 09′, E. 110° 39′	30.15	765.8	61	16.1		nne.			3		10	n.				1		misty	Capt. A. J. Errington.
H. M. S. Alert, Singapore, Malay Pen	29.90	759.4	79	26.1	86	n.			1-2		2							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.23	767.8	43	6.1	58	n.			5-6		6								Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.92	760.0	75.5	24.2	70	ese.			6		0							blue sky	Com. Sir F. W. Richards.
H. M. S. Champion, Off San Lorenzo, Peru	29.91	759.7	68	20.0	100	calm			0		8					3	s.	d. clouds	Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	29.91	759.7				se.			4-6		0							squally	Capt. A. T. Dale.
H. M. S. Dido																			
H. M. Dock-Yard, Bermuda, W. I.	29.82	757.4	69	20.6	90	ssw.			4-5		6	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 18° 13′, W. 76° 27′	30.05	763.3	78.5	25.8	97	e.			1-2		4	ese.				2	e.	d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf																			Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 33° 20′, W. 15° 50′	30.23	767.8	73	22.8	85	n.			1-2		4	nne.				1	wnw.	d. clouds	Capt. C. A. G. Bridge.
H. M. S. Fawn, Mocha, Arabia	29.85	758.2	79.5	26.4	82	s.			6		1					4	s.	blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.39	771.9	48	8.9	62	calm			0		6							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 20° 55′, W. 75° 10′	29.99	761.7	70	21.1	66	sse.			2-3		1	nw.				2	s.	blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.54	750.3	53	11.7	86	n.			4		10							overcast	Capt. L. F. Jones.
H. M. S. Inconstant																			
H. M. S. Iris, Off Rhodes, Asiatic Turkey	29.88	758.9	55	12.8	68	nw.			3-4		5					3	n.	d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.14	765.5	60	15.6	88	ene.			1		9	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey, Coquimbo, Chili	29.93	760.2	63	17.2		ne.			1		10							overcast	Capt. J. T. R. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, Sydney, Australia	30.20	767.1	72	22.2	75	calm			0		2	calm						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, St. Lucia, W. I.	30.00	762.0	78	25.6	82	ne.			2		7	ne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. J. Kinahan.
H. M. S. Pelican, N. 6° 13′, W. 25° 44′	29.92	760.0	80.5	26.9	98	n.			3		4					4	nne.	misty	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Ascension Island, Africa	29.94	760.5	82	27.8	91	ese.			4		4	ese.						squally	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.13	765.3	60	15.6		se.			1		5							d. clouds	Capt. W. H Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id.	30.29	769.4	38	3.3	100	calm			0		10							raining	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 3° 20′, E 40° 10′	29.23	742.4	83	28.3	95	nne.			4		2	nne.				2	ene.	d. clouds	Capt. M. Byles.
H. M. S. Thalia																			
H. M. S. Triumph, S. 5° 16′, W. 81° 25′	29.96	761.0	72	22.2	95	se.			2		9	s.				1	s.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 5° 50′, E. 89° 19′	29.98	761.5	76	24.4	100	e.			1		10	e.				1	nne.	thund'r st'm	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica W. I.	30.04	763.0	72	22.2		nnw.			1		4							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Bedna, Arabia	30.16	766.1	62.5	16.9	72	e.			2		5	wsw.						misty	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon																			
Quanza, Brava, Cape Verd Ids.	30.00	762.0	75.2	24.0	79	ne.			3		5		sw.			2	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder																			Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla.	30.18	766.6	41	5.0	82	nne.	10	4.5	.....	.....	0	.....	.....	0	0	.....	.....	clear	
N. Yard, Portsmouth, N. H.	29.63	752.6	28	— 2.2	.....	nw.	6	2.7	.....	.....	10	.....	nw.	0	0	.....	.....	cloudy	
Naval Hospital Yokohama, Japan.	30.21	767.3	42	5.6	74	e.	.....	.....	2	.....	10	.....	e.	0.18	4.6	.....	.....	sprinkling	
Adams, Callao, Peru	29.75	755.6	70	21.1	90	sse.	.....	.....	1	.....	10	.....	.....	0	0	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	29.85	758.2	60	15.6	88	ssw.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert, Bang Kok River, India*	29.81	757.2	83	28.3	83	s.	.....	.....	3	.....	2	.....	calm	0	0	sm'h	.....	clear	
Alliance, Boston, Mass.*†	29.66	753.4	30	— 1.1	89	nnw.	.....	.....	2	.....	10	.....	.....	snow	snow	.....	.....	overcast	
Ashuelot, Tientsin, China	30.65	778.5	28	— 2.2	100	se.	.....	.....	1	.....	2	.....	calm	.....	.....	.....	.....	clear	
Brooklyn, Montevideo, Uruguay	29.42	747.3	67	19.4	95	s.	54	24.1	.....	.....	10	.....	s.	1.01	25.7	r'gh	s.	cloudy	
Colorado, New York, N. Y.	29.81	757.2	28	— 2.2	89	w.	23	10.3	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Enterprise, Washington, D. C*	30.00	762.0	33	0.6	89	wnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Essex, N. 32° 30′, W. 21° 27′	30.31	769.9	64	17.8	78	ne.	.....	.....	1	.....	2	.....	ne.	.....	.....	long	nw.	fair	
Franklin, Norfolk, Va.	30.01	762.2	37	2.8	62	nnw.	7	3.1	.....	.....	0	.....	.....	0.06	1.5	.....	.....	clear	
Galena. N. 32° 39′, W. 16° 43′	30.21	767.3	62	16.7	88	n.	.....	.....	4	.....	8	.....	ne.	.....	.....	mod.	ne.	fair	
Independence, N. Yard, Mare I'd, Cal.	29.92	760.0	46	7.8	77	nw.	15.6	7.0	.....	.....	0	.....	.....	0.13	3.3	.....	.....	clear	
Kearsarge. New Orleans, La.	30.15	765.8	43	6.1	83	ne.	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....	fair	
Lackawanna. Valparaiso, Chili*	29.88	758.9	59	15.0	94	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Lancaster, Naples, Italy	30.41	772.4	46	7.8	54	ne.	.....	.....	3-5	.....	0	.....	.....	.....	.....	r'gh	ne.	hazy	
Marion, S. 30° 09′ E. 63° 37′	29.95	760.7	72	22.2	90	e.	.....	.....	4	.....	5	.....	e.	0	0	sm'h	.....	fair	
Michigan, Erie, Pa.	30.03	762.7	29	— 1.7	67	sw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I.	29.65	753.1	28	— 2.2	.....	nnw.	20	8.9	.....	.....	8	.....	nnw.	.....	.....	.....	.....	cloudy	
Monocacy, Yokohama, Japan	30.42	772.7	44	6.7	92	nne.	.....	.....	2	.....	10	.....	ne.	.....	.....	.....	.....	drizzling	
Nipsic, Villafranca, France	30.49	774.4	59	15.0	44	sse.	.....	.....	3	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.03	762.7	68	20.0	100	calm	.....	.....	0	.....	10	.....	nnw.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.16	766.1	56	13.3	87	n.	.....	.....	1	.....	10	.....	n;e.	.....	.....	.....	.....	overcast	
Passaic, Washington, D. C.	29.89	759.2	29	— 1.7	.....	w.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	clear	
Pensacola, Valparaiso, Chili	29.99	761.7	69	20.6	65	ne.	2	0.9	.....	.....	0	.....	.....	0	0	sm'h	.....	clear	
Powhatan, Norfolk, Va.	30.00	762.0	34	1.1	79	wnw.	.....	.....	3-4	.....	0	.....	.....	.....	.....	.....	.....	clear	
Quinnebaug, N. 39° 06′, E. 10° 22′	30.36	771.1	54	12.2	62	ese.	.....	.....	6	.....	10	.....	ese.	.....	.....	mod.	ese.	cloudy	
Ranger, N. 19° 40′, W. 105° 16′*	29.83	757.7	65	18.3	89	ne.	.....	.....	2	.....	0	.....	.....	0	0	long	n.	clear	
Richmond, N. 13° 41′, E. 173° 18′*	29.87	758.7	78	25.6	82	nne.	.....	.....	4	.....	2	.....	ne.	0	0	light	ene.	clear	
Shenandoah, Montevideo, Uruguay*.	29.51	749.5	67	19.4	89	s.	.....	.....	8	.....	10	.....	.....	.....	.....	r'gh	s.	rainy	
St. Louis, League Island, Pa.	30.17	766.3	27	— 2.8	88	nw.	15	6.7	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Swatara, Kobe, Japan*	30.22	767.6	48	8.9	63	n.	.....	.....	1	.....	8	.....	w.	.....	.....	.....	.....	fair	
Tennessee, New York, N. Y.	29.69	754.1	29	— 1.7	.....	nw.	8	3.6	.....	.....	1	.....	.....	0	0	.....	.....	hazy	
Vandalia, N. 12° 55′, W. 71° 32′	29.99	761.7	76	24.4	91	e.	.....	.....	4	.....	2	.....	e.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass.	29.64	752.8	24	— 4.4	.....	ne.	14	6.3	.....	.....	8	.....	e.	0	0	.....	.....	fair	
Wachusetts. Mare Isld, Cal.	29.78	756.4	45	7.2	76	wnw.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	clear	
Wyoming, Port Royal, S. C.	30.15	765.8	35	1.7	90	nw.	7	3.1	.....	.....	2	.....	calm	0.29	7.4	.....	.....	clear	
Yantic. Aspinwall, Panama*	29.94	760.5	77	25.0	91	n.	.....	.....	3	.....	5	.....	n.	.....	.....	.....	.....	fair	

MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith																	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Richie																	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephens, N. 50° 19′, W. 36° 08′*	30.06	763.5	39	3.9		wsw.	7		8		wsw.			h'vy	wsw.	fair	J. G. Stephens.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.52	775.2	39	3.9		se.	3				s.	6 h'r	6 h'r			overcast	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Fruth, N. 49° 46′, W. 21° 22′*†	30.06	763.5	55	12.8		w.	2		4		nw.	8 h'r	8 h'r	long	w.	fair	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 47° 16′, W. 35° 37′	30.16	766.1	45	7.2	92	nw.	7		8		nw.			h'y	w.	fair	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Philadelphia, Penn.†	29.89	759.2	28	—2.2	67	sw.	4		5		w.	0	0			fine	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, N. 42° 48′, W. 63° 39′*†	29.04	737.6	43	6.1	91	sw.	6		9		sw.			chop	wsw.	misty	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 47° —′, W. 43° —′†	30.22	767.6	34	1.1	90	wnw.	3				sw.			r'gh	wsw.	gloomy	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 51° 15′ W. 35° 00′*†	29.97	761.2	38	3.3		wnw.	4		5		wnw.			high	w.	snowing	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Daw, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 22° 05′, W. 74° 22′†*	30.24	768.1	79	26.1	78	se.	5		2		calm	0	0	light	se.	hazy	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 19° 22′, W. 74° 09′*	30.15	765.8	80	26.7		une.	3		0			0	0	sm'h		fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Kingston, Jamaica, W. I*†	29.08	738.6	70	21.1												fine	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Mayagues, Porto Rico, W. I.						wnw.	1									clear	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearse																	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright																	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 54° 28′, W. 105° 36′	29.68	753.9	47	8.3		nnw.	6		10							misty	
Baroda, Capt. C. J. Russell, N. 10° 58′, W. 26° 17′	30.00	762.0	74.5	23.6	81	nne.	5		3							d. clouds	
Bk. Caldew, Capt. W. Peterson S. 56° 22′, W. 70° 52′	29.31	744.5	48.5	9.2		wnw.	3		10							overcast	
S. S. Cipero, Capt. W. N. Lailey Trinidad Island W. I.	30.06	763.5	82.8	28.2	82	ne.	3		4					1	ne.	d. clouds	
S. City of Agra, Capt. Thos. Young. N. 27° 14′, W. 42° 42′	30.33	770.4	69.5	20.8		e.	3		7							showery	
Coppename, Capt. James Buchan																	
Bk. Glaramara, Capt. R. Morton, N. 49° 25′, W. 13° 44′	30.31	769.6	52	11.1	100	s.	6		9							gloomy	
Glencairn, Capt. R. S. Tannock,																	
Hermine, Capt. S. G. Jones,																	
Hope, Capt. James Campbell																	
S. S. Humboldt, Capt. A. W. Jeffery,																	
S. S. Gordon Castle, Capt. W. Waring,																	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 31° 50′, E. 34° 31′	30.11	764.8	77	25.0	69	ene.	3		3							d. clouds	
May Hulse, Capt. H. Youlden, R. N. R., S. 44° 02′, W. 55° 18′	29.86	758.4	61.4	16.3	70	se.	1		0							blue sky	
Bk. Mertola, Capt. E. W. Turner, N. 50° 45′, W. 8° 00′	30.50	774.7	46.2	7.9	92	se.	5		10							overcast	
Minho, Capt. J. Lawson, Montevideo, Uruguay, S. A.	29.36	745.7	66	18.9	84	s.	9		10							raining	
Naiad, Capt. J. Smith, N. 18° 52′, W. 43° 12′	30.18	766.6	73.7	23.2	85	e.	6		8							d. clouds	
Pole Star, Capt. F. Norman, S. 40° 18′, W. 74° 56′	29.79	756.7	63.7	17.6	94	nnw.	4		10							raining	
Queen of Cambria, Capt. M. Parry. S. 39° 24′, E. 63° 34′	30.18	766.6	65	18.3	83	n.	6		7							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson, N. 44° 28′, W. 43° 18′	30.27	768.6	44	6.7	83	wsw.	3		8							d. clouds	
S. Superb, Capt. Berridge. N. 29° 59′, W. 39° 17′						ne.	4		10							d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Bristol, England†*	30.50	774.7				se.	3		10		sw.	0	0			fine	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman, N. 25° 40′, W. 80° 00′*†	30.21	767.3	71	21.7		nw.	2		0			0	0	sm'h		clear	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey																	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan.																	E. F. Stembridge, 3d offi
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d Officer.

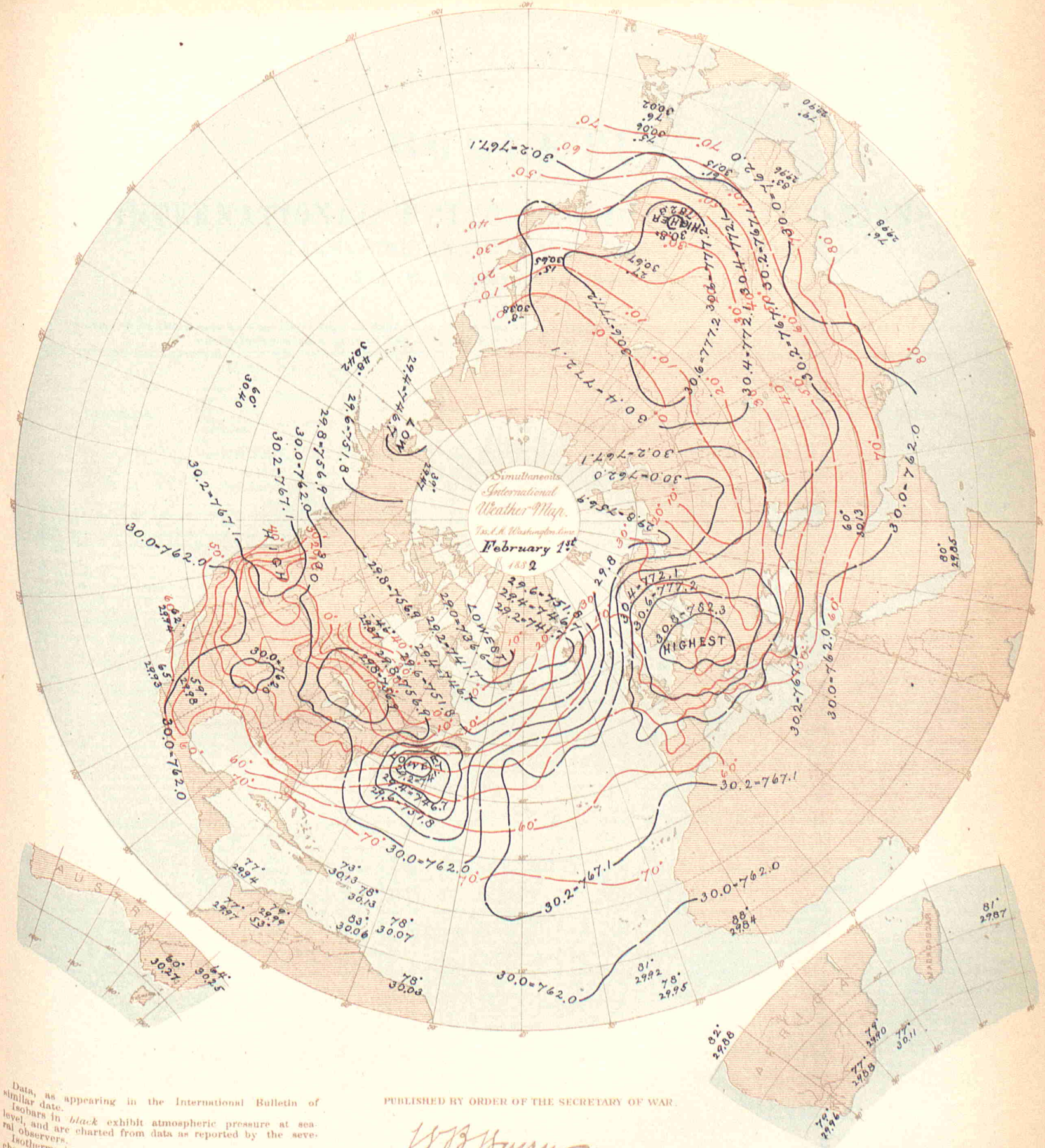
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Beblan, Agent, New York.*																	
S. S. Canada, Capt. Frangeul, Havre, France	30.49	774.4	37.4	3.0	.....	n.	3	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. France, Capt P. de Hauterive, N. 49° 26′, W. 27° 29′*†	30.00	762.0	50.0	10.0	.....	wsw.	5	ck	0	w.	.....	light	rain	hv'y	w.	clear	.....
S. S. St. Laurent, Capt. A. Servan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein, N. 49° 09′, W. 36° 00′*†	30.06	763.5	48	8.9	.....	nw.	4	.....	5	.....	w.	2 h'r	hail	cross	nw.	fair	.....
S. S. Silesia, Capt. A. Albers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich, N. 44° 40′, W. 51° 04′*	29.82	757.4	42	5.6	.....	se.	6	.....	10	.....	se.	shr's	sh'rs	3	se.	.....	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt. Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, Argentine Rep. S. A†*.	29.79	756.7	66	18.9	.....	se.	6	.....	10	.....	wsw.	20 h'r	20h'r	.....	.....	thnd'r storm	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, Galveston, Texas*†	30.18	766.6	52	11.1	.....	ese.	2	.....	0	.....	.....	0	0	.....	.....	clear	C. A. Pike, 1st Officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 48° 11′, W. 28° 44′*†	30.22	767.6	52	11.1	79	w.	4	.....	8	.....	w.	sh'rs	sh'rs	cross	w;sw	.....	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, N. 27° 55′, W. 80° 20′*†	30.18	766.6	66	18.9	.....	n.	3	.....	0	.....	.....	0	0	sm'h	.....	clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, N. 39° 40′, W. 73° 35′†	29.88	758.9	33	0.6	.....	nw.	6	.....	0	.....	.....	0	0	cross	var.	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Alisa, Capt. J. W. Sansom, Savanilla, U. S. C.† [man	29.91	759.7	80	26.7	.....	ne.	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Elbe, Capt. W. Willigerod [nolds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Lessing, Capt. B. Voss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Maas, Capt. T. N. Bonjer, N. 43° 50, W. 55° 33′*	29.34	745.2	37	2.8	.....	sse.	6	.....	.....	.....	.....	.....	.....	.....	.....	rain&hail	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke N. 41° 32′, W. 56° 00′*†	29.50	749.3	46	7.8	.....	s.	8–9	.....	.....	.....	.....	.....	.....	high	ssw.	raining	.....
S. S. P. Caland, Capt. E. Deddes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Schiedam. Capt. E. M. Chevalier, N. 49° 41′, W. 8° 37′	30.40	772.1	51	10.6	.....	s.	5	.....	.....	.....	.....	.....	.....	.....	nw.	cloudy	.....
S. S. Scythia, Capt. M. Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers, N. 45° 15′, W. 42° 25′	30.23	767.8	.....	.....	.....	sw.	5	.....	8	.....	w.	2 h'r and	rain hail	h'vy	w.	covered	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer, N. 45° 42′, W. 46° 07′	30.34	770.6	39	3.9	71	sse.	1–2	.....	8	.....	sse.	10 h'r	10h'r	mod.	wnw.	hailing	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 45° 41′, W. 51° 30′*	29.89	759.2	32.0	0.0	.....	se.	4–5	.....	10	.....	var.	snow	&hail	mod.	s;w.	snowandhail	.....
S. S. Mosel, Capt. J. Hesse, N. 50° 30′, W. 2° 05′	30.64	778.2	45.5	7.5	.....	ese.	4	.....	2	.....	ese.	0	0	sm'h	ese.	clear	J. Hesse.
S. S. Neckar, Capt. R. Bussius, N. 50° 39′, W. 0° 26′	30.65	778.5	41.0	5.0	.....	ese.	3	.....	0	.....	.....	0	0	light	ese.	fair	Steinbronn & Tanke.
S. S. Nurnburg, Capt. A, Jaeger, N. 15° 26′, W. 25° 35′*	30.07	763.8	75.2	24.0	95	nne.	5	.....	0	.....	.....	0	0	4	nne.	clear	Moutz & Kohlenbeck.
S. S. Oder, Capt. C. Undutsch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Ohio, Capt. Gustave Meyer, Bremerhaven, Germany*	30.89	784.6	.....	.....	.....	sw.	3	.....	0	.....	.....	0	0	.....	.....	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 34° 44′, W. 152° 00′†	30.40	772.1	60	15.6	88	s.	1	.....	8	.....	s.	0	0	light	se.	cloudy	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 47° 20′, E. 170° 27′†*	30.42	772.7	48	8.9	56	sw.	6	.....	8?	.....	sw.	.....	.....	mod.	w.	clear.?	.....
S. S. Oceanic, Capt. J. Metcalf, Hong Kong, China*	30.16	766.1	62	16.7	83	ne.	4	.....	8	.....	.....	.....	.....	.....	.....	cloudy	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.84	757.9	.....	.....	.....	nnw.	1	.....	0	.....	.....	.....	.....	.....	.....	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Savannah, Georgia†	30.17	766.3	40	4.4	.....	nw.	1	.....	1	.....	nw.	4 h'r	4 h'r	.....	.....	clear	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
OREGON IMPROVEMENT CO.																	
John L. Howard, Agent, San Francisco.																	
S. S. Mississippi, Capt. E. W. Holmes, N. 47° 24′, W. 124° 46′†.	30.36	771.1	45	7.2	76	wnw.	2	.....	5	.....	nw.	.....	.....	h'vy	nw.	fair	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO.																	
K. Van Oterendorp, Agent, San Francisco.																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d Off.
S. S. Columbia, Capt. Fred. Bolles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco Calf†	30.01	762.2	38	3.3	90	n.	5	.....	0	.....	.....	.....	.....	.....	.....	.....	G. Boese.
PACIFIC COAST S. S. CO.																	
Goodal, Perkins & Co., Agents, San Francisco.																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Calf†	30.01	762.2	45	7.2	45	ne.	5	.....	0	.....	.....	.....	.....	.....	.....	fair	.....
S. S. Geo. W. Elder, Capt. H. G. Morse, N. 41° 12′, W. 124° 47′†	30.27	768.8	47	8.3	.....	nne.	4	.....	4	.....	n.	0	0	sm'h	nw.	clear	.....
S. S. Idaho, Capt. H. M. Hayward, N. 41° 44′, W. 124° 10′†	30.50	774.7	45	7.2	60	n.	4	.....	1	.....	w.	.....	.....	.....	.....	clear	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 42′, W. 118° 14′†	29.80	756.9	53	11.7	53	wsw.	6	.....	0	.....	.....	0	0	long	sw.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Calf†	30.22	767.6	40	4.4	82	n.	4	.....	0	.....	.....	6 h'r	light	.....	.....	clear	.....
S. S. State of California, Capt. G. Debney, Astoria, Oregon†	30.37	771.4	35	1.7	?	calm	0	.....	6?	.....	sw.	0	0	.....	.....	cloudy?	.....
S. S. Victoria, Capt. W. E. Plummer, San Francisco, Calf†	30.03	762.8	43	6.1	42	n.	5	.....	0	.....	.....	.....	.....	.....	.....	clear	J. C. Hunter.
PACIFIC MAIL S. S. CO.																	
Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.																	
S. S. Australia, Capt. ———	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of New York, Capt. W. B. Cobb, S. 32° —′, E. 178° 30′†	29.93	760.2	74	23.3	81	nne.	3	.....	1	.....	nne.	0	0	light	ne.	clear	W. H. Hawes, 2d Off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 36° 05′, W. 151° 58′†	30.60	777.2	59	15.0	76	e.	2	.....	0	.....	.....	0	0	mod.	e.	clear	J. M. Dow, 3d Officer.
S. S. City of Sydney, Capt. H. C. Dearborn, S. 18° 43′, W. 172° 21′†	29.60	751.8	80	26.7	86	nw.	7	.....	10	.....	w.	0.125	3.2	h'vy	w.	heavy rain	E. Le Saik.
S. S. City of Tokio, Com. J. Maury N. 29° 45′, E. 129° 52′†	30.21	767.3	60	15.6	59	ne.	7	.....	10	.....	ne.	1 h'r	hv'y	high	nw.	drizzling	W. Thaxter.
S. S. Colima, Capt. Robert Searle, N. 24° 17′, W. 111° 50′†	29.94	760.5	62	16.7	88	nw.	4	.....	7	.....	nw.	0	0	mod.	nw.	cloudy	.....
S. S. Grenada, Capt. M. Connolly, Panama, Panama†	29.90	759.4	75	23.9	90	nw.	2	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. South Carolina, Capt. W J. Russell, N. 21° 30′, W. 105° 26′†	29.96	761.0	66	18.9	84	nw.	1	.....	0	.....	.....	0	0	small	nw.	clear	A. W. Hart, 2d Off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.25	768.3	64	17.8	78	calm	0	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
QUEBEC S. S. CO.																	
E. A. Outerbridge & Co., Agents, New York.																	
S. S. Burmuda, Capt. F. M Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 33° 28′, W. 69° 11′	.....	.....	.....	.....	.....	w.	5	.....	8	.....	.....	4 h'r	h'vy	h'vy cross	sw; nw.	fair	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Atbrecht & Bull.
S. S. Nederland, Capt. J. Uberwig	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Rhynland, Capt. W. G. Randle, N. 43° 50′, W. 56° 44′*	29.20	741.7	42	5.6	83	se.	7	.....	10	.....	.....	0	0	high	se.	rainy	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jameson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon N. 49° 52′, W. 15° 28′*†	30.24	768.1	55	12.8	80	sse.	6	.....	8	.....	sse.	0	0	long	s.	cloudy	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, N. 47° 48′, W. 29° 14′*	30.06	763.5	60	15.6	.....	wsw.	5	.....	5	.....	wnw.	rain	&hail	mod.	wsw.	fair	Olsen & Assfeld.
ROTTERDAM LINE.																	
Fundh, Edye, & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. J. Vis, N. 45° 20′, W. 41° 21′*	30.16	766.1	48.8	9.3	90	w.	6	.....	7	.....	w.	2 h'r	2 h'r	high	nw. w.	cloudy	.....
THINGVALLA LINE.																	
Funch, Edye, & Co., Agents, New York.																	
S. S. Thingvalla, Capt. S. T. Laub, Copenhagen, Denmark†	30.85	783.6	34.7	1.5	.....	nw.	1	.....	2	.....	nw.	0	0	.....	.....	clear	J. T. Elberling.
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters, N. 42° 58′, W. 47° 59′*†	30.21	767.3	49	9.4	.....	se.	6	.....	10	.....	sse.	0	0	light	nw.	cloudy	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agents, New York.																	
S. S. Adriatic, Capt. J. W. Jennings, N. 47° 36′, W. 32° 48′*†	30.53?	775.4?	51	10.6	.....	w.	6	.....	5	.....	w.	sh'rs	shr's	high	w.	raining	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell, Ballycottin, Ireland*†	30.40	772.1	48	8.9	92	sse.	4	.....	10	.....	s.	0	0	sm'h	.....	cloudy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving, N. 44° 56′, W. 52° 48′†	29.75	755.6	30	—1.1	78	s.	6	.....	10	.....	.....	4 h'r	4 h'r	mod.	s.	misty	H. Goulden, 4th officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell, Hull, Eng.*	30.64	778.2	40	4.4	.....	.....	.....	.....	.....	.....	.....	24 h'r	24 h'r	.....	.....	.....	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. Pensacola, Florida †	30.25	768.3	45	7.2	73	n.			1 8		n.	0	0			clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey,																	C. Bailey.
Bk. Alpha, Capt. Ole Grönn N. 34° 48′, W. 12° 02′	30.18	766.6	65	18.3		ene.	2	0	2		e.	0	0	long	wsw.	fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, Ponce, Porto Rico, W. I.*†	30.14	765.5	78	25.6		ne.	2		2		ene.	1 h'r	1 h'r			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 29° 25′, W. 36° 15′*†	30.33	770.4	68	20.0		w.	3		10		w.	1 h'r	light	sm'h	w.	drizzling	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 49° 50′, W. 19° 30′*†	30.04	763.0				nw.	3				nw.	1 h'r	light	mod.	wnw.	light rain	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill, S. 28° 46′ W. 44° 39′†	29.80	756.9				nne.	3		0			0	0	sm'h	ne.	clear	A. J. Pettingill.
S. Enoch Train, Capt. H. D. Chapman, Off Helgoland, Denmark*	30.81	782.6				ese.	3		2		se.	0	0	sm'h		very fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, N. 54° 40′ E. 4° 12′*	30.79	782.1				sse.	4		1		se.	0	0	short	se.	clear	J. C. Andersen.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C.	30.07	763.8	31	—0.6		w.	2		0			snow	snow			clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison S. 41° 30′, W. 80° 23′	29.87	758.7	55	12.8		wsw.	5		5?		wsw.	0	0	hv'y	wsw.	clear?	G. D. Morrison.
Bk. Freya, Capt. Blaouw, N. 40° 44′, W. 21° 21′			60	15.6		sw.	2		8		s.	0	0	sm'h		fair	
Bk. Gamaliel, Capt. D. J. Anthony, S. 8° 16′, W. 34° 21′*†	29.05	737.9				ese.	4		0			0	0	sm'h	ene.	fair	
Bk. Geo. Booth, Capt. D. Williams, N. 38° 14′, W. 57° 50′*†	29.20	741.7	60	15.6		wsw.	9					rain	rain		wsw.	threatening.	D. Williams.
Bk. Granville, Capt. R. Bonney																	
Schr. Henry Denison, Capt Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 29° 16′, W. 4° 06′*	29.60	751.8				wnw.	8		6		nnw.	6 h'r	light	hv'y	nw.	clearing	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,											w.						G. E. Cann.
Kryolith, Capt. Adam Smith																	A. Smith.
Schr. Moravian, Capt. Geo T. Le Compte																	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen, N. 36° 00′, W. 4° 14′*†	30.25	768.3				e.	4				e.	6 h'r	6 h'r	h'vy	e.	cloudy	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 46° 24′, W. 13° 20′*†	30.57	776.5	54	12.2	93	s.	3		10		ssw.			mod	ssw. nw.	overcast	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Anconaz, Fiume, Austria†	30.57	776.5	43	6.1	42	ne.	4		0							clear	G. S. d'Anconaz.
Bk. Pilgrim, Capt. J. Connolly, N. 2° 15′, W. 28° 45′*†	29.85	758.2				var.			8		var.	0	0			cloudy	J. Connolly.
Schr. S. B. Hubbard,																	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, N. 2° 03′, E. 24° 21′*	29.85	758.2	78.4	25.8	89	calm	0		7		s.			sm'h	s.	threatening.	H. N. T. Sumner.
Bk. Sunbeam, Capt. Joseph Hand, N. 38° 41′, W. 9° 05′	30.16	766.1	61	16.1	94	calm	0		8		sw.	1 h'r	mod.			cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 34° 48′, W. 13° 08′*†	30.30	769.6				nw.	5		4		nw.	0	0				
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 36° 38′, W. 68° 18′*†	29.35	745.5	58	14.4	100	w.	9				nw.			h'vy	w.	covered	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, N. 13° 39′, W. 31° 05′*†	30.10	764.5				ne.					ne.			r'gh	e.	hazy	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 2, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.17	766.3	66.6	19.2	90	sw.			2		4			0	0	cloudy	Moiroud.
Algiers			30.28	769.0	59.0	15.0	70	ne.			1		0			0	0	clear	Nicolas.
La Calle			30.39	771.9	76.3	24.6	68	ssw.			5		5			0	0	cloudy	Fonfréde.
Tunis			30.43	773.0															Jacques.
Sfax																			Gau.
Saida			30.26	768.7	49.6	9.8	66	sw.			1		2			inap.	inap.	fair	Dumas.
Tebessa			30.38	771.7	48.2	9.0	68	se.			3		9			inap.	inap.	covered	Derché.
Geriville					43.3	6.3	53	sse.			8		10			0	0	covered	Louchamp.
Laghouat			30.35	771.0	47.5	8.6	50	e.			4		4			0	0	cloudy	Herbin.
Biskra			30.39	772.0	60.8	16.0	41	se.			3		9			0	0	covered	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.97	761.2	30.06	763.5	62.0	16.7	86	s.	2	0.9			3			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	30.24	768.0	30.83	783.1	31.8	— 0.1	71	e.			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.99	761.8	30.82	782.8	28.9	— 1.7	90	wnw.	1.8	0.8			3			0	0		Dr. Wierzbiski.
Eperies	29.82	757.4	30.76	781.4	30.9	— 0.6	57	n.			2	cs	7 s		s.	0	0		Julius Mikolik.
Gratz	29.46	748.3	30.82	782.7	28.4	— 2.0	53	s.			2		0			0	0		Andreas Rospini.
Hermannstadt	29.19	741.3	30.75	781.0	24.3	— 4.3	89	n.			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.25	743.0	30.72	780.3	23.2	— 4.9	93	ne.			2		0			0	0	clear	The Staff.
Lemberg	29.63	752.5	30.69	779.5	29.1	— 1.6	80	ne.			1		10			0	0		Dr. T. Stanecki.
Pola	30.61	777.4	30.73	780.5	39.6	4.2	35	wnw.			1		0			0	0	foggy	I. R. Hydrographic Office.
Szathmar	30.21	767.3	30.69	779.5	31.6	— 0.2	76	sw.			1		5			0	0		Joseph Midlinszky, S. J.
Szegedin	30.47	774.0	30.78	781.7	31.6	— 0.2	70	calm			0		0			0	0		Karl Stancel.
Trieste	30.64	778.3	30.74	780.9	41.4	5.2	24	e.			1		0			0	0		Rieder.
Vienna	30.02	762.6	30.79	782.1	31.3	— 0.4	36	se.			1		0			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.16	766.1	30.26	768.6	42.2	5.7	81	sw.	15	6.7			9			0	0	misty	W. Boswell.
Armagh, Observatory	30.18	766.6	30.43	772.9	44.0	6.7	92	sw.	7	3.1			10					gloomy	S. Call.
Bidston, Liverpool Obs'y			30.46	773.7	37.7	3.2	80	se.	9	4.0			10					overcast	John Hartnup.
Bolton, Sharples	29.91	759.7	30.47	773.9	33.0	0.6	87	se.					10					gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.97	761.2	30.36	771.1	42.5	5.8	84	sw.			1		6			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	80.0	26.7	71	ne.			3		2					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			30.52	775.2	36.0	2.2	70	s.			0.4		10					foggy	John McLaren.
Chatham, School M. E.	30.42	772.7	30.56	776.2	37.2	2.9	80	calm			0		10					misty	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.28	769.1	30.52	775.2	48.4	9.1	74	w.			1		9					foggy	The Staff.
Fort Napier, Natal	27.68	703.1	29.89	759.2	81.2	27.3	58	calm			0		6						Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.86	758.4	89.0	31.7	63	nw.			1		3						Sergt. John Robinson.
Galway, Queen's College			30.36	771.1	50	10.0	85	s.			2		2					blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.13	765.3	30.18	766.6	60.0	15.6	87	ne.			3		4					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.14	765.5	30.35	770.9	43.7	6.5	91	sw.			4		10 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.38	771.6	30.56	776.2	36.1	2.3	92	wsw.			1		10					overcast	The Staff.
Guernsey	30.22	767.6	30.54	775.7	41.6	5.3	62	se.			1		0					blue sky	A. Collenette, F. M. S.
Kew, Observatory	30.52	775.2	30.56	776.2	36.0	2.2	75	e.	3	1.3			9					foggy	The Staff.
Leicester, Museum	30.25	768.3	30.52	775.2	34.9	1.6	89	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.39	771.9	30.47	773.9	50.0	10.0	74	ne.			4		6					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.20	767.1	30.25	768.3	73.2	22.9	85	ne.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.98	761.5	30.54	775.7	34.0	1.1	79	ssw.			0–1		10					misty	John Mac Email.
Oxford, Radcliffe Obs'y	30.30	769.6	30.53	775.4	36.4	2.4	86	s.			1		10					misty	The Staff.
Plymouth	30.42	772.7	30.49	774.4	50.3	10.2	78	sw.			2		8					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.17	766.3	45	7.2	83	sw.	26	11.6			4					showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.16	766.1	30.24	768.1	28.6	— 1.9	88	n.			3		10					overcast	W. H. Lyne.
Sheffield	30.19	766.8	30.48	774.2	40.2	4.6	77	sw.			1		3			0	0	d. clouds	W. F. Cooper.
Silloth Rectory	30.35	770.9	30.38	771.6	41.5	5.3	84	sw.			4		10			0.015	0.4	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.47	773.9	34.2	1.2	78	se.	1	0.4			10					foggy	I. New.
Stratfield Turgiss	30.26	768.6	30.49	774.4	35.2	1.8	77	se.			0.7		10					foggy	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.41	772.4	30.47	773.9	52	11.1	66	e.			4		6					d. clouds	W. Newcombe.
Valencia, Observatory	30.42	772.7	30.44	773.2	49.9	9.9	87	nnw.	4	1.8			4					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.00	762.0	30.03	762.7	77.0	25.0	94	e.	10.0	4.5		0	2 k			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.87	758.7	29.91	759.7	81.3	27.4	68	ssw.	21	9.4		0	0			0	0		The Staff, for D. Gill.
Worcester* †																			C. Stokes.

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STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.01	762.2	30.05	763.3	— 1	—18.3	100	se.	6	2.7		2cs	8 s			0.250	6.3	fair	H. J. Cundall, C. E.
Chatham, N. B.*	29.96	761.0	30.03	762.7	— 2	—18.9	100	e.	2	0.9			10 n		e.	0.01	0.3	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.71	754.6	29.73	755.1	6	—14.4	100	calm	0	0			10 n		calm	0.02	0.5	light snow	J. McWilliams.
Fort Garry, Manitoba*	29.06	738.1	30.01	762.2	—15	—26.1	100	n.	2	0.9		5 k	5 ks	n.	n.	0.100	2.5	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	29.97	761.2	30.12	765.0	2	—16.7	100	se.	4	1.8			10 s			0.15	3.8	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.56	750.8	29.92	760.0	28	— 2.2	84	w.	8	3.6		5 c	0	sw.		0.04	1.0	fair	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.57	751.1	29.79	756.7	30	— 1.1	96	sw.	17	7.6		0	2 s			0.04	1.0	clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.11	739.4	29.83	757.7	28	— 2.2	88	sw.	14	6.3		2 k	5 ks	sw.	sw.	0.17	4.3	fair	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.29	744.0	30.02	762.5	29	— 1.7	89	sw.	7	3.1		0	0			0	0	clear	H. Morgan.
Port Stanley, Ontario	29.33	745.0	30.01	762.2	27	— 2.8	88	w.	11	4.9		hz.	0			0	0	hazy	M. Payne.
Quebec, Quebec*	29.39	746.5	29.74	755.4	12	—11.1	100	calm			0		10 n			0.15	3.8	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.28	743.7	29.77	756.1	10	—12.2	91	calm	0	0		5 c	0	nw.		0.05	1.3	fair	W. H. McIntyre.
Saugeen, Ontario*	29.14	740.1	29.88	758.9	29	— 1.7	96	sw.	15	6.7			10 ks			0.02	0.5	cloudy	
St. Andrews, N. B.	29.85	758.2	29.90	759.4	23	— 5.0	95	s.	1	0.4			10 n			0.01	0.3	light snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.05	763.3	30.11	764.8	— 2	—18.9	91	s.	2	0.9		10 cs	0			1.00	25.4	fair	T. C. Hill, C. E.
Toronto, Ontario*	29.58	751.3	29.98	761.5	28	— 2.2	84	w.	8	3.6		0	2 ks			0.01	0.3	clear	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.90	759.4	29.97	761.2	18	— 7.8	80	se.	6	2.7			10 n			0.33	8.4	light snow	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.70	754.4	29.98	761.5	3	—16.1		ne.	3	1.3		0	0			0.60	15.2		John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.57	776.5	30.87	784.1	32.4	0.2		nne.			3		10			blank	blank		N. Titoushkin.
Sung-shu-chwang†	24.98	634.4			21.4	— 5.9		calm			0		10			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.47	773.8	30.49	774.4	43.0	6.1	84	ne.	6.5	2.9			10			0.012	0.3	covered	M. Marc Dechevrens, S'
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.61	777.4	30.65	778.6	32.9	0.5	76	sw.	20	9			8						Oversergent Fischer.
Fanöe	30.56	776.1	30.58	776.6	32.9	0.5	83	s.			4		8						Overloerer Lauridsen.
Godthaab, Greenland	29.26	743.1	29.30	744.2	— 1.5	—18.6		n.			3		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.00	736.6	29.04	737.7	28.8	— 1.8		sw.			7		10					snowing	A. O. Thorlacius.
Thorshavn	29.78	756.4	29.82	757.3	40.3	4.6	68	sw.	29	13			5						Overloerer Bergh.
Vestervig	30.39	771.9	30.48	774.2	34.0	1.1	85	s.			4		3						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.81	757.2	30.51	774.9	45.3	7.4	94	sse.			2		kn			0	0		M. Labroue, Director.
Alençon, Normal School	30.03	762.8	30.58	776.8	34.2	1.2	96	ne.			2					0	0		M. Nicot, Director.
Arras, Engineer School	30.31	769.9	30.58	776.8	37.0	2.8	100	se.			1		c			0	0	clear	M. Klein, Commandant.
Avignon, Normal School	30.54	775.6	30.61	777.6	49.1	9.5	66	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.02	762.4	30.61	777.4	36.3	2.4	89	se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.34	770.5	30.62	777.8	31.8	—0.1	74	ene.			1		0			0	0	clear	M. Frère Eugène Marié
Besançon, Normal School			30.58	776.7	37.8	3.2	91	ne.			1		10 n		sw.	0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	30.18	766.6	30.45	773.4	50.0	10.0	60	se.			3		1			0	0	almost clear	M. Rayet, Director.
Bourges, Normal School	30.04	762.9	30.66	778.7	34.7	1.5	93	ne.			1		0			0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.26	768.6	30.50	774.8	50.7	10.4	76	ese.			1		0			0	0	clear	M. de Kennaree, Dir.
Caen, Normal School	30.54	775.8	30.62	777.8	39.6	4.2	80	se.			1		0			0	0	clear	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.21	767.3	30.54	775.8	34.7	1.5	72	se.			1		0			0	0	clear	M. Jadot, Director.
Charleville, Normal School	30.12	765.1	30.65	778.6	34.2	1.2	51	se.			2		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.14	740.1	30.52	775.3	51.4	10.8	33	se.			1	0	0			0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.73	755.1	30.61	777.4	33.8	1	96	n.			2		fg			0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.71	754.6	30.64	778.2	33.3	0.7	80	se.			1	1	1	se.	se.	0	0	clear	Dr. Coulet, Director.
Gap, Normal School	27.98	710.8	30.60	777.2	45.7	7.6	22									0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.42	747.2	30.59	776.9	47.3	8.5	34	e.			3		8		se.	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.84	757.9	30.65	778.5	38.5	3.6	72	ese.			1	0	0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.85	732.8	30.59	776.9	47.3	8.5	67	s.			1	0	0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.28	769.1	30.56	776.2	51.8	11	52	s.			1		1		s.	0	0	clear	M. Olliffrault, Director.
Lescar, Normal School	29.84	758.0	30.42	772.6	50.0	10	68	nw.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.43	772.9	30.53	775.5	50.9	10.5	68	se.			1		0			0	0	clear	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.52	749.9	30.64	778.3	36.1	2.3	83	ese.			1		5 n			0	0	fair	M. André, Director.
Mans, Normal School	30.27	768.8	30.60	777.1	37.6	3.1	75	sw.			1		0			0	0	clear	M. Piboen, Director.
Marseille, Observatory	30.29	769.4	30.57	776.4	50.4	10.2	26	ene.			3		5		ene.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.08	637.1	29.93	760.1	29.8	—1.2	100	e.	5.6	2.5			10			0.098	2.5	foggy	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.47	773.9	30.58	776.8	51.4	10.8	43	ne.			3		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.81	757.1	30.64	778.3	31.3	—0.4	89	nw.			1	0	0			0	0	clear	M. Hasse, Director
Nantes, Observatory	30.37	771.5	30.54	775.6	53.6	12	48	ese.			0—1	0	0			0	0	clear	M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.43	772.8	30.54	775.8	49.3	9.6	71	se.	9.4	4.2			10		se.	0.315	8.0	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.33	541.8			17.6	—8.0		se.			1		5		se.	0	0	cloudy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.48	748.8	30.60	777.2	34.9	1.6	96						2		s.	0	0	foggy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.50	647.6			33.6	0.9	44	sse.			4		0			0	0	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.45	773.4	30.48	774.2	50.7	10.4	72	se.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.25	768.4	30.48	774.1	48.6	9.2	54	se.			1		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.34	719.7	30.57	776.4	42.1	5.6	46	e.			2		0			0	0	clear	M. Sorger, Director.
Rouen, Normal School	30.54	775.8	30.59	777.0	32.7	0.4	96	ese.			1		0			0	0	clear	M. Platrier, Director.
Saint Lô, Normal School	30.41	772.4	30.57	776.4	45.5	7.5	65	ese.			1		1		se.	0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.42	772.6	30.58	776.8	36.3	2.4	65	sw.			1		0			0	0	clear	M. Renou, Director.
Toulouse, Observatory	29.76	755.9	30.49	774.5	51.1	10.6	67	sse.			6		2		se.	0	0	slightly cl'dy	M. Baillard, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.06	763.6	30.56	776.1	36.7	2.6	72	e.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.30	769.7	30.60	777.1	37.2	2.9	6.3	s.			1		0			0	0	clear	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.78	756.4	30.65	778.6	32.4	0.2	55	n.			2		0			0	0		Prof. Dr. Hoh.
Berlin	30.53	775.4	30.72	780.2	32.7	0.4	57	se.			1		0			0	0		Prof. Dr. Arndt.
Breslau	30.24	768.0	30.78	781.9	30.9	—0.6	59	se.			2		0			0	0		Royal University Obs'y.
Carlsruhe	30.20	767.1	30.68	779.2	30.6	—0.8	83	sse.			1		0			0	0		Albert Senz.
Cassel	29.89	759.2	30.61	777.4	29.8	—1.2	86	s.			1		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.28	769.1	30.67	779.1	30.6	—0.8	54	ese.			1		0			0	0		Physical Society.
Friedrichshafen	29.16	740.7	30.71	779.9	27.7	—2.4	68	s.			2		10	sw.		0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.56	776.3	30.66	778.7	32.0	0.0	78	se.			2		3			0	0		E. Preller.
Kiel	30.62	777.7	30.63	778.1	33.3	0.7	70	sw.			2		2			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.27	768.9	30.73	780.5	29.1	—1.6	64	s.			1		0			0	0	hazy	H. Leppig, Asst.
Magdeburg	30.49	774.5	30.70	779.7	33.6	0.9	65	se.			2		0			0	0		Dr. Assmann.
Memel	30.68	779.3	30.73	780.5	33.8	1.0	80	wnw.			3		10 s						Issermann.
Munich	28.75	730.2	30.65	778.5	21.0	—6.1	70	calm.			0		0			0	0		Central Station.
Neufahrwasser	30.76	781.4	30.78	781.8	32.9	0.5	68	sw.			1		3			0	0		A. Lothes.
Neustadt, Palatinate	30.10	764.6	30.64	778.3	27.1	—2.7		e.			2		0			0	0		Dicknether.
Stuttgart	29.65	753.1	30.61	777.4	29.3	—1.5	84	s.			1		0			0	0		Prof. Dr. Schoder
Wustrow	30.68	779.2	30.70	779.8	32.4	0.2	100	sse.			2	0	5 s			0	0		Profs. Brandes & Reimer.
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.97	761.2	30.38	771.7	31.6	—0.2		ne.			0.5		10			0.307	7.8	snowing	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	30.07	763.8	30.12	765.2	73.1	22.8	49	wsw.	18	8.0			5	nw.		0	0	d. clouds	
Deesa	29.53	750.1	30.02	762.4	73.2	22.9	38	nne.	13.9	6.2			0			0	0	blue sky	
Bombay	29.92	760.0	29.96	760.9	78.5	25.8	55	nnw.	21	9.4			0			0	0	blue sky	
Poona, Yarrowda.	28.05	712.4	29.88	759.1	84.8	29.3	26	wnw.	15	6.7			0			0	0	blue sky	
Belgaum	27.37	695.2	29.89	759.2	80.9	27.2	21	ssw.	7	3.1			8	s.		0	0	d. clouds	
Lahore	29.27	743.5	30.05	763.2	63.6	17.6	34	w.	2.3	1.0			0			0	0	blue sky	
Roorkee	29.04	737.6	29.98	761.4	62.0	16.7	59	nw.	5.2	2.3			2			0	0		
Agra	29.44	747.7	30.03	762.6	66.0	18.9	54	nw.	5.6	2.5						0	0		
Nagpur	28.86	733.0	29.90	759.3	83.5	28.6	27	nw.	3.5	1.6			0			0	0	blue sky	
Jubbulpore	28.63	727.1	30.01	762.3	71.3	21.8	41	n.	0.3	0.1			0			0	0	blue sky	
Lucknow	29.58	751.4	29.97	761.3	67.3	19.6	35	wsw.	8.7	3.9			0			0	0	blue sky	
Allahabad	29.65	753.2	29.98	761.4	67.1	19.5	40	w.	5.1	2.3			0			0	0	blue sky	
Patna	29.74	755.3	29.93	760.2	68.9	20.5	43	wnw.	6.7	3.0			0			0	0	blue sky	
Hazaribagh	27.90	708.6	29.96	760.9	67.8	19.9	40	w.	10.4	4.6						0	0	blue sky	
Cuttack	29.81	757.2	29.90	759.3	84.0	28.9	57	e.	0.4	0.2			2			0	0	d. clouds	
Calcutta, Alipore	29.88	759.0	29.91	759.6	75.8	24.3	56	nw.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.73	755.2	29.86	758.4	70.9	21.6	51	w.	1.5	0.7			0			0	0	blue sky	
Chittagong	29.84	757.8	29.93	760.2	75.1	23.9	86	sw.	3.9	1.7			5			0	0	blue sky	
Sibsagar	29.52	749.8	29.87	758.7	64.6	18.1	81	ne.	2.4	1.1			8	w.	w.	0.02	0.5	d. clouds	
Jeypore	28.56	725.5	30.06	763.5	64.2	17.9	28	nne.	4.8	2.2			2	n.		0	0	d. clouds	
Zanzibar, Africa	29.82	757.4			85.6	29.8	67	ne.	7.8	3.5		c	4 fk		nne.	0	0	d. clouds	
Trichinopoly	29.68	753.9			85.6	29.8	37	calm	0	0			0			0	0	blue sky	
Bellary	28.42	721.9			88.8	31.6	17	nw.	1.7	0.8		3 c	5	s.		0	0	overcast	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	30.32	770.0	30.74	780.8	38.3	3.5	36	ne.	1.3	0.6			0			0	0		Prof. Giovanni Clodig.
Milan	30.21	767.3	30.72	780.3	36.3	2.4	58	nw.	3.1	1.4			0			0	0		Prof. Schiaparelli.
Padua	30.65	778.5	30.76	781.4	35.2	1.8	56	nnw.	1.3	0.6			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.80	757.0	30.76	781.2	36.3	2.4	66	s.	1.8	0.8			1	n.		0	0		Prof. P. F. Denza.
Genoa	30.48	774.1	30.68	779.2	41.0	5.0	43	ne.	8.1	3.6			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.73	729.7	30.76	781.2	30.2	— 1.0	74	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.09	779.4	30.74	780.7	38.1	3.4	71	n.	14.3	6.4			5			0	0		Prof. Luigi Guidi.
Florence	30.41	772.1	30.67	778.9	43.2	6.2	27	ne.			4		0			0	0		Prof. Costantino Pitter.
Leghorn	30.56	776.3	30.65	778.6	43.0	6.1	33	ene.	17.4	7.8			3			0	0		Prof. P. Monte.
Rome	30.41	772.3	30.59	776.9	40.8	8.2	27	nne.	2.5	1.1			0			0	0		Prof. P. S. Ferrari.
Lecce	30.31	769.9	30.57	776.5	39.6	4.2	37	nne.	26.2	11.7			3	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.63	752.5	30.56	776.1	39.2	4.0	67	wnw.	11.2	5.0			9	nw.		0	0		Prof. D. Conti.
Cagliari	30.26	768.5	30.45	773.5	50.5	10.3	62	se.			4		10			0.020	0.5		Prof. A. Pacinotti.
Palermo	30.27	768.9	30.53	775.5	48.7	9.3	48	ese.	6.9	3.1			6	ene.		0	0		Prof. G. Ciacciatore.
Syracuse	30.42	772.6	30.47	773.8	47.7	8.7	78	ene.	18.6	8.3			10	ene.		0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.02	762.5	30.58	776.6	42.6	5.9	53	ene.	18.6	8.3			1	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.42	569.5			18.7	— 7.4	39	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.46	570.4			21.0	— 6.1	51	se.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.56	776.2	30.60	777.2	18.9	— 7.3	66	s.	3.1	1.4		2ck;cs	0	w.				fair	
Hakodate	30.58	776.7	30.59	777.0	27.5	— 2.5	50	calm	0	0			9			0	0	cloudy	
Hiroshima, I. M. Obs'y	30.45	773.4	30.47	773.9	39.3	4.1	09	nne.	10.9	4.9		ck	10 s			0	0	covered	K. Sasaki.
Kanazawa	30.43	772.9	30.54	775.7	34.9	1.6	83	n.	5.1	2.3		ck	10 s			0	0	overcast	S. Endo.
Kioto	30.28	769.1	30.47	773.9	39.7	4.3	71	nnw.	3.3	1.5		ck	10 s		sw.	0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.14	765.5	30.35	770.9	44.3	6.8	67	ne.	15.0	6.7			10 s			0.095	2.4	overcast	S. Takehayashi.
Niigata	30.53	775.4	30.57	776.5	32.0	0.0	91	se.	0.4	0.2		8 ck	0			0	0	cloudy	
Nobiru	30.56	776.2	30.58	776.7	24.5	— 4.2	97	nnw.	5.8	2.6		1 cs	0			0	0	clear	H. Midzushina.
Supporo					15.2	— 9.3	82	calm	0	0			10			0	0	covered	
Tokei Obs'y, Yeddo	30.46	773.7	30.53	775.4	32.4	0.2	95	nne.	6.8	3.0		2 ck	8 n	ne.	w.	0.302	7.7	snowing	The Staff.
Wakayama	30.41	772.4	30.46	773.7	38.0	3.3	88	ene.	4.2	1.9		9ck·cs	1 n	wsw.	nne.	0.169	4.3	light rain	Y. Kuwamues.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Sefior Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																0	0		Vicente Fernandez.
Leon	24.41	619.9	30.25	768.3	46.9	8.3	80	ssw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.81	757.3	30.08	764.0	58.8	14.9	76	n.	1.6	0.8		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.08	586.2	30.22	767.7	47.3	8.5	76	calm	0	0		0	0			0	0		The Staff.
Morelia	24.22	615.3	30.43	773.1	50.9	10.5	78	ne.			4	3c	4 k	se.	s.	0	0	cloudy	M. Tena, M. D.
Puebllon, Aguascalientes	23.93	607.8	30.02	762.6	49.1	9.5	72	calm	0	0	0	0	0			0	0		M. Y de Leon, M. E.
Puebla, Catholic Institute	23.47	596.0	30.36	771.1	42.8	6.0	87	calm	0	0		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.16	613.9	30.28	769.2	56.2	13.4	52	sw.			1	2	0	w.		0	0	clear	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.42	569.6	30.03	762.7	46.7	8.5	82	sw.	13.9	6.2		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.70	754.4	29.89	759.2	81.7	27.6	72	e.	18.0	8.0		1 cs	2 ks;k		e.	0.02	0.5	fair	Oliver & Figoc.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.61	777.5	30.61	777.5	34.7	1.5		ssw.			3					0	0		
Groningen	30.52	775.2	30.58	776.6	33.4	0.8		s.			1					0	0		
Helder	30.57	776.5	30.57	776.5	31.6	— 0.2		sse.			1					0	0		
Hellevoetsluis	30.19	766.9	30.19	766.9	35.8	2.1	61	s.			2					0	0		
Utrecht	30.56	776.3	30.61	777.5	34.3	1.3	70	se.			1		2			0	0	lightly cl'dy.	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.21	767.2	30.27	768.8	38.8	3.8	73	s.	34	15			10			0	0		
Brono	29.85	758.2	29.89	759.2	41.7	5.4	68	sw.	18	8			9			0.748	19.0		
Christiania	30.20	767.1	30.35	771.0	33.6	0.9	87	sw.	7	3			8			0.004	0.1		
Gjæsvær	29.41	747.0	29.43	747.6	41.4	5.2		ssw.			4		10					raining	
Lodingen	29.60	751.9	29.65	753.1	41.5	5.3	90	sw.			8		10			0.331	8.4	raining	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					58.6	14.8	82	e.	8.7	3.9			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.28	743.8	30.30	769.7	54.0	12.2	60	ne.	7.4	3.3			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.17	766.3	30.26	768.5	64.0	17.8	63	se.	0.7	0.3			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.94	760.4	30.30	769.7	52.7	11.5	71	ne.	14.3	6.4			0			0	0		The Staff.
Ponta Delgada, Azores	30.28	769.0	30.35	770.8	62.2	16.8	80	calm	0	0			3			0	0		
Saint Paul de Loando	29.67	753.6	29.87	758.6	82.4	28.0	77	w.	0.7	0.3			7	e.		0	0		
Serra da Estrella	25.44	646.2	30.31	769.8	38.7	3.7	82	ese.	6.9	3.1			9			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.91	734.2	30.07	763.7	14.5	— 9.7		sw.	31	14			10 n			0.012	0.3		Major K. Lasarew.
Archangel	29.95	760.6	29.97	761.1	26.2	— 3.2	87	wnw.	4	2			10			0	0		Capt. Sselwerstow.
Astrakhan	30.38	771.7	30.30	769.6	11.7	—11.3	65	wsw.	4	2		0	1 s			0.016	0.4		Capt. Wisganow.
Barnaul	29.91	759.7	30.47	773.9	4.6	—15.2	83	calm	0	0			9			0	0	light clouds	Meteorological Obs'y.
Dorpat	30.26	768.6	30.52	775.2	31.8	— 0.1	87	wnw.	9	4			10 n			0.004	0.1		Observatory.
Ekaterinburg	28.86	733.0	29.92	760.0	— 0.2	—17.9	67	sw.	9	4		cs	1 s			0	0		Meteorological Obs'y.
Kasan	29.53	750.0	29.82	757.5	8.1	—13.3	85	ssw.	2	1			10			0.024	0.6	light snow	Observatory.
Kertch	30.33	770.4	30.35	770.9	19.9	— 6.7	81	n.	9	4		0	4 k			0	0		Lagorio & Sastyrez.
Kieff	29.76	755.8	30.44	773.1	26.6	— 3.0	85	nw.	22	10		c	10 ks			0	0		Observatory.
Lugan	30.02	762.5	30.24	768.1	19.8	— 6.8	78	w.	18	8			10			0.004	0.1		Meteorological Obs'y.
Moscow	29.64	752.9	30.15	765.8	27.0	— 2.8	74	wnw.	4	2		0	8 ks			0	0		Meteorological Obs'y.
Nikolaiev	30.42	772.6	30.49	774.4	26.6	— 3.0	83	n.	13	6			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.40	772.1	30.48	774.3	— 2.2	—19.0	70	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.67	778.9	30.81	782.5	24.8	— 4.0	68	calm	0	0		1 c	0			0	0		Physical Observatory.
St. Petersburg	30.34	770.7	30.36	771.1	29.5	— 1.4	90	wnw.	16	7		0	3 ks;n			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.64	727.4	30.28	769.1	37.4	3.0	59	ne.	22	10			0			0	0		Teich, A. M.
Tiflis	28.73	729.8	30.21	767.4	36.5	2.5	89	calm	0	0			10 n			0.398	10.1	snowing	Physical Observatory.
Vladivostok	30.73	780.6	30.80	782.3	9.5	—12.5	56	n.	4	2		0	0			0	0		
Warsaw	30.34	770.6	30.80	782.2	27.1	— 2.7	74	wnw.	4	2			10 ks						Astronomical Obs'y.
Wilna	30.23	767.8	30.68	779.3	28.0	— 2.2	79	wnw.	4	2			10			0	0	heavy clouds	Berg, Assistant.
Yeniseisk	30.27	768.9	30.59	776.9	12.6	—10.8	76	e.	9	4			0			0	0		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.27	768.8	47	8.3	92	sw.			4	5	5	sw.		0.2	5.	d. clouds	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.30	769.6	30.41	772.3	51.3	10.7	87	e.	8.1	3.6			10			0.055	1.4	covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.34	770.5	30.39	772.0	59.7	15.4	51	s.	3.6	1.6		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.35	694.7	30.45	773.4	41.0	5.0	55	ne.	3.6	1.6		0	1			0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.04	712.3	30.33	770.4	50.0	10.0	59	e.	18.3	8.2		0	2			0.055	1.4	lightly cl'dy	The Staff.
Murcia, Met. Obs'y	30.11	764.9	30.27	768.8	54.5	12.5	76	w.	1.1	0.5		5	5			0.091	2.3	covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.35	745.4	30.25	768.4	56.5	13.6	61	calm	0	0		0	0			0	0	clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.08	764.0	30.14	765.6	69.2	20.7	85	se.	1.1	0.5		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.94	760.4	29.99	761.8	78.9	26.1	74	ese.	2.2	1.0		3 ck	4 ks		ne.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.13	765.3	30.23	767.8	57.9	14.4	75	ese.	3.3	1.5		0	7		ese.	0.076	1.9		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.06	763.4	30.15	765.7	74.5	23.6	90	se.	3.8	1.7		4 c	5 kn	se.	se.	0.098	2.5	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.91	759.7	30.04	763.0	75.0	23.9	79	nnw.	5.6	2.5			10 k		n.	inap.	inap.	covered	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.93	760.2	29.97	761.2	29.5	— 1.4	88	sw.			4		8			0	0		
Umea	30.04	763.1	30.10	764.4	29.5	— 1.4	64	sw.			2		4			0	0		
Hernosand	30.15	765.7	30.20	767.0	27.9	— 2.3	57	calm			0		1			0	0		
Stockholm	30.24	768.2	30.42	772.7	35.6	2.0	64	sw.			4		10			0	0		
Wisby	30.52	775.3	30.58	776.8	34.9	1.6	69	sw.			2		5			0	0		
Sub Series.																			
Upsala	30.26	768.6	30.35	770.8	33.6	0.9	77	sw.	17.2	7.7			10		w.	0	0		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.17	741.0	30.67	779.0	32.2	0.1	92	nnw.			1					0	0	covered	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.24	768.0	28.9	— 1.7	92	n.	27	12.0			10		n.	0.157	4.0		The Observatory.
Valona			30.50	774.7	39.6	4.2		nw.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.74	755.5	49.1	9.5	93	sw.			4		10 n		sw.	2.96	75.2		Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Albany, New York	29.90	759.4	30.00	762.0	33	0.6	78	s.	5	2.2			10 s		nw.	0	0	cloudy	
Alpena, Michigan	29.17	740.9	29.88	758.9	23	— 5.0	73	sw.	12	5.4		0	1 s			0.08	2.0	clear	
Atlanta, Georgia	29.02	737.1	30.24	768.1	40.5	4.7	72	sw.	4	1.8		7 c	3 s	calm	calm	0	0	cloudy	
Atlantic City, New Jersey	30.14	765.5	30.16	766.1	30	— 1.1	80	w.	1	0.4		0	0			0	0	clear	
Augusta, Georgia	30.08	764.0	30.28	769.1	34.4	1.3	89	calm	0	0		0	fg.			0	0	clear	
Baltimore, Maryland	30.11	764.8	30.16	766.1	29	— 1.7	88	calm	0	0			fg.			0	0	dense fog	
Barnegat, New Jersey	30.12	765.0	30.14	765.5	26.2	— 3.2	88	w.	6	2.7		0	0			0	0	clear	
Bismarck, Dakota	28.03	711.9	30.01	762.2	17	— 8.3	83	nw.	8	3.6		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho																			
Boston, Massachusetts	29.83	757.7	29.99	761.7	27.5	— 2.5	77	sw.	9	4.0		0	hz.			0	0	clear	
Brownsville, Texas	29.84	757.9	29.89	759.2	66	18.9	100	se.	4	1.8			10 s		se.	0.37	9.4	cloudy	
Buffalo, New York	29.24	742.7	30.04	763.0	32.3	0.2	93	sw.	25	11.2		3 ck	3 ks	sw.	sw.	0	0	fair	
Burlington, Vermont	29.55	750.6	29.86	758.4	32.3	0.2	87	s.	14	6.3			10 n		w.	inap.	inap.	light snow	
Cairo, Illinois	29.74	755.4	30.16	766.1	38.0	3.3	87	s.	4	1.8		10 ck	0	s.		0	0	cloudy	
Campo, California	27.58	700.5	30.22	767.6	24	— 4.4	88	e.	3	1.3		0	0			0	0	clear	
Camp Thomas, Arizona	27.20	690.9	30.03	762.7	36	2.2	82	n.			4		10 ks			0	0	cloudy	
Cape Henry, Virginia	30.18	766.6	30.20	767.1	38	3.3	72	sw.	13	5.8		0	0			0	0	clear	
Cape May, New Jersey	30.11	764.8	30.14	765.5	35	1.7	79	w.	12	5.4		0	0			0	0	clear	
Castroville, Texas	29.13	739.9	29.97	761.2	58	14.4	93	e.	4	1.8			10 n			0.03	0.8	light rain	
Cedar Keys, Florida	30.17	766.3	30.19	766.8	53	11.7	86	e.	10	4.5		3 cs	0			0	0	clear	
Champaign, Illinois	29.18	741.2	30.05	763.3	33.5	0.8	76	s.	9	4.0			10 s		s.	0	0	cloudy	
Charleston, S. Carolina	30.21	767.3	30.27	768.8	42	5.6	100	nw.	4	1.8		5 cs	fg.	calm		0	0	dense fog	
Charlotte, N. Carolina	29.31	744.5	30.20	767.1	34.0	1.1	88	sw.	3	1.3		10 cs	fg.			0	0	cloudy	
Chattanooga, Tennessee	29.40	746.7	30.26	768.6	31.0	— 0.6	96	calm	0	0			fg.		calm	0	0	dense fog	
Cheyenne, Wyoming	23.98	609.1	30.23	767.8	13.2	—10.4	70	nw.	1	0.4		0	0			0	0	clear	
Chicago, Illinois	29.28	743.7	30.03	762.7	29.8	— 1.2	75	w.	6	2.7		0	0			0	0	clear	
Chincoteague, Virginia	30.15	765.8	30.17	766.3	35	1.7	79	sw.	5	2.2		1 c	1 s	w.		0	0	clear	
Cincinnati, Ohio	29.49	749.0	30.18	766.6	35.2	1.8	69	s.	8	3.6			10 s			0	0	cloudy	
Cleveland, Ohio	29.34	745.2	30.12	765.0	29	— 1.7	88	s.	8	3.6		0	2 s			0	0	clear	
Coleman City, Texas																			
Columbus, Ohio	29.26	743.2	30.16	766.1	32	0.0	78	sw.	4	1.8			10 s			0	0	cloudy	
Concho, Texas	28.10	713.7	30.12	765.0	40	4.4	82	ne.	20	8.9			10 s			0	0	cloudy	
Davenport, Iowa	29.33	745.0	30.03	762.7	27	— 2.8	64	w.	1	0.4		0	fg.			0	0	light fog	
Dayton, Washington T'y	28.54	724.9	30.35	770.9	29.2	— 1.6	84	sw.	4	1.8		2 c	3 k		sw.	0	0	fair	
Deadwood, Dakota	25.28	642.1	30.20	767.1	27	— 2.8	88	sw.	6	2.7		0	0			0	0	clear	
Decatur, Texas					37	2.8	72	ne.	6	2.7			10 s			0	0	cloudy	
Delaware Breakwater, Del.	30.13	765.3	30.15	765.8	33	0.6	88	sw.	11	4.9		0	1 s			0	0	clear	
Denison, Texas	29.30	744.2	30.14	765.5	38.0	3.3	82	n.	4	1.8			10 s			0	0	cloudy	
Denver, Colorado	24.76	628.9	30.28	769.1	12.7	—10.7	66	s.	1	0.4		0	hz.		calm	0.01	0.3	clear	
Des Moines, Iowa	29.04	737.6	30.01	762.2	26	— 3.3	77	w.	6	2.7		0	5 s		w.	0	0	fair	
Detroit, Michigan	29.30	744.2	30.05	763.3	35.2	1.8	79	sw.	8	3.6		0	0			0	0	clear	
Dodge City, Kansas	27.44	697.0	30.18	766.6	20	— 6.7	87	nw.	4	1.8		0	0			0	0	clear	
Dubuque, Iowa	29.20	741.7	29.96	761.0	23.5	— 4.7	73	s.	6	2.7		0	2 s		s.	0	0	clear	
Duluth, Minnesota	28.90	734.0	29.66	753.4	29	— 1.7	77	sw.	4	1.8			10 s		sw.	inap.	inap.	cloudy	
Eagle Pass, Texas	29.12	739.6	29.96	761.0	59.0	15.0	100	se.	6	2.7			10 n			inap.	inap.	light rain	
Eagle Rock, Idaho	25.53	648.5	30.43	772.9	— 9	—22.8	82	n.	3	1.3		0	0			0	0	clear	
Eastport, Maine	29.82	757.4	29.89	759.2	25	— 3.9	94	se.	10	4.5			10 n			0.02	0.5	heavy snow	
El Paso, Texas	26.19	665.2	30.07	763.8	29	— 1.7	80	w.	2	0.9		0	0			0	0	clear	
Erie, Pennsylvania	29.30	744.2	30.07	763.8	30	— 1.1	88	sw.	10	4.5		hz.	0			0	0	clear	
Escanaba, Michigan	29.04	737.6	29.76	755.9	24	— 4.4	88	sw.	9	4.0			hz.			0	0	dense haze	
Fort Apache, Arizona	24.87	631.7	29.97	761.2	30	— 1.1	92	calm	0	0			10 n		sw.	0.53	13.5	light snow	
Fort Assinnaboine, Montana	27.01	686.0	30.05	763.3	30	— 1.1	60	sw.	24	10.7		0	0			0	0	clear	
Fort Bennett, Dakota	28.34	719.8	30.07	763.8	31	— 0.6	62	calm	0	0		0	0			0	0	clear	
Fort Benton, Montana	27.08	687.8	30.08	764.0	35	1.7	72	ne.	20	8.9		10 k	0	ne.		0	0	cloudy	
Fort Buford, Dakota	27.89	708.4	30.07	763.8	15	— 9.4	67	s.	4	1.8		0	0			0	0	clear	
Fort Custer, Montana	26.81	681.0	30.17	766.3	16	— 8.9	70	se.	5	2.2		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.00	635.0	29.96	761.0	29	— 1.7	92	s.	4	1.8			fg			0	0	dense fog	
Fort Elliott, Texas	27.26	692.4	30.16	766.1	20	— 6.7	46	nw.	4	1.8		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.52	749.8	30.12	765.0	33.0	0.6	68	calm	0	0		0	0			0	0	clear	
Fort Grant, Arizona	25.17	639 3	30.03	762.7	24	— 4.4	76	s.	3	1.3		7 cs	0			0.01	0.3	fair	
Fort Griffin, Texas	28.83	732.3	30.20	767.1	37	2.8	72	ne.	7	3.1			10 s		sw.	0	0	cloudy	
Fort Keogh, Montana	27.44	697.0	30.12	765.0	20	— 6.7	73	w.	5	2.2		0	0			0	0	clear	
Fort Macon, North Carolina	30.25	768.3	30.26	768.6	43	6.1	83	nw.	4	1.8		10 cs	0	sw.		0	0	cloudy	
Fort McKavett, Texas	27.74	704.6	30.12	765.0	48.1	8.9	86	e.	5	2.2			10 s			0	0	cloudy	
Fort Missoula, Montana	26.90	683.2	30.33	770.4	19	— 7.2	87	sw.	2	0.9			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	29.50	749.3	29.54	750.3	—15	—26.1	100	se.	4	1.8		0	5 s			0	0	fair	
Fort Shaw, Montana	26.26	667.0	30.11	764.8	32	0.0	62	sw.	40	17.9		9 cs	0			0	0	cloudy	
Fort Sill, Indian Territory	28.86	733.0	30.17	766.3	32.5	0.3	83	calm	0	0		0	0			0	0	clear	
Fort Stevenson, Dakota	28.00	711.2	30.02	762.5	22	— 5.6	80	nw.	5	2.2		0	9 ks		nw.	0	0	cloudy	
Fort Verde, Arizona					30	— 1.1	81	nw.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.20	716.3	30.00	762.0	54	12.2	93	e.	2	0.9			10 n			0.01	0.3	light rain	
Galveston, Texas	30.00	762.0	30.04	763.0	60	15.6	94	e.	8	3.6		10 k	0	s.		0	0	cloudy	
Grand Haven, Michigan	29.26	743.2	29.97	761.2	32.5	0.3	88	sw.	18	8.0		0	0			0	0	clear	
Hatteras, North Carolina	30.24	768.1	30.26	768.6	44	6.7	83	w.	12	5.4		3 c	0	w.		0	0	clear	
Helena, Montana	25.84	656 3	30.24	768.1	33	0.6	62	sw	4	1.8		5 k	0	sw.		0	0	fair	
Henrietta, Texas	29.19	741.4	30.24	768.1	32	0.0	78	calm	0	0			10 s			0	0	cloudy	
Huron, Dakota	28.51	724.1	30.03	762.7	26.8	— 2.9	77	w.	18	8.0		0	1 s			0	0	clear	
Indianapolis, Indiana	29.24	742.7	30.09	764.3	34	1.1	82	sw.	5	2.2		6 k	1 s	sw.	sw.	0	0	fair	
Indianola, Texas	29.93	760.2	29.96	761.0	61.4	16.3	93	e.	9	4.0			10 k		s.	0	0	cloudy	
Jacksboro, Texas	28.97	735.8	30.21	767.3	35	1.7	89	n.	5	2.2			10 s		n.	0	0	cloudy	
Jacksonville, Florida	30.18	766.6	30.24	768.1	47	8.3	86	ne.	4	1.8		4 cs	0			0	0	fair	
Keokuk, Iowa	29.32	744.7	30.02	762.5	31.5	— 0.3	78	calm	0	0		0	2 s			0	0	clear	
Key West, Florida	30.13	765.3	30.16	766.1	74.0	23.3	84	se.	6	2.7		0	4 k		se.	inap.	inap.	fair	
Kittyhawk, North Carolina	30.23	767.8	30.25	768.3	40	4.4	78	w.	10	4.5		7 c;cs	0	nw.		0	0	fair	
Knoxville, Tennessee	29.19	741.4	30.27	768.8	26.6	— 3.0	98	calm	0	0			fg.			0	0	dense fog	
La Crosse, Wisconsin	28.99	736.3	29.83	757.7	35	1.7	69	sw.	10	4.5			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.13	663.7	30.14	765.5	32.0	0.0	81	calm	0	0		2 ck	2 s			0	0	fair	
Leavenworth, Kansas	29.17	740.9	30.12	765.0	29	— 1.7	67	calm	0	0		0	sk.			0	0	clear	
Lewiston, Idaho	29.55	750.6	30.42	772.7	20	— 6.7	61	w.	1	0.4		0	1 s		calm	0	0	clear	
Little Rock, Arkansas	29.78	756.4	30.11	764.8	38	3.3	89	e.	2	0.9		5 cs	0			0	0	fair	
Los Angeles, California	29.84	757.9	30.24	768.1	40.0	4.4	73	n.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	29.55	750.6	30.14	765.5	34.0	1.1	89	s.	5	2.2			10s;fg		calm	0	0	cloudy	
Lynchburg, Virginia	29.47	748.5	30.19	766.8	30.0	— 1.1	92	calm	0	0		0	fg.			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	28.84	732.5	29.93	760.2	27	— 2.8	64	s.	14	6.3		6 cs	0	w.		0	0	fair	
Marquette, Michigan	28.89	733.8	29.67	753.6	25	— 3.9	73	sw.	7	3.1		0	6 s		sw.	inap.	inap.	fair	
Mason, Texas	28.30	718.8	30.04	763.0	54.5	12.5	86	ne.	6	2.7			10 n		ne.	0.06	1.5	light rain	
Memphis, Tennessee	29.82	757.4	30.17	766.3	38	3.3	82	se.	4	1.8		10 cs	0	sw.		0	0	cloudy	
Milwaukee, Wisconsin	29.14	740.1	29.94	760.5	26	— 3.3	77	sw.	6	2.7		8 ck	0	w.		0	0	cloudy	
Mobile, Alabama	30.16	766.1	30.20	767.1	44.0	6.7	93	ne.	2	0.9			10 s		w.	0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	29.99	761.7	30.23	767.8	34.7	1.5	93	calm	0	0		3 cs	0			0	0	clear	
Moorhead, Minnesota	28.85	732.8	29.95	760.7	3	—16.1	72	n.	20	8.9		0	5 s		n.	0.03	0.8	fair	
Morgantown, W. Virginia	29.15	740.4	30.22	767.6	34.5	1.4	79	sw.	4	1.8			10 s		sw.	0	0	cloudy	
Mt. Washington, N. H	23.27	591.0	29.89	759.2	8.0	—13.3	94	nw.	65	39.0			fg		nw.	0.13	3.3	dense fog	
Nashville, Tennessee	29.64	752.8	30.20	767.1	32.3	0.2	82	e.	2	0.9		4 cs	sk			0	0	fair	
New Haven, Connecticut	29.95	760.7	30.07	763.8	26	— 3.3	82	calm	0	0		8 c	0	sw.		0	0	cloudy	
New London, Connecticut	30.03	762.7	30.08	764.0	29	— 1.7	67	nw.	7	3.1		3 c	0	calm		0	0	fair	
New Orleans, Louisiana	30.06	763.5	30.12	765.0	51.0	10.6	86	e.	9	4.0			10 s		e.	0	0	cloudy	
Newport, Rhode Island	29.99	761.7	30.04	763.0	32.6	0.4	72	sw.	18	8.0		6 ck	1 s	w.	calm	0	0	fair	
New River, N. Carolina					40	4.4	82	w.			1	1 cs	2 s	w.		0	0	clear	
New Shoreham, Rhode I'd	30.02	762.5	30.05	763.3	33.0	0.6	68	w.	14	6.3		9 cs	0	s.		0	0	cloudy	
New York, New York	29.93	760.2	30.12	765.0	27	— 2.8	88	sw.	8	3.6			10 s		w.	0	0	cloudy	
Norfolk, Virginia	30.18	766.6	30.21	767.3	38	3.3	72	sw.	2	0.9		2 cs	2 ks	se.	se.	0	0	fair	
North Platte, Nebraska	27.12	688.8	30.22	767.6	18.6	— 7.4	68	w.	10	4.5		0	2 s			0	0	clear	
Olympia, Washington T'y	30.27	768.8	30.31	769.9	38.0	3.3	82	s.	10	4.5		10 k	0	sw.		0.01	0.3	cloudy	
Omaha, Nebraska	28.80	731.5	30.07	763.8	31.4	— 0.3	71	sw.	11	4.9		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.41	747.0	29.43	747.5	—40.8	—40.4	76	sw.	9	4.0		2 c	0			0	0	clear	
Oswego, New York	29.61	752.1	29.96	761.0	35.0	1.7	69	w.	16	7.2		0	9 s		w.	0.04	1.0	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.17	766.3	30.20	767.1	44.4	6.9	87	ne.	7	3.1		6 cs	0	w.		0	0	fair	
Philadelphia, Pa	30.04	763.0	30.15	765.8	32	0.0	68	w.	1	0.4		0	fg			0	0	clear	
Pike's Peak, Colorado	17.45	443.2	30.17	766.3	— 1	—18.3	79	n.	18	8.0		0	0			0	0	clear	
Pioche, Nevada	24.17	613.9	30.33	770.4	15	— 9.4	56	nw.	15	6.7		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.31	744.5	30.17	766.3	31.0	— 0.6	78	s.	8	3.6			10 s		sw.	0	0	cloudy	
Port Eads, Louisiana	30.12	765.0	30.12	765.0	55.6	13.1	96	ne.	6	2.7			10 s			0	0	cloudy	
Port Huron, Michigan	29.28	743.7	30.01	762.2	23.8	— 4.6	80	sw.	7	3.1		0	0			0	0	clear	
Portland, Maine	29.83	757.7	29.88	758.9	27	— 2.8	77	sw.	11	4.9		0	4 s		calm	0	0	fair	
Portland, Oregon	30.33	770.4	30.40	772.1	30.0	— 1.1	88	s.	3	1.3		0	0			0	0	clear	
Portsmouth, N. Carolina					45	7.2	60	sw.	10	4.5		10 c	0	calm		0	0	cloudy	
Prescott, Arizona	24.71	627.6	30.07	763.8	16	— 8.9	58	ne.	1	0.4		0	0			0.05	1.3	clear	
Punta Rassa, Florida	30.15	765.8	30.16	766.1	65	18.3	90	ne.	2	0.9			10 ks		s.	0	0	cloudy	
Red Bluff, California	29.99	761.7	30.37	771.4	37.0	2.8	61	n.	3	1.3		0	0			0	0	clear	
Rio Grande City, Texas	29.65	753.1	29.90	759.4	65	18.3	93	se.	6	2.7			10 s		calm	0	0	cloudy	
Rochester, New York	29.29	744.0	30.00	762.0	31	— 0.6	88	w.	19	8.5		0	5 s		w.	0	0	fair	
Roseburg, Oregon	29.89	759.2	30.46	773.7	33	0.6	89	e.	1	0.4			10 s			0	0	cloudy	
Sacramento, California	30.28	769.1	30.36	771.1	35.4	1.9	89	s.	2	0.9		0	0			0	0	clear	
St. Louis, Missouri	29.42	747.3	30.06	763.5	34.0	1.1	88	s.	10	4.5		0	7 s		se.	0	0	fair	
St. Paul, Minnesota	28.84	732.5	29.78	756.4	32.0	0.0	68	sw.	12	5.4		0	0			0	0	clear	
St. Vincent, Minnesota	29.00	736.6	29.98	761.5	—21	—29.4	100	nw.	5	2.2		0	0			0.07	1.8	clear	
Salt Lake City, Utah	25.93	658.6	30.49	774.4	12	—11.1	64	se.	2	0.9		0	0			0	0	clear	
San Antonio, Texas	29.21	741.9	29.93	760.2	55.6	13.1	93	n.	4	1.8			10 n		n.	0.05	1.3	light rain	
San Diego, California	30.16	766.1	30.23	767.8	41.9	5.5	79	ne.	4	1.8		0	0			0.01	0.3	clear	
Sandusky, Ohio	29.37	746.0	30.09	764.3	29	— 1.7	84	sw.	12	5.4		0	0			0	0	clear	
Sandy Hook, New Jersey	30.08	764.0	30.12	765.0	30.0	— 1.1	78	w.	18	8.0		3 ck	3 s	w.	calm	0	0	fair	
San Francisco, California	30.27	768.8	30.34	770.6	44	6.7	72	s.	3	1.3		0	0			0	0	clear	
Santa Fé, New Mexico	23.17	588.5	30.21	767.3	18.4	— 7.6	72	ne.	6	2.7		8 k	0	w.		0	0	cloudy	
Savannah, Georgia	30.18	766.6	30.27	768.8	41	5.0	86	nw.	1	0.4		3 cs	fg	s.		0	0	clear	
Shreveport, Louisiana	29.88	758.9	30.13	765.3	45	7.2	83	se.	3	1.3			10 s			0	0	cloudy	
Silver City, New Mexico	24.08	611.6	29.93	760.2	28	— 2.2	80	calm	0	0			10 s		calm	0.04	1.0	cloudy	
Sitka, Alaska	29.46	748.3	29.52	749.8	35.6	2.0	65	w.	25	11.2		4 k	3 s	w.	calm	0.20	5.1	fair	
Smithville, North Carolina	30.22	767.6	30.26	768.6	39	3.9	89	nw.	4	1.8		4 cs	0			0	0	fair	
Spokane Falls, Wash. Ter.	28.20	716.3	30.32	770.1	17	— 8.3	70	nw.	3	1.3		7 k	0	nw.		inap.	inap.	fair	
Springfield, Illinois	29.32	744.7	30.05	763.3	37.5	3.1	77	s.	4	1.8			10 s		n.	0	0	cloudy	
Springfield, Massachusetts	29.88	758.9	30.02	762.5	21.2	— 6.0	70	s.	2	0.9		1 k	fg			0	0	clear	
Springfield, Mo	28.57	725.7	30.14	765.5	39	3.9	73	s.	10	4.5		0	2 s			0	0	clear	
Stockton, Texas	26.95	684.5	30.08	764.0	35.2	1.8	100	w.	8	3.6			10 s		w.	0	0	cloudy	
Thatcher's Island, Mass	29.89	759.2	29.95	760.7	31.0	— 0.6	83	w.	18	8.0		0	0			0	0	clear	
Toledo, Ohio	29.34	745.2	30.08	764.0	31.2	— 0.4	78	sw.	8	3.6		0	0			0	0	clear	
Tucson, Arizona	27.58	700.5	30.06	763.5	32	0.0	88	se.	2	0.9		0	2 ks			0.08	2.0	clear	
Umatilla, Oregon	30.00	762.0	30.38	771.6	25.0	— 3.9	88	se.	5	2.2		8 cs	0	w.		0	0	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.92	760.0	30.19	766.8	44	6.7	76	se.	3	1.3		8 k	fg	calm	calm	0	0	cloudy	
Visalia, California	29.93	760.2	30.31	769.9	32	0.0	88	w.	2	0.9		0	0			0	0	clear	
Washington, D. C	30.04	763.0	30.16	766.1	21	— 6.1	84	calm	0	0		0	fg			0	0	clear	
West Los Animas, Colorado	26.06	661.9	30.20	767.1	13	—10.6	83	w.	9	4.0		0	0			0	0	clear	
Wickenburg, Arizona					30	— 1.1	70	calm			0	0	0			inap.	inap.	clear	
Williamsport, Pa	29.45	748.0	30.08	764.0	35	1.7	79	w.	5	2.2			10 s		w.	0	0	threatening.	
Wilmington, N. Carolina	30.20	767.1	30.26	768.6	41	5.0	82	calm	0	0		10 c	fg	w.	calm	0	0	cloudy	
Winnemucca, Nevada	25.99	660.1	30.51	774.9	5	—15.0	76	ne.	6	2.7		0	0			0	0	clear	
Wood's Holl, Mass																			
Yankton, Dakota	28.65	727.7	30.07	763.8	33	0.6	78	w.	8	3.6		0	0			0	0	clear	
Yuma, Arizona	30.02	762.5	30.17	766.3	44.4	6.9	55	n.	3	1.3		0	0			0.01	0.3	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.01	559.0			52.5	11.4	65	calm	0	0		7 ck;k	2 s	nw.		0	0	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.06	763.5	30.07	763.8	79	26.1	78	e.				2 ck	2 ks	ne.	ne.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C	29.97	761.2	29.99	761.7	76	25.6	86	sw.	8	3.6			10 ks		s.	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I	30.02	762.5	30.04	763.0	75	23.9	86	e.				3 ks	2 ks			0	0		B. Bigar.
Havana, Cuba, W. I	30.15	765.8	30.20	767.1	74	23.3	76	s.	1.2	0.5		0	0			0.02	0.5	clear	A. Van Caneghem.
Kingston, Jamaica, W. I	30.10	764.5	30.11	764.8	67.0	19.4	94	calm	0	0		0	0			0	0	fine	Robert Johnstone.
Navassa, W. I	29.93	760.2	30.01	762.2	77	25.0	69	ne	9	4.0		2 k	2 s	e.	ne.	0	0	fair	F. M. Everett.
Paramaribo, S. A	30.02	762.5	30.02	762.5	77	25.0	91	e.			3	5 k	8 ps	e.		0	0		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.46	748.3	29.92	760.0	80	26.7	80	calm			0		10 ks		calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua							70	ne.			3	0	ks		ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I	30.10	764.5	30.13	765.3	76	24.4	76	n.	3.6	1.6		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	29.93	760.2	29.98	761.5	—42.0	—41.1		ne.	9	4.0		0	0			0	0	clear	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt																			
H. M. S. Albatross, N. 20° 09′, E. 110° 39′	30.22	767.6	57	13.9		nne.			4-6		10					3		squally	Capt. A. J. Errington.
H. M. S. Alert, Singapore Roads, India	29.90	759.4	81	27.2	80	nne.			2		3							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.50	774.7	51	10.6	53	nnw.			3		4							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.88	758.9	75	23.9	70	ese.			6-7		2	se.						squally	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.93	760.2	69	20.6	100	se.			1		8	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	29.91	759.7	74	23.3	76	se.			6-7		1							squally	Capt. A. T. Dale.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.22	767.6	61	16.1	66	wnw.			1		1	wnw.						blue sky	Capt. T. Barnardiston.
H. M. S. Druid, N. 18° 11′, W. 76° 27′	30.12	765.0	78	25.6	82	e.			1		7	ene.						d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf																			Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 34° 02′, W. 12° 40′	30.16	766.1	73	22.8	90	wnw.			3-4		7	wnw.				2	wsw.	d. clouds	Capt. C. A. G. Bridge.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.44	773.2	44	6.7	79	calm			0		6							misty	Capt. R. F. Moskyn.
H. M. S. Gannet, S. 19° 35′, W. 75° 25′	30.02	762.5	70.5	21.4	73	sse.			3		7					1	s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Off Rhodes, Asiatic Turkey	29.76	755.9	43	6.1	58	n.			7		9	n.				6	n.	squally	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.23	767.8	55	12.8	87	ne.			1		4	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	30.01	762.2	66	18.9		calm			0		8								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, Sydney, Australia	30.11	754.8	71	21.7	75	se.			1		2		nw.					d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, St. Lucia, W. I.	30.01	762.2	77.5	25.3	84	ne.			3		8	ne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes																			Capt. R. J. Kinahan.
H. M. S. Pelican, N. 7° 18′, W. 27° 55′	29.91	759.7	79.5	26.4	98	n.			4		3					4	n.	misty	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, S. 6° 04′, W. 13° 24′	29.92	760.0	80	26.7	100	ese.			5		7	ese.						d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.07	763.8	59	15.0		ese.			3		9							d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	30.11	764.8	41	5.0	91	ene.			3		2							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 2° 13′, E. 40° 59′	29.25	742.9	84	28.9	91	ene.			3-4		2	nne.						d. clouds	Capt. E. T. Church.
H. M. S. Thalia																			
H. M. S. Triumph, S. 7° 01′, W. 80° 57′	29.96	761.0	78	25.6	86	sse.			2		4	calm				3	se.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 5° 56′, E. 91° 55′	29.88	758.9	82	27.8	91	e.			2		5	e.				1	ne.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.08	764.0	73	22.8		n.			1		3							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, N. 25° 28′, E. 52° 40′	30.09	764.3	69.5	20.8	61	e.			3		7	calm				2	e.	d. clouds	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Brava, Cape Verd Ids	30.00	762.1	73.8	23.2	81	ne.			2		6		sw.			2	ne.	d. clouds	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder																			Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.18	766.6	49	9.4	85	nne.	7	3.1	.....	.....	2	.....	ne.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	29.93	760.2	24	— 4.4	.....	sw.	2	0.9	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Naval Hospital Yokohama, Japan	30.31	769.9	33.5	0.8	95	ene.	.....	.....	3	.....	10	.....	ne.	0.37	9.4	.....	.....	rain & sleet.	
Adams, Callao, Peru	29.74	755.4	69	20.6	95	sse.	.....	.....	2	.....	10	.....	se.	0	0	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	29.94	760.5	61	16.1	83	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert, Bang Kok River, India*	29.81	757.2	81	27.2	83	e.	.....	.....	2	.....	8	.....	calm	0	0	sm'h	.....	cloudy	
Alliance, Boston, Mass.*†	30.02	762.5	30	— 1.1	78	w.	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	clear	
Ashuelot, Tientsin, China	30.81	782.6	27	— 2.8	100	se.	.....	.....	2	.....	2	.....	calm	.....	.....	.....	.....	clear	
Brooklyn, Montevideo, Uruguay	29.69	754.1	67	19.4	100	sw.	6	2.7	.....	.....	10	.....	sw.	0.15	3.8	mod.	sw.	cloudy	
Colorado, New York, N. Y	30.10	764.5	28	— 2.2	.....	wsw.	10	4.5	.....	.....	5	.....	sw.	0	0	.....	.....	fair	
Enterprise, Washington, D. C*	30.12	765.0	30	— 1.1	100	calm	.....	.....	0	.....	10	.....	calm	.....	.....	.....	.....	.....	
Essex, N. 31° 34′, W. 20° 02′	30.27	768.8	61	16.1	82	ne.	.....	.....	1	.....	5	.....	ne.	.....	.....	sm'h	nw.	fair	
Franklin, Norfolk, Va	30.20	767.1	38	3.3	81	ssw.	4	1.8	.....	.....	2	.....	w.	0	0	.....	.....	fair	
Galena, N. 33° 21′, W. 13° 59′	30.25	768.3	64	17.8	83	ene.	.....	.....	2	.....	2	.....	.....	.....	.....	long	ne.	fair	
Independence, N. Yard, Mare I'd, Cal	30.21	767.3	39	3.9	55	e.	6.0	2.7	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La	30.11	764.8	52	11.1	86	ene.	.....	.....	1	.....	10	.....	sw.	.....	.....	.....	.....	cloudy	
Lackawanna, Valparaiso, Chili*	29.90	759.4	62	16.7	88	calm	.....	.....	0	.....	2	.....	nw.	.....	.....	.....	.....	hazy	
Lancaster, Naples, Italy	30.54	775.7	47	8.3	100	ne.	.....	.....	4	.....	0	.....	.....	.....	.....	r'gh	ne.	clear	
Marion, S. 30° 19,′ E. 60° 39′	30.00	762.0	74	23.3	90	ese.	.....	.....	4	.....	5	.....	ese.	.....	.....	sm'h	.....	fair	
Michigan, Erie, Pa	29.96	761.0	31	— 0.6	89	sw.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	clear	
Minnesota, Newport, R. I	30.03	762.7	37	2.8	81	wsw.	4	1.8	.....	.....	8	.....	w.	.....	.....	.....	.....	cloudy	
Monocacy, Yokohama, Japan	30.54	775.7	35	1.7	100	nne.	.....	.....	3	.....	10	.....	ne.	.....	.....	.....	.....	overcast	
Nipsic, N. 43° 24′, E. 7° 04′	30.60	777.2	49	9.4	48	ese.	.....	.....	5	.....	8	.....	.....	.....	.....	long	ese.	fair	
Onward, Callao, Peru†	30.07	763.8	68	20.0	100	sse.	.....	.....	3	.....	10	.....	nnw.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.24	768.1	54	12.2	80	ne.	.....	.....	2	.....	10	.....	n;e.	.....	.....	.....	.....	overcast	
Passaic, Washington, D. C	30.15	765.8	24	— 4.4	.....	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Pensacola, Valparaiso, Chili	30.00	762.0	51	10.6	87	ne.	1	0.4	.....	.....	10	.....	n.	0	0	sm'h	.....	cloudy	
Powhatan, Norfolk, Va	30.21	767.3	34	1.1	100	wsw.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear	
Quinnebaug, N. 38° 39′, E. 10° 04′	30.45	773.4	52	11.1	73	e.	.....	.....	6	.....	10	.....	calm	.....	.....	mod.	e.	overcast	
Ranger, N. 19° 40′, W. 105° 16′*	29.93	760.2	65	18.3	94	n.	.....	.....	2	.....	0	.....	.....	0	0	gr'd	wnw.	clear	
Richmond, N. 14° 38′, E. 170° 50′*	29.86	758.4	78	25.6	82	ne.	.....	.....	4	.....	5	.....	ne.	0	0	mod.	ne.	fair	
Shenandoah, Montevideo, Uruguay*.	29.81	757.2	66	18.9	89	sw.	.....	.....	4	.....	8	.....	sw.	.....	.....	mod.	sw.	fair	
St. Louis, League Island, Pa	30.34	770.6	21	— 6.1	100	calm	0	0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Swatara, Kobe, Japan*	30.29	769.4	50	10.0	65	n.	.....	.....	3	.....	10	.....	ne.	.....	.....	.....	.....	cloudy	
Tennessee, New York, N. Y	30.06	763.5	29	— 1.7	78	s.	7	3.1	.....	.....	8	.....	.....	0	0	.....	.....	cloudy	
Vandalia, N. 10° 32′, W. 73° 59′	29.98	761.5	75	23.9	90	e.	.....	.....	4	.....	0	.....	.....	.....	.....	mod.	e.	hazy	
Wabash, Boston, Mass	29.97	761.2	28	— 2.2	.....	sw.	7	3.1	.....	.....	2	.....	sw.	0	0	.....	.....	hazy	
Wachusetts, Mare Isld, Cal†	30.51	774.9	42	5.6	100	ese.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Wyoming, Port Royal, S. C	30.23	767.8	42	5.6	91	ne.	4	1.8	.....	.....	2	.....	calm	0	0	.....	.....	clear	
Yantic, Aspinwall, Panama*	29.89	759.2	77	25.0	91	n.	.....	.....	3	.....	5	.....	n.	.....	.....	.....	.....	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie																	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen. N. 52° 31′, W. 29° 30′*	29.94	760.5	48	8.9		ssw	10		10		ssw.			very h'vy	ssw.	fair	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.31	769.9	45	7.2		s.	2				ssw.	4 h'r	4 h'r			cloudy	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 50° 46′, W. 14° 16′*†	30.38	771.6	52	11.1		ne.	1		2		nw.	0	0	long	w.	clear	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 49° 14′, W. 27° 50′	30.08	764.0	52	11.1	93	s.	7		10		ssw.			h'vy	ssw.	overcast	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 39° 55′, W. 71° 13′†	30.05	763.3	48	8.9	62	wnw	4		2		w.	0	0	mod.	w.	fine	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, N. 40° 48′, W. 69° 07*†	30.12	765.0	43	6.1	100	ssw.	4		4		ssw			mod.	ssw.	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 45° —′, W. 45° —′.†	29.79	756.7	37	2.8	90	nnw.	9				sw.				n. s.	gloomy	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 50° 15′, W. 38° 55′*†	29.06	738.1	51	10.6		s.	6		10		s.			very high	ssw.	rainy	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause, N. 25° 55′, W. 74° 20*†	30.30	769.6	72	22.2	90	ene.	6		7		ne.	0	0	short	ne.	squally	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 23° 12′, W. 74° 18′*	30.21	767.3	74	23.3		ene.	3		1		ne.	0	0	sm'h		fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Kingston, Jamaica*†	29.93	760.2	68	20.0												fine	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Ponce Porto Rico, W. I.						ene.	2		5?		ese.			mod.		clear?	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce,																	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,																	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 55° 24′, W. 97° 52′	29.36	745.7	49	9.4		nnw.	6		10							misty	
Baroda, Capt. C. J. Russell, N. 7° 47′, W. 26° 30′	29.96	761.0	77.4	25.2	82	nne.	4		9							d. clouds	
Caldew, Capt. W. Peterson, S. 56° 06′, W. 66° 30′	29.60	751.8	49.7	9.8		w.	3		10							misty	
S. S. Cipero, Capt. W. N. Lailey, Trinidad Island, W. I.	30.05	763.3	78.1	25.6	77	ene.	4		3					3	ene.	d. clouds	
S. City of Agra, Capt. Thos. Young, N. 28° 00′, W. 43° 03′	30.27	768.8	70.7	21.5		calm	0		5							showery	
Coppename. Capt. James Buchan																	
Bk. Glaramara, Capt. R. Morton, N. 50° 42′, W. 10° 28′	30.47	773.9	50.5	10.3	95	nne.	3		4							d. clouds	
Glencairn, Capt. R. S. Tannock, S. 25° 06′, E. 82° 07′	29.99	761.7	77	25.0	86	nnw.	2		6							d. clouds	
S. S. Gordon Castle, Capt. W. Waring,																	
Bg. Hermine, Capt. S. G. Jones, S. 56° 00′, W. 67° 58′	29.60	751.8	48	8.9	92	w.	4		10							overcast	
Hope, Capt. James Campbell																	
S. S. Humboldt, Capt. A. W. Jeffery,																	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 32° 05′, E. 31° 58′	30.06	763.5	78.4	25.8	73	ene.	4		5							misty	
May Hulse, Capt. H. Youlden, S. 45° 33′, W. 57° 40′	29.64	752.8	57.6	14.2	76	n.	3		4							d. clouds	
Bk. Mertola, Capt. E. W. Turner, N. 52° 24′, W. 5° 52′	30.48	774.2	48.6	9.2	93	ssw.	3		10							overcast	
Minho, Capt. J. Lawson, Montevideo, Uruguay, S. A	29.70	754.4	67.2	19.6	84	ssw.	4		3							d. clouds	
Naiad, Capt. John Smith, N. 18° 24′, W. 44° 40′	30.20	767.1	73.5	23.1	90	ene.	5		6							d. clouds	
Pole Star, Capt. F. Norman, S. 38° 19′, W. 74° 31′	29.85	758.2	61.9	16.6	77	wnw.	4		6							showery	
Queen of Cambria, Capt. M. Parry, S. 38° 50′, E. 66° 50′	30.33	770.4	66.1	18.9	84	nnw.	4		5							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson, N. 45° 43′, W. 39° 22′	29.31	744.5	55.5	13.1	93	sse.	9		10							raining	
S. Superb, Capt. Berridge N. 31° 38′, W. 39° 21′	30.33	770.4	67.7	19.8	74	s.	2		3							d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 51° 12′, W. 7° 00′*†	30.56	776.2				ssw.	4		8		sw.	0	0	mod.	w.	cloudy	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman, N. 25° 10′, W. 84° 00′*†	30.33	770.4	74	23.3		nw.	4		8		nw.	rain	rain	sm'h	nw.	cloudy	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 27° 12′, W. 86° 42′*†	30.20	767.1	71	21.7		e.			8		se.				e.	cloudy	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan, N. 40° 58′, W. 62° 37′	30.00	762.0				wsw.	4				sw.	0	0	mod.	sw.	fair	E. F. Stembridge, 3d offi
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d Officer.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, Havre, France	30.55	775.9	35.6	2.0	.....	n.	2	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. France, Capt. Périer d'Hauterive, N. 48° 49′, W. 33° 07′*†	29.57	751.0	44.6	7.0	.....	ssw.	7	.....	k	.....	sw.	rain	rain	very h'vy	sw.	.....	.....
S. S. St. Laurent, Capt. A. Servan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein, N. 49° 49′. W. 27° 42′*†	30.11	764.8	40	4.4	.....	sw.	4	.....	5	.....	sw.	0	0	mod.	w.	fair	.....
S. S. Silesia, Capt. A. Albers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich, N. 43° 08′, W. 57° 13′*	30.04	763.0	28	—2.2	.....	wnw.	5	.....	10	.....	nw.	10 h'r	10h'r	5	nw.	overcast	Jorgensen, Wolkowotz.
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S. S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, La Plata, S. A*†	29.92	760.0	69	20.6	.....	sw.	1	.....	1	.....	sse.	0	0	.....	.....	fine	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 42° 46′, W. 66° 11′	.....	.....	.....	.....	.....	sse.	3	.....	10	.....	s.	0	0	.....	.....	overcast	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, Galveston, Texas*†	30.12	765.0	59	15.0	.....	ne.	3	.....	10	.....	.....	0	0	.....	.....	overcast	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 48° 42′, W. 23° 40′*†	30.36	771.1	54	12.2	86	ssw	5	.....	8	.....	ssw	0	0	mod. long	wnw; ssw.	.....	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d off.
S. S. Santiago, Capt. S. F. Phillips, N. 35° 10′, W. 73° 45′†	30.25	768.3	58	14.4	.....	w.	5	.....	8	.....	sw.	0	0	long	ne.	cloudy	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom Savanilla, U. S. C† [man	29.91	759.7	80	26.7	.....	ne.	5	.....	.....	.....	.....	.....	.....	.....	.....	hazy	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Elbe, Capt. W. Willigerod [nolds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Lessing, Capt. B. Voss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Maas, Capt. T. H. Bonjer, N. 42° 38′ W. 58° 50′*	30.05	763.3	39	3.9	.....	w.	1	.....	.....	.....	.....	.....	.....	high	nw; sw.	.....	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke, N. 41° 50′, W. 54° 00′*†	30.05	763.3	53	11.7	.....	nw.	7–9	.....	.....	.....	.....	.....	.....	high	ssw; nw.	snowy	.....
S. S. P. Caland, Capt. E Deddes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 49° 58′, W. 15′ 07′†	30.40	772.1	53	11.7	.....	w.	3	.....	.....	.....	.....	.....	.....	.....	w.	clear	.....
S. S. Scythia, Capt. M Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers, N. 44° 15′, W. 45° 30′	29.47	748.5	.....	.....	.....	nnw.	6	.....	10	.....	.....	4 h'r	4 h'r	cross	sw; nw.	covered	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d off.
S. S. Leipzig, Capt. F. Pfeiffer, N. 44° 56′, W. 49° 01′	29.73	755.1	34	1.1	90	nw.	8	.....	10	.....	nw.	14 h'r	14 h'r	cross	sw; nw.	clearing	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 47° 40′, W. 44° 43′..*	29.02	737.1	37.4	3.0	.....	nne.	6	.....	10	.....	n.	rain	rain	high	n.	raining	.....
S. S. Mosel, Capt. F. Hesse, N. 49° 56′, W. 9° 57′	30.46	773.7	49.6	9.8	.....	sw.	4	.....	10	.....	sw.	½ h'r	light	long	wsw.	hazy	J. Hesse.
S. S. Neckar, Capt. R. Bussius.. N. 53° 48′, E. 6° 06′	30.57	776.5	34.7	1.5	.....	s.	3	.....	0	.....	.....	0	0	sm'h	s.	fair	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, N. 11° 29′, W. 26° 39′*	30.00	762.0	75.2	24.0	97	nne.	5	.....	0	.....	.....	0	0	4	nne.	clear	.....
S. S. Oder, Capt. Undeutsch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, N. 52° 21′, E. 3° 12′	30.61	777.5	.....	.....	.....	ssw.	3	.....	0	.....	.....	0	0	.....	.....	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 35° 56′, W. 157° 26′†	30.42	772.7	64	17.8	88	ne.	5	.....	5	.....	ne.	0	0	mod.	ne.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 46° 47′, W. 163° 07′*†	30.20	767.1	50	10.0	86	sw.	5	.....	10	.....	.....	.....	.....	mod.	w.	overcast	.....
S. S. Oceanic, Capt. J. Metcalfe, Hong Kong, China*	30.19	766.8	54	12.2	73	ne.	6	.....	8	.....	sw.	.....	.....	.....	.....	cloudy	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Ga*†	29.91	759.7	.....	.....	.....	calm	0	.....	1	.....	.....	.....	.....	.....	.....	rain & fog	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Savannah. Ga.†	30.32	770.1	38	3.3	.....	calm	0	.....	1	.....	sw.	0	0	.....	.....	clear	H. K. Hallett.

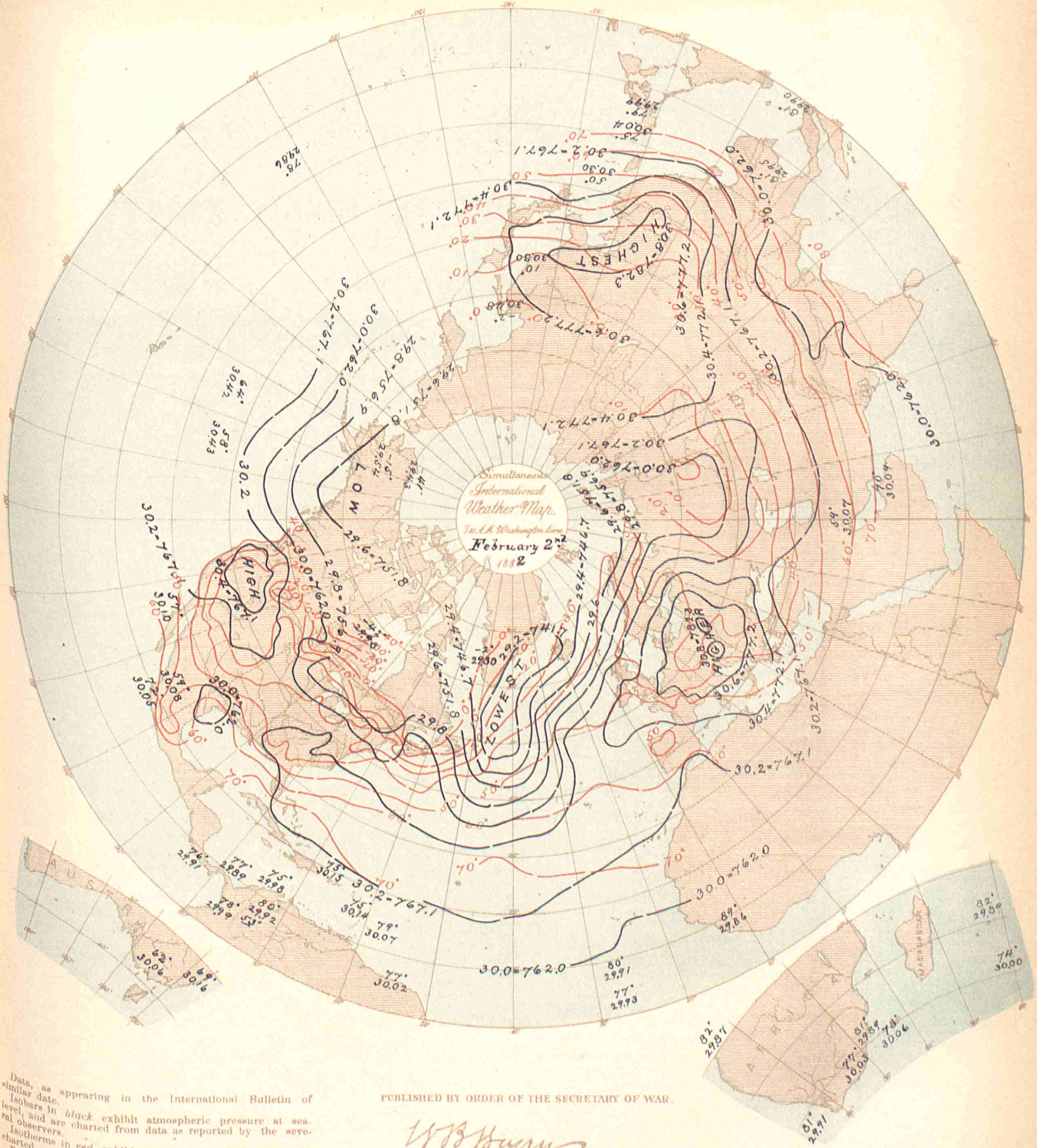
Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.29	769.4	42	5.6	75	s.	4		8		s.					fair	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer,																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†	30.25	768.3	38	3.3	90	calm	0		0							clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	30.24	768.1	41	5.0	73	calm	0		0							clear	
S. S. G. W. Elder, Capt. H. G. Morse, N. 38° 10′, W. 123° 10′†	30.23	767.8	48	8.9		se.	5		6		s.	0	0	light	s.	cloudy	
S. S. Idaho, Capt. H. M. Hayward, N. 45° 15′, W. 124° 04′†	30.25	768.3	43	6.1	48	e.	1		10							cloudy	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 32° 40′, W. 117° 00′..†	30.26	768.6	54	12.2	68	sw. to se.	5		0			0	0	r'gh	sw.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, SanSimion Bay, Cal†	30.34	770.6	44	6.7	50	se.	1		0			0	0	light	nw.	clear	
S. S. State of California, Capt. G. Debney, N. 46° 40′, W. 124° 45′.†	30.38	771.6	44	6.7	84	nnw.	3		0			0	0	sm'h	w.	clear	
S. S. Victoria, Capt. W. E. Plummer, San Francisco, Cal†	30.33	770.4	42	5.6	83	calm	0		0							clear	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh																	
S. S. City of New York, Capt. W. B. Cobb, S. 27° 30′, W. 177° 30′†	29.73	755.1	71	21.7	90	s.	3		1		s.	0	0	h'vy	ne.	clear	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 36° 11′, W. 146° 11′†	30.63	778.0	58	14.4	69	ne.	2		2		ne.	0	0	mod.	e.	fine	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, S. 22° 39′, W. 174° 22′†	29.62	752.3	78	25.6	86	sw.	6		8		sw.	0.25	6.3	h'vy	sw.	cloudy	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, N. 27° 37′, E. 124° 21′†	30.30	769.6	60	15.6	59	nnw.	6		2		nnw.	15 h'r	light	high	nnw.	fine	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 27° 00′, W. 114° 27′..†	30.10	764.5	57	13.9	57	nw.	5–6		4		nw.	0	0	r'gh	nw.	clear	
S. S. Grenada, Capt. M. Connolley, N. 7° 20′, W. 82° 15′†	29.91	759.7	76	24.4	86	n.	3		0			0	0	small	nw.	clear	
S. S. South Carolina, Capt. W. J. Russell, N. 19° 41′, W. 105° 18′†	30.05	763.3	72	22.2	80	n.	1		5		n.	0	0	light	nw.	hazy	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.16	766.1	69	20.6	70	ne.	2		10		se.					light rain	
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth																	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 35° 16′, W. 71° 02′†						wnw.	3		2		nw.	0	0	mod.	w.	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes																	
S. S. Nederland, Capt J. Ueberweg, N. 40° 39′, W. 68° 47′*†	30.57	776.5	46	7.8		wsw.	3		2		wsw.	0	0	mod	e.	clear	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, N. 42° 13′ W 61° 37′*	30.22	767.6	24	—4.4		nw.	2		10		nw.	0	0	con.	sw.	cloudy	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,															n.		
S. S. Vaderland, Capt. W. A Beynon, N. 49° 41′, W. 21° 24′*†	30.37	771.4	52	11.1	74	sw.	5		5?		wsw.	3 h'r	light	high	wsw.	cloudy?	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels. N. 48° 43′, W. 21° 50′*	30.23	767.8	52	11.1		s.	5		2		sw.	0	0	cross	s; w.	fair	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W A. Scholten, Capt. G. I. Vis. N. 44° 49′, W. 43° 38′*	29.14	740.1	56.4	13.6	87	w.	9		6		nw.	6 h'r	6 h'r	very high	w.	stormy	
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Copenhagen, Denmark†	30.60	777.2	33.2	0.7		ssw.	1		2		ssw.	0	0			clear	J. T. Eiberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 46° 48′, W. 42° 36′*†	29.40	746.7	46	7.8		sw.	6		9		sw.	12 h'r	h'vy	h'vy	ssw.	clearing	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 49° 26′, W. 24° 29′*†	30.37	771.4	49	9.4		ssw.	4		5		ssw.	shr's	shr's	long	w.	d. clouds	J. Moore.
S. S. Britannic, Capt. H. H. Perry,																	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell N. 51° 09′ W. 14° 55′*†	30.40	772.1	50	10.0	78	nw.	2		2		s.	1 h'r	light	mod.	wsw.	fair	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy																	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving, N. 43° 03′ W. 58° 36′†	30.10	764.5	31	—0.6	79	n.	3		10			0	0	long	n.	cloudy	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, Hull, Eng.*	30.60	777.2	42	5.6													Shaw & Smith.

MERCHANT-MARINE SERIES.—Continued.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.27	768.8	54	12.2	86	nne.		6 cs	2 s	w.		0	0			fair	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey,																	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 33° 45′, W. 13° 20′.*†	30.25	768.3	66	18.9		nne.	5		2		ne.	0	0	mod	w.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. Ponce, Porto Rico, W. I †*	30.14	765 5	77	25.0		ne.	1		2		e.	0	0			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 27° 25′ W. 34° 40′*†	30.32	770.1	69	20.6		ne.	4		8		ssw.	7 h'r	light	mod.	ssw.	hazy	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia.,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 49° 06′, W. 20° 10′*†	30.22	767.6				sw.	3				wsw.	0	0	h'vy	nw.	clear	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill.																	A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	30.52	775.2				s.	2		4		ese.	0	0	sm'h		very fine	H. D. Chapman.
S. Festina Lente, Capt. J.C. Andersen, Jr., N. 54° 30′, E. 6° 26′*.	30.78	781.8				s.	5		1		s.	0	0	sm'h		clear	J. C. Andersen, Jr.
U. S. F. C.S.FishHawk, Lt.Tanner, U.S.N., Washington, D. C†	30.17	766.3	27	—2.8		calm	0		4		calm	0	0			fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison, S. 38° 23′, W. 83° 27′†	30.18	766.6	60	15.6		sw.	4		10		wsw.	0	0	mod	sw.	cloudy	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 39° 44′, W. 21° 22′			60	15.6		ese.	1		2		wnw.	0	0	long	wnw.	fine	
Bk. Gamaliel, Capt. D. J. Anthony, S. 6° 10′, W. 34° 29′*†	29.06	738.1				ene.	6		3		ene.	0	0	long	ene.	hazy	
Bk. Geo. Booth, Capt. D. Williams, N. 37° 54′, W. 56° 10′*†	30.00	762.0	53	11.7		nw.	2		0			0	0		n.		D. Williams.
Bk. Granville, Capt. R. Bonney,																	
Schr. Henry Denison, Capt. Jno. Fehring,																	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt,																	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte.																	G. T. Lecompte.
Bk. New York, Capt. J. E. Sorensen. N. 36° 21′ W. 4° 05′*†	30.30	769.6				e.	3				e.	4 h'r	4 h'r	very h'vy	e.	cloudy	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 45° 53′ W. 13° 56′*†	30.64	778.2	54.5	12.5	97	se.	2		8		sse.			h'vy	n.	fine	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.53	775.4	48	8.9	48	ne.	1		0							clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, N. 1° 35′, W. 28° 30′*†	29.90	759.4				calm	0		8		var.	2 h'r	2 h'r				J. Connolly.
Schr. S. B. Hubbard, Race Rock, Mass*†	30.01	762.2	40	4.4		wsw.	3		5		wsw.	0	0	long	sw.	threatening	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, N. 1° 53′, W. 21° 41′*.	29.83	757.7	76.8	24.9	95	s.	2		8		s.					showery	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 38° 40′. W. 9° 15′*†	30.26	768.6	56	13.3	87	ne.	5		0			0	0			clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 34° 50′, W. 10° 34′*†	30.20	767.1				nw.	6		8		nw.	0	0	sm'h			
S. Wm. Woodbury Capt. H. T. Schmidt, N. 36° 34′, W. 64° 00′*†	29.98	761.5	58	14.4	76	w.	9				w.			mod.	w.	cloudy	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, N. 10° 28′, W. 29° 50′*†	30.00	762.0				ne; ene.					ne; ene.			r'gh.	ene.	hazy	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 3, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.19	766.7	62.6	17.0	84	sw.			2		3			0.394	10.0	pretty fair	Moiroud.
Algiers			30.32	770.2	58.6	14.8	87	e.			1		0			0	0	clear	Nicolas.
La Galle			30.42	772.7	56.1	13.4	54	sw.			4		5			0	0	cloudy	Fonfrède.
Tunis			30.43	772.8															Jacques.
Sfax																			Gau.
Saida			30.28	769.1	53.6	12.0	67	se.			2		2			0	0	fair	Dumas.
Tebessa			30.39	772.0	43.2	6.2	76	sse.			4		9			0	0	covered	Derché.
Geriville					43.5	6.4	54	sse.			2		10			0.016	0.4	covered	Louchamp.
Laghouat			30.37	771.4	41.7	5.4	66	ne.			5		4			0.334	3.4	cloudy	Herbin.
Biskra			30.41	772.5	53.6	12.0	61	se.			3		9			0.138	3.5	covered	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.79	756.6	29.88	758.9	77.8	25.4	38	n.	9	4.0			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	30.11	764.8	30.70	779.8	32.4	0.2	75	se.			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.85	758.2	30.67	779.0	30.7	— 0.7	85	wsw.	3.8	1.7			0			0	0		Dr. Wierzbiski.
Eperies	29.68	753.8	30.61	777.6	33.8	1.0	53	n.			2	0	0			0	0		Julius Mikolik.
Gratz	29.32	744.8	30.66	778.7	32.2	0.1	49	sse.			2		0			0	0		Andreas Rospini.
Hermannstadt	29.09	738.9	30.63	778.0	28.0	— 2.2	85	n.			2		2			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.21	742.0	30.68	779.2	22.3	— 5.4	90	ne.			1		0			0	0	clear	The Staff.
Lemberg	29.52	749.7	30.58	776.6	30.2	— 1.0	71	nw.			1		7			0	0		Dr. T. Stanecki.
Pola	30.42	772.6	30.54	775.6	41.5	5.3	38	wnw.			2		0			0	0		I. R. Hydrographic Office.
Szathmar	30.11	764.9	30.59	777.0	31.3	— 0.4	63	w.			2		0			0	0		Joseph Midlinszky, S. J.
Szegedin	30.35	770.9	30.65	778.6	33.1	0.6	61	n.			3		0			0	0		Karl Stancel.
Triesto	30.46	773.6	30.56	776.2	47.1	8.4	12	e.			2		0			0	0		Rieder.
Vienna	29.93	760.3	30.71	779.9	30.0	— 1.1	56	calm			0		0			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.24	768.1	30.34	770.6	44.0	6.7	75	s.	14	6.3			3			0	0	misty	W. Boswell.
Armagh, Observatory	30.18	766.6	30.43	772.9	44.1	6.7	86	s.	16	7.2			10					gloomy	S. Call.
Bidston, Liverpool Obs'y			30.52	775.2	43.9	6.6	79	se.	11	4.9			10					overcast	John Hartnup.
Bolton, Sharples	29.97	761.2	30.53	775.4	46.6	8.1	79	s.	12	5.4			10					gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.04	763.0	30.44	773.2	43.7	6.5	83	s.			1		9			0	0	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	82.0	27.8	55	ne.			3		3					d. clouds	Corpl. J. Surgenor, A.H.C.
Cardington			30.54	775.7	40.0	4.4	88	sw.			0.2		9					overcast	John McLaren.
Chatham, School M. E.	30.49	774.4	30.63	778.0	39.4	4.1	90	calm			0		10					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.29	769.4	30.52	775.2	48.4	9.1	75	sse			4		1					d. clouds	The Staff.
Fort Napier, Natal	27.52	699.0	29.74	755.4	88.4	31.3	43	e.			2		3					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	87.0	30.6	69	ne.			1		3						Sergt. John Robinson.
Galway, Queen's College			30.32	770.1	48	8.9	85	s.			2		10					overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.19	766.8	30.24	768.1	61.2	16.2	88	e.			4		4					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.20	767.1	30.40	772.1	44.6	7.0	88	wsw.			4		10 k					gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.43	772.9	30.61	777.5	42.5	5.8	83	sw.			1		7					foggy	The Staff.
Guernsey	30.28	769.1	30.59	777.0	46.6	8.1	81	sse.			1		0					blue sky	A. Collenette, F. M. S.
Kew, Observatory	30.58	776.7	30.62	777.7	39.0	3.9	95	e.	3	1.3								misty	The Staff.
Leicester, Museum	30.28	769.1	30.55	776.0	40.2	4.6	91	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.35	770.9	30.43	772.9	51.0	10.6	64	n.			3		4					d clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.14	765.5	30.19	766.8	71.0	21.7	90	se.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.03	762.7	30.58	776.7	40.2	4.6	89	ssw.			2		7					d. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.35	770.9	30.58	776.7	41.9	5.5	88	s.			1		6					d. clouds	The Staff.
Plymouth	30.47	773.9	30.54	775.7	48.6	9.2	81	se.			2		2					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.17	766.3	45.1	7.3	73	ssw.	16	7.2			8					d. clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.22	767.6	30.29	769.4	34.4	1.3	91	nne.			2		10					snowing	W. H. Lyne.
Sheffield	30.24	768.1	30.53	775.4	43.5	6.4	87	s.			1		7			0	0		W. F. Cooper.
Silloth Rectory	30.43	772.9	30.46	773.7	44.2	6.8	89	sw.			3		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.52	775.2	41.9	5.5	77	s.	6	2.7			10					foggy	I. New.
Stratfield Turgiss	30.39	771.9	30.61	777.5	42.6	5.9	87	se.			0–5		8					overcast	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.43	772.9	30.49	774.4	53	11.7	73	se.			6		0					blue sky	W. Newcombe.
Valencia, Observatory	30.36	771.1	30.39	771.9	49.6	9.8	87	se.	23	10.3			10					gloomy	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.64	752.8	29.67	753.6	75.0	23.9	84	ne.	18.5	8.3		0	4 ks			0	0		John Duthie.
Cape Town, C. G. H. Obs'y								nnw.	12	5.4						0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.68	753.9	29.73	755.1	18	— 7.8	100	calm	0	0			fg.			0.03	0.8	foggy	H. J. Cundall, C. E.
Chatham, N. B*	29.60	751.8	29.67	753.6	2	—16.7	100	calm	0	0		2 k	8 s			0.02	0.5	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.62	752.3	29.64	752.8	14	—10.0	87	n.	20	8.9			10 n			0.13	3.3	light snow	J. McWilliams.
Fort Garry, Manitoba*	28.73	729.7	29.63	752.6	2	—16.7	95	w.	3	1.3		0	0			0	0	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	29.62	752.3	29.76	755.9	26	— 3.3	100	calm	0	0			fg.			0.15	3.8	dense fog	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.61	752.1	29.96	761.0	18	— 7.8	80	nw.	8	3.6		2 c	0	nw.		0.10	2.5	fair	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.49	749.0	29.70	754.4	23	— 5.0	80	w.	24	10.7			10 s			0.06	1.5	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.42	747.3	30.21	767.3	— 6	—21.1	64	nw.	9	4.0		0	0			0.04	1.0	clear	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.38	746.2	30.13	765.3	20	— 6.7	70	nw.	6	2.7		0	0			0.03	0.8	clear	H. Morgan.
Port Stanley, Ontario	29.47	748.5	30.16	766.1	21	— 6.1	87	w.	18	8.0			8 k		nw.	inap.	inap.	cloudy	M. Payne.
Quebec, Quebec*	29.21	741.9	29.55	750.6	27	— 2.8	100	calm			0		10 n			0.07	1.8	light hail	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.61	752.1	30.14	765.5	— 7	—21.7	82	nw.	10	4.5		0	0			0.10	2.5	clear	W. H. McIntyre.
Saugeen, Ontario*	29.38	746.2	30.15	765.8	15	— 9.4	83	n.	26	11.6			10 n			0.01	0.3	cloudy	
St. Andrews, N. B.	29.63	752.6	29.69	754.1	28	— 2.2	92	sw.	1	0.4			10 n			0.02	0.5	cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.72	754.9	29.78	756.4	11	—11.7	100	s.	2	0.9		2 cs	0			0.04	1.0	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.71	754.6	30.12	765.0	19	— 7.2	70	nw.	19	8.5		0	5 ks		nw.	inap.	inap.	fair	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.64	752.8	29.72	754.9	34	1.1	88	s.	2	0.9		hz.	hz.			0	0	hazy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.81	757.2	30.08	764.0	22	— 5.6		e.	2	0.9		10 k	10 s						John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.57	776.5	30.86	783.8	33.7	0.9		nne.			2		10			blank	blank		N. Titoushkin.
Sung-shu-chwang†	24.58	634.4			18.9	— 7.3		calm			0		9			0.83	21.		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.52	775.1	30.54	775.8	42.4	5.8	78	ne.	4.5	2.0		10 ck	0	w.		0	0	covered	M. Marc Dechevrens, S.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.52	775.3	30.57	776.5	35.1	1.7	80	nw.	9	4			10						Oversergent Fischer.
Fanöe	30.55	775.9	30.57	776.4	36.5	2.5	85	wsw.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.61	752.2	29.66	753.3	— 0.8	—18.2	94	sw.			3		10						S. Kleinschmidt.
Stykkisholm, Iceland	28.80	731.4	28.84	732.5	27.0	— 2.8		sw.			7		10					snowing	A. O. Thorlacius.
Thorshavn	29.63	752.5	29.66	753.4	47.8	8.8	86	sw.	45	20			10						Overloerer Bergh.
Vestervig	30.41	772.5	30.50	774.8	37.0	2.8	96	ssw.			2		10						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.82	757.4	30.48	774.3	48.6	9.2	86	se.			1	0	0			0	0	clear	M. Labrone, Director.
Alençon, Normal School	30.06	763.5	30.61	777.5	35.6	2	93	ne.			2		k	se.	s.	0	0		M. Nicot, Director.
Arras, Engineer School	30.35	770.9	30.63	778.0	27.9	—2.3	71	se.			1		fg			0	0	foggy	M. Klein, Commandant.
Avignon, Normal School	30.50	774.8	30.58	776.8	44.6	7	57	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.05	763.3	30.65	778.5	31.6	—0.2	100	se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.38	771.6	30.67	778.9	32.2	0.1	89	nnw.			1		10			0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.56	776.2	31.8	—0.1	96	ne.			1		0			0	0	clear	M. Gobin, Director.
Bordeaux, Observatory	30.19	766.8	30.46	773.7	50.4	10.2	46	ese.			3		0			0	0	clear	M. Rayet, Director.
Bourges, Normal School	30.00	762.1	30.03	777.9	39.2	4	75	nne.			1		0			0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.28	769.1	30.52	775.3	51.4	10.8	62	ese.			1		0			0	0	clear	M. de Kennaree, Dir.
Caen, Normal School	30.52	775.1	30.60	777.1	38.8	3.8	83	ne.			1		0			0	0	clear	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.24	768.1	30.58	776.7	33.6	0.9	85	se.			1		10			0	0	covered	M. Judot, Director.
Charleville, Normal School	30.10	764.5	30.63	778.0	29.1	—1.6	96	sw.			1		10					light rain	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.16	740.7	30.55	776.0	50.4	10.2	26	wsw.			1		2 c	0		0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.74	755.4	30.64	778.2	30.2	—1	100	nw.			1		fg			0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.72	754.8	30.65	778.4	27.9	—2.3	94	se.			1		10	se.	se.	0	0	foggy	Dr. Coulet, Director.
Gap, Normal School	27.96	710.2	30.60	777.1	42.8	6	88									0	0		M. Jeangirard, Director.
Grénasque, du. Rhone	29.37	746.1	30.54	775.8	46.9	8.3	46	ne.			2		2		ne.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.80	756.9	30.61	777.6	37.0	2.8	74	e.			1		2 cs	0		0	0	slightly cl'dy.	M. Ablard, Director.
Guéret, Normal School	28.87	733.4	30.62	777.7	44.6	7	57	s.			1		0	0		0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.32	770.1	30.61	777.6	32.4	0.2	96	se.			1		1		se.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	29.84	757.8	30.41	772.3	51.8	11	63	ene.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.47	773.9	30.57	776.5	48.2	9.0	86	e.			3		0			0	0	clear	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.52	749.8	30.65	778.6	26.8	—2.9	100	nne.			1		fg			0	0	dense fog	M. André, Director.
Mans, Normal School	30.26	768.5	30.58	776.8	36.8	2.7	81	e.			1		0			0	0	clear	M. Piboen, Director.
Marseille, Observatory	30.26	768.7	30.54	775.7	54.1	12.3	31	e.			1		1		ene.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.08	637.1	29.93	760.1	34.2	1.2	73	se.	5.6	2.5			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.45	773.4	30.56	776.3	48.9	9.4	54	ene.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.81	757.2	30.65	778.4	30.2	—1	92	wsw.			1	0	0			0	0	misty	M. Hasse, Director
Nantes, Observatory	30.42	772.6	30.58	776.7	46.8	8.2	63	ne.			0-1	0	0			0	0	clear	M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.43	772.9	30.55	775.9	46.6	8.1	94	ne.	3.8	1.7			10		se.	0.232	5.9	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.35	542.2			22.1	—5.5		s.			2		1		s.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.45	747.9	30.57	776.4	40.5	4.7	81						0			0	0	clear	M. Tallien.
Puy de Dôme Obs'y, Summit	25.49	647.4			32.9	0.5	80	se.			3		0			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.51	775.0	30.54	775.8	48.9	9.4	71	ese.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.30	769.6	30.52	775.2	48.6	9.2	46	se.			1		0			0	0	clear	M. Monillot, Director.
Rodez, Normal School	28.30	718.8	30.52	775.1	42.8	6	32	e.			2		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.41	772.3	30.45	773.5	29.8	—1.2	96	ese.			1		10			0	0	misty	M. Platrier, Director.
Saint Lô, Normal School	30.46	773.7	30.62	777.7	42.4	5.8	73	ese.			2		1		se.	0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.47	773.8	30.63	778.0	31.1	—0.5	96	ne.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.78	756.3	30.51	774.9	49.3	9.6	65	sse.			3		2		w.	0	0	slightly cl'dy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.11	764.9	30.61	777.4	31.3	—0.4	89	e.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.35	770.9	30.64	778.3	31.5	—0.3	100	ene.			1		10			0	0	dense fog	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.77	756.2	30.64	778.3	30.4	—0.9	74	nw.			1	0	1 s			0	0		Prof. Dr. Hoh.
Berlin	30.43	773.0	30.62	777.7	35.6	2.0	64	s.			1		0			0	0		Prof. Dr. Arndt.
Breslau	30.11	764.7	30.65	778.3	32.2	0.1	51	sse.			1		0			0	0		Royal University Obs'y.
Carlsruhe	30.18	766.5	30.65	778.5	31.3	—0.4	78	e.			1		0			0	0		Albert Senz.
Cassel	29.86	758.5	30.58	776.7	32.0	0.0	89	s.			1		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.27	768.8	30.66	778.8	29.8	—1.2	69	e.			1		0			0	0		Physical Society.
Friedrichshafen	29.13	739.8	30.67	779.1	27.0	—2.8	94	ne.			1		10			0	0	foggy	Wilhelm, Chief Tel.
Hamburg	30.55	775.9	30.64	778.3	32.9	0.5	73	sw.			2		0			0	0	hazy	E. Preller.
Kiel	30.59	777.0	30.61	777.4	33.1	0.6	82	sw.			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.21	767.2	30.65	778.6	32.7	0.4	55	sw.			1		0			0	0	hazy	H. Leppig, Asst.
Magdeburg	30.43	773.0	30.64	778.2	35.6	2.0	61	s.			1		0			0	0		Dr. Assmann.
Memel	30.46	773.7	30.51	774.9	34.0	1.1	81	wnw.			4		10 s						Issermann.
Munich	28.71	729.3	30.61	777.6	22.8	—5.1	84	ne.			1		0			0	0		Central Station.
Neufahrwasser	30.54	775.8	30.56	776.2	38.3	3.5	42	wsw.			1		2			0	0		A. Lothes.
Neustadt, Palatinate	30.10	764.6	30.64	778.3	29.3	—1.5		w.			2		0			0	0		Dicknether.
Stuttgart	29.63	752.5	30.58	776.7	31.1	—0.5	94	n.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.60	777.1	30.62	777.7	34.0	1.1	92	sw.			2		0			0	0		Profs. Brandes & Reimer.
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.97	761.3	30.38	771.7	37.8	3.2		ne.			1.0		10			0.031	0.8	snowing	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.99	761.8	30.04	763.1	72.3	22.4	74	wsw.	22	9.8			8	w.		0	0	d. clouds	
Deesa	29.47	748.6	29.95	760.8	79.0	26.1	28	wsw.	9.7	4.3			8	ssw.		0	0	d. clouds	
Bombay	29.86	758.4	29.90	759.4	78.5	25.8	62	nnw.	17	7.6			0			0	0	blue sky	
Poona, Yarrowda.	28.00	711.2	29.83	757.8	84.9	29.4	27	wnw.	6	2.7			0			0	0	blue sky	
Belgaum	27.32	694.0	29.84	758.0	79.6	26.4	26	ssw.	9	4.0			0			0	0	blue sky	
Lahore	29.26	743.1	30.03	762.7	64.6	18.1	31	calm	1.2	0.5			0			0	0	blue sky	
Roorkee	29.05	737.8	29.98	761.6	61.8	16.6	53	nw.	4.6	2.1			1			0	0		
Agra	29.44	747.8	30.03	762.7	67.6	19.8	26	nw.	6.5	2.9									
Nagpur	28.87	733.4	29.92	760.0	79.9	26.6	26	n.	4.1	1.8			0			0	0	blue sky	
Jubbulpore	28.63	727.2	30.02	762.6	68.7	20.4	19	calm	2.3	1.0			0			0	0	blue sky	
Lucknow	29.59	751.6	29.98	761.5	68.3	20.2	28	wsw.	7.0	3.1			0			0	0	blue sky	
Allahabad	29.68	753.8	30.00	762.1	63.8	17.7	43	w.	4.6	2.1			0			0	0	blue sky	
Patna	29.81	757.2	30.01	762.1	64.6	18.1	44	wnw.	5.2	2.3			0			0	0	blue sky	
Hazaribagh	27.93	709.4	30.00	762.1	64.8	18.2	16	nw.	10.7	4.8			0			0	0	blue sky	
Cuttack	29.88	758.9	29.96	761.0	78.2	25.7	52	sse.	1.0	0.4			0			0	0	blue sky	
Calcutta, Allpore	29.96	760.9	29.98	761.5	70.0	21.1	47	nnw.	3.0	1.3			0			0	0	blue sky	
Dhubri	29.86	758.5	29.99	761.7	66.3	19.1	48	calm	0.9	0.4			0			0	0	blue sky	
Chittagong	29.87	758.7	29.96	761.0	72.6	22.6	66	wnw.	2.0	0.9			2			0	0	blue sky	
Sibsagur	29.64	752.8	29.99	761.7	63.4	17.4	80	ne.	3.1	1.4			2		w	0	0	blue sky	
Jeypore	28.54	725.0	30.03	762.7	67.7	19.8	24	nnw.	4.0	1.8			1	n.		0	0	d. clouds	
Zanzibar, Africa																			
Trichinopoly	29.65	753.1			87.3	30.7	31	calm	0	0			4			0	0	d. clouds	
Bellary	28.39	721.1			90.0	32.2	19	se.	2.2	1.0			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	30.13	765.2	30.55	776.0	46.0	7.8	18	calm	0	0			0			0	0		Prof. Giovanni Clodig.
Milan	30.10	764.6	30.61	777.6	36.5	2.5	57	w.	3.1	1.4			0			0.016	0.4		Prof. Schiaparelli.
Padua	30.48	774.2	30.60	777.1	38.8	3.8	40	wnw.	4.9	2.2			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.69	754.1	30.64	778.3	36.1	2.3	68	se.	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	30.37	771.3	30.57	776.4	47.8	8.8	30	ne.	1.3	0.6			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.62	727.0	30.65	778.5	34.0	1.1	55	wnw.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.52	775.3	30.58	776.6	39.0	3.9	56	n.	7.4	3.3			0			0	0		Prof. Luigi Guidi.
Florence	30.27	768.9	30.54	775.7	47.3	8.5	24	n.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.47	773.8	30.56	776.1	44.6	7.0	26	ne.	6.3	2.8			0			0	0		Prof. P. Monte.
Rome	30.32	770.0	30.50	774.6	45.0	7.2	37	n.	2.5	1.1			0			0	0		Prof. P. S. Ferrari.
Lecce	30.19	766.8	30.45	773.4	45.5	7.5	52	nne.	17.4	7.8			1	nne.		0	0		Prof. C. de Giorgi.
Cosenza	29.56	750.7	30.48	774.3	43.2	6.2	70	nne.	11.9	5.3			3	n.		0	0		Prof. D. Conti.
Cagliari	30.24	768.2	30.44	773.2	54.0	12.2	52	se.			2		9	n.		0	0		Prof. A. Pacinotti.
Palermo	30.22	767.7	30.48	774.3	50.0	10.0	41	e.	3.1	1.4			2	e.		0	0		Prof. G. Ciacciatore.
Syracuse	30.39	771.9	30.44	773.1	48.9	9.4	49	wnw.	7.4	3.3			8	ene.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	29.93	760.1	30.47	773.9	37.4	3.0	53	ne.	0	0			1	n.		0	0		Prof. T. Brioschi.
Stelvio	22.42	569.5			22.3	— 5.4	20	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.46	570.4			18.3	— 7.6	24	se.			6		1			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.61	777.5	30.65	778.5	28.0	— 2.2	78	sse.	0.2	0.1			10 s			0	0	cloudy	
Hakodate	30.63	778.0	30.64	778.2	23.7	— 4.6	44	calm	0	0			1			0	0	clear	
Hiroshima, I. M. Obs'y	30.42	772.6	30.43	772.9	39.9	4.4	66	nne.	14.2	6.3		ck	10 s		e.	0	0	overcast	K. Sasaki.
Kanazawa	30.42	772.6	30.52	775.2	33.7	0.9	94	nne.	1.2	0.5		4ck;cs	0	ne.		0.030	0.8	fair	S. Endo.
Kioto	30.26	768.6	30.44	773.2	37.6	3.1	79	nnw.	0.7	0.3		ck;cs	9 s			0	0	fair	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.14	765.5	30.35	770.9	42.1	5.6	73	ne.	6.9	3.1			10 n			0.170	4.3	raining	S. Takehayashi.
Niigata	30.53	775.4	30.56	776.2	32.3	0.2	65	se.	1.6	0.7		0	0			0	0	clear	
Nobiru	30.58	776.7	30.60	777.2	27.4	— 2.6	88	nnw.	6.5	2.9		0	1 s			0	0	clear	H. Midzushina.
Sapporo					24.5	— 4.2	84	calm	0	0			10			0.078	2.0	covered	
Tokei Obs'y, Yeddo	30.45	773.4	30.52	775.2	36.5	2.5	83	n.	4.0	1.8			10 s		ssw.	0.003	0.1	light rain	The Staff.
Wakayama	30.37	771.4	30.42	772.6	41.3	5.2	71	n.	8.1	3.6			10 s			0.004	0.1	cloudy	Y. Kuwamusa.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.41	620.0	30.25	768.4	46.8	8.2	80	nnw.			1	1 cs	0	nw.		0	0	fine	Prof. M. Leal.
Mazatlan	29.80	756.8	30.06	763.6	55.5	13.1	78	nw.	5.3	2.3			10 n		se.	0	0	covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.05	585.6	30.20	767.0	46.4	8.0	86	calm	0	0		0	0			0	0		The Staff.
Morelia	24.26	616.2	30.48	774.2	49.3	9.6	75	s.			4	2 c	0	s.		0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.90	607.1	29.99	761.7	48.2	9.0	69	sw.			1	2 c	0	sw.		0	0	clear	M. V de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.36	771.0	43.7	6.5	88	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.07	611.6	30.16	766.1	56.6	13.7	58	wsw.			1	0	0			0	0	fine	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Chávaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.45	570.4	30.18	766.6	43.7	6.5	65	wsw.	19.8	8.8		0	0			0	0		J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.69	754.1	29.88	758.9	82.7	28.2	69	e.	17.0	7.6		0	4 n;k		e.	0.05	1.3	fair	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.64	778.3	30.64	778.3	39.0	3.9		se.			2					0	0		
Groningen	30.57	776.4	30.62	777.8	31.8	— 0.1		sw.			1					0	0		
Helder	30.61	777.4	30.61	777.4	35.4	1.9		sse.			1					0	0		
Hellevoetsluis	30.63	778.0	30.63	778.0	37.8	3.2	71	s.			1					0	0		
Utrecht	30.60	777.1	30.64	778.3	37.2	2.9	76	se.			1		2			0	0	lightly cl'dy	H. van der Brink.
NOR WEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.30	769.7	30.37	771.3	41.4	5.2	87	sse.	27	12			10			0.402	10.2		
Brono	29.76	755.8	29.80	756.8	40.6	4.8	92	sw.	36	16			10			0.472	12.0		
Christiania	30.18	766.6	30.34	770.5	31.3	— 0.4	89	w.	0	0			10			0	0		
Gjæsvær	29.13	739.8	29.15	740.4	33.4	0.8		s.			6		9						
Lodingen	29.24	742.7	29.29	743.9	41.9	5.5	84	sw.			8–9		10			1.252	31.8	raining	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					58.3	14.6	86	sw.	2.5	1.1			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.26	743.3	30.29	769.3	53.6	12.0	59	e.	9.4	4.2			2			c	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.13	765.3	30.22	767.5	64.2	17.9	62	se.	1.3	0.6			6			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.93	760.2	30.30	769.5	51.8	11.0	67	ne.	19.2	8.6			0			0	0		The Staff.
Ponta Delgada, Azores	30.15	765.9	30.22	767.7	60.8	16.0	81	sse.	6.9	3.1			3			0.165	4.2		
Saint Paul de Loando	29.69	754.1	29.89	759.1	80.2	26.8	79	nnw.	0.7	0.3			6	sse.		blank	blank		
Serra da Estrella	25.43	646.0	30.35	770.9	34.2	1.2	82	se.	31.1	13.9			9			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.95	735.4	30.12	765.0	12.9	—10.6		sw.	7	3			10 n			0	0		Major K. Lasarew.
Archangel	29.75	755.6	29.77	756.1	24.4	— 4.2	95	sw	9	4			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.15	765.7	30.06	763.6	18.7	— 7.4	78	ssw.	2	1		0	5 k;s			0.047	1.2		Capt. Wisganow.
Barnaul	29.76	756.0	30.31	769.8	13.1	—10.5	69	sw.	2	1			10			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.97	761.1	30.22	767.6	35.1	1.7	75	w.	9	4		0	0			0	0		Observatory.
Ekaterinburg	29.10	739.0	30.17	766.2	— 0.6	—18.1	70	wsw.	16	7		8 c,cs	0			0	0	light clouds	Meteorological Obs'y.
Kasan	30.04	763.1	30.35	771.0	— 6.2	—21.2	83	se.	2	1			0			0	0		Observatory.
Kertch	30.11	764.7	30.13	765.2	30.7	— 0.7	86	nnw.	4	2			10 n			0	0		Lagorio & Sastyrez.
Kieff	29.70	754.4	30.38	771.7	26.4	— 3.1	76	n.	4	2		c	10 ks			0	0		Observatory.
Lugan	29.98	761.5	30.20	767.1	23.0	— 5.0	71	nne.	13	6			7			0.004	0.1		Meteorological Obs'y.
Moscow	29.67	753.7	30.18	766.6	27.7	— 2.4	67	nw.	4	2			10 s			0	0		Meteorological Obs'y.
Nikolaiev	30.32	770.2	30.39	772.0	30.6	— 0.8	77	n.	22	10			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.47	773.8	30.55	776.0	8.2	—13.2	70	w.	7	3			0			0	0		Lieut. Iwanow.
Pekin, China	30.63	778.0	30.77	781.6	26.8	— 2.9	68	calm	0	0		0	4 k			0	0		Physical Observatory.
St. Petersburg	30.11	764.7	30.12	765.1	30.9	— 0.6	86	wnw.	9	4			10ks;n			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.60	726.5	30.23	767.8	41.4	5.2	48	ne.	13	6			10			0	0	light clouds	Teich, A. M.
Tiflis	28.52	724.4	30.00	761.9	34.3	1.3	82	calm	0	0			10			0.043	1.1	snowing	Physical Observatory.
Vladivostok	30.67	779.1	30.74	780.8	9.3	—12.6	70	n.	13	6		0	0			0	0		
Warsaw	30.15	765.9	30.60	777.3	32.7	0.4	54	wsw.	9	4		8 c;cs	0						Astronomical Obs'y.
Wilna	30.03	762.8	30.48	774.2	27.7	— 2.4	84	sw.	4	2			10			0	0		Berg, Assistant.
Yeniseisk	30.00	762.1	30.32	770.0	13.3	—10.4	69	ese.	2	1			5			0	0		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.16	766.1	49	9.4	85	sw.			6		10			0	0	gloomy	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.33	770.4	30.43	773.0	51.8	11.	82	e.	6.5	2.9			10			0.343	8.7	covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.35	771.0	30.41	772.5	60.1	15.6	49	se.	0.7	0.3		0	0			0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.37	695.3	30.46	773.6	44.1	6.7	69	ne.	6.0	2.7		0	3			0	0	light clouds	Domingo Martin.
Madrid, Royal Obs'y	28.08	713.2	30.35	770.8	54.0	12.2	57	se.	13.0	5.8		0	8			inap.	inap.	almost cov'd	The Staff.
Murcia, Met. Obs'y	30.17	766.3	30.33	770.3	53.6	12.0	82	sw.	1.8	0.8		2	4	ne.		0.461	11.7	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.37	746.1	30.28	769.2	56.1	13.4	52	se.	6.3	2.8		0	0			0	0	clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.01	762.4	30.08	764.0	69.3	20.7	83	se.	8.7	3.9		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.96	761.0	30.02	762.5	77.3	25.2	73	e.	0	0		0	8			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.16	766.1	30.26	768.6	59.0	15.0	69	ese.	3.7	1.7		3	4	se.	e.	0.262	6.7		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.05	763.2	30.14	765.5	73.8	23.2	90	calm	0	0		3 cs	4 k	sw.	sw.	0.244	6.2	d. clouds	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.94	760.5	30.07	763.8	72.8	22.7	91	n.	6.1	2.7			10 ks		n.	0	0	covered.	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.82	757.3	29.85	758.3	33.4	0.8	85	sw.			4		10			0	0		
Umea	30.03	762.7	30.08	764.0	35.6	2.0	75	sw.			2		10			0	0		
Hernosand	30.13	765.3	30.18	766.6	37.9	3.3	52	s.			2		10			0	0		
Stockholm	30.27	768.8	30.45	773.3	38.8	3.8	70	w.			2		6			0	0		
Wisby	30.39	771.9	30.45	773.4	36.7	2.6	89	wnw.			2		0			0	0		
Sub Series.																			
Upsala	30.26	768.5	30.34	770.7	35.8	2.1	68	sw.	1.8	0.8			10			0	0		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.14	740.1	30.63	778.1	32.9	0.5	81	n.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.29	769.3	34.7	1.5	92	n.	22	10.0			10		n.	0.039	1.0	snowing	The Observatory.
Valona			30.43	772.8	45.1	7.3		nw.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.75	755.6	44.2	6.8	90	se.			2		10 n		sw.	1.53	38.9		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Albany, New York	29.74	755.4	29.82	757.4	36.4	2.4	69	w.	6	2.7		0	3 s			inap.	inap.	clear	
Alpena, Michigan	29.50	749.3	30.21	767.3	11	—11.7	80	nw.	6	2.7			10 s			0.05	1.3	cloudy	
Atlanta, Georgia	28.92	734.6	30.14	765.5	43.5	6.4	83	nw.	7	3.1			10 n		calm	0.11	2.8	light rain	
Atlantic City, New Jersey	29.99	761.7	30.00	762.0	37	2.8	64	w.	10	4.5		5 ck	0	w.		0	0	fair	
Augusta, Georgia	29.98	761.5	30.18	766.6	47.0	8.3	77	w.	2	0.9			10 s			0	0	cloudy	
Baltimore, Maryland	30.01	762.2	30.06	763.5	41	5.0	57	nw.	8	3.6		6 cs	0	w.		0	0	fair	
Barnegat, New Jersey	29.95	760.7	29.97	761.2	36.0	2.2	69	w.	18	8.0		0	4 k		w.	0	0	fair	
Bismarck, Dakota	28.05	712.5	30.03	762 7	27	— 2.8	77	nw.	12	5.4		5 ck	0	nw.		0	0	fair	
Block Island, Rhode Island																			
Boise City, Idaho																			
Boston, Massachusetts	29.57	751.1	29.73	755.1	31.0	— 0.6	78	w.	13	5.8		4 ck	0	w.		0.10	2.5	fair	
Brownsville, Texas	29.69	754.1	29.74	755.4	65	18.3	93	nw.	8	3.6			10 n		nw.	inap.	inap.	light rain	
Buffalo, New York	29.35	745.5	30.15	765.8	21	— 6.1	74	sw.	19	8.5		0	2 ks		sw.	0.05	1.3	clear	
Burlington, Vermont	29.41	747.0	29.72	754.9	30.3	— 0.9	64	nw.	17	7.6		0	7 s		nw.	0.01	0.3	fair	
Cairo, Illinois	29.77	756.1	30.19	766.8	44.0	6.7	85	nw.	3	1.3			10 s		w.	0	0	cloudy	
Campo, California	27.69	703.3	30.33	770.4	38	3.3	37	e.	3	1.3		0	0			0	0	clear	
Camp Thomas, Arizona	27.49	698.2	30.32	770.1	32	0.0	81	calm			0	0	0			0	0	clear	
Cape Henry, Virginia	30.07	763.8	30.09	764.3	43	6.1	74	w.	10	4.5		0	6 s			0	0	fair	
Cape May, New Jersey	30.08	764.0	30.11	764.8	38	3.3	82	w.	20	8.9			10 ks		nw.	0	0	cloudy	
Castroville, Texas	29.02	737.1	29.86	758 4	54	12.2	86	nw.	13	5.8			10 n			0.62	15.7	light rain	
Cedar Keys, Florida	30.06	763.5	30.08	764.0	62	16.7	93	se.	6	2.7			fg.			0	0	dense fog	
Champaign, Illinois	29.29	744.0	30.16	766.1	31.0	— 0.6	74	ne.	7	3.1		0	3 s		n.	0	0	clear	
Charleston, S. Carolina	30.06	763.5	30.12	765.0	52	11.1	72	ne.	4	1.8			10s;fg		ne.	0	0	threatening	
Charlotte, N. Carolina	29.25	742.9	30.14	765.5	41.0	5.0	82	nw.	3	1.3			10 s		w.	0	0	cloudy	
Chattanooga, Tennessee	29.38	746.2	30.24	768.1	41.0	5.0	96	se.	3	1.3			10ks;fg		sw;c	0	0	cloudy	
Cheyenne, Wyoming	24.06	611.1	30.31	769.9	30.0	— 1.1	54	nw.	1	0.4		0	2 s			0	0	clear	
Chicago, Illinois	29.44	747.8	30.18	766.6	29.9	— 1.2	84	w.	2	0.9		3 k	0			0	0	clear	
Chincoteague, Virginia	30.05	763.3	30.07	763.8	37	2.8	82	sw.	4	1.8		9 ck	1 s	nw.		0	0	cloudy	
Cincinnati, Ohio	29.53	750.0	30.22	767.6	38.2	3.4	61	nw.	6	2.7			10 s			0	0	cloudy	
Cleveland, Ohio	29.43	747.5	30.22	767.6	29	— 1.7	77	n.	7	3.1		0	2 s			0	0	clear	
Coleman City, Texas																			
Columbus, Ohio	29.32	744.7	30.22	767.6	30	— 1.1	77	nw.	6	2.7		0	0			0	0	clear	
Concho, Texas	28.11	714.0	30.13	765.3	40	4.4	100	n.	14	6.3			10 n		n.	1.08	27.4	heavy rain	
Davenport, Iowa	29.43	747.5	30.13	765.3	33	0.6	68	w.	1	0.4		0	fg.		calm	0	0	light fog	
Dayton, Washington T'y	28.68	728.5	30.49	774 4	32	0.0	78	sw.	2	0.9		2 c	2 k	sw.	sw.	0	0	fair	
Deadwood, Dakota	25.36	644 1	30.28	769.1	34.2	1.2	78	nw.	5	2.2			10 s			0	0	cloudy	
Decatur, Texas					39	3.9	73	ne.	13	5.8			10 s		ne.	0.14	3.6	cloudy	
Delaware Breakwater, Del.	30.01	762.2	30.03	762.7	39	3.9	73	nw.	16	7.2		5 c;ck	4 s	w.		0	0	cloudy	
Denison, Texas	29.24	742.7	30.08	764.0	44.3	6.8	93	n.	6	2.7			10 s			0.05	1.3	cloudy	
Denver, Colorado	24.81	630.2	30.33	770.4	40.3	4.6	52	nw.	6	2.7		0	4 s		nw.	0	0	fair	
Des Moines, Iowa	29.12	739.6	30.09	764.3	32	0.0	78	nw.	3	1.3		0	fg.			0	0	clear	
Detroit, Michigan	29.48	748.8	30.23	767.8	29.2	— 1.6	77	nw.	6	2.7		0	0			0	0	clear	
Dodge City, Kansas	27.45	697.2	30.19	766.8	24	— 4.4	88	w.	6	2.7		0	0			0	0	clear	
Dubuque, Iowa	29.35	745.5	30.11	764.8	23.5	— 4.7	78	s.	3	1.3		1 k	hz.	s.		0	0	clear	
Duluth, Minnesota	29.16	740.7	29.92	760.0	21.8	— 5.7	74	ne.	8	3.6			10 s		calm	0	0	cloudy	
Eagle Pass, Texas	29.21	741.9	30.05	763.3	47.1	8.4	86	nw.	31	13.9			10 n			0.86	21.8	light rain	
Eagle Rock, Idaho	25.59	650.0	30.49	774.4	—10	—23.3	78	calm	0	0		0	0			0	0	clear	
Eastport, Maine	29.59	751.6	29.66	753.4	33	0.6	78	s.	6	2.7		10 cs	0			0.05	1.3	cloudy	
El Paso, Texas	26.40	670.6	30.28	769.1	31	— 0.6	88	nw.	4	1.8		0	0			0.21	5.3	clear	
Erie, Pennsylvania	29.39	746.5	30.16	766.1	27	— 2.8	77	nw.	16	7.2		6 k	0	nw.		0	0	fair	
Escanaba, Michigan	29.46	748.3	30.18	766.6	11	—11.7	61	ne.	4	1.8			10 s		nw.	0.04	1.0	cloudy	
Fort Apache, Arizona	25.23	640.8	30.33	770.4	21	— 6.1	53	ne.	3	1.3		0	0			0.02	0.5	clear	
Fort Assinnaboine, Montana	27.23	691.6	30.27	768.8	25	— 3.9	64	sw.	11	4.9		8 k	0	w.		0	0	cloudy	
Fort Bennett, Dakota	28.36	720.3	30.08	764.0	35	1.7	66	w.	1	0.4		10 ck	0	w.		0	0	cloudy	
Fort Benton, Montana	27.17	690.1	30.17	766.3	18	— 7.8	58	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	27.97	710.4	30.15	765.6	27	— 2.8	56	w.	20	8.9		0	0			0	0	clear	
Fort Custer, Montana	26.92	683.8	30.28	769.1	33	0.6	71	nw.	12	5.4		0	6 s		w.	0	0	fair	
Fort Davis, Texas	25.22	640.6	30.18	766.6	31	— 0.6	65	ne.	4	1.8			10 s		n.	0.13	3.3	cloudy	
Fort Elliott, Texas	27.30	693.4	30.20	767.1	30	— 1.1	41	nw.	12	5.4		6 c	0	nw.		0	0	fair	
Fort Gibson, Indian T'y	29.52	749 8	30.12	765.0	37.5	3.1	82	n.	3	1.3			10 s		n.	0	0	cloudy	
Fort Grant, Arizona	25.34	643.6	30.20	767.1	23	— 5.0	67	e.	4	1.8		0	0			0	0	clear	
Fort Griffin, Texas	28.80	731.5	30.17	766.3	42	5.6	43	n.	7	3.1			10 k		calm	0.10	2.5	cloudy	
Fort Keogh, Montana	27.45	697.2	30.13	765 3	33	0.6	62	nw.	16	7.2		4 cs	0	w.		0	0	fair	
Fort Macon, North Carolina	30.08	764.0	30.10	764.5	48	8.9	77	nw.	11	4.9			10 s		nw.	0	0	cloudy	
Fort McKavett, Texas	27.74	704.6	30.12	765.0	42	5.6	93	n.	16	7.2			10 n			0.42	10.7	light rain	
Fort Missoula, Montana	26.93	684.0	30.36	771.1	32	0.0	81	se.	2	0.9			10 ks			0	0	cloudy	
Fort St. Michaels, Alaska	29.47	748.5	29.50	749.3	—22	—30.0	100	sw.	9	4.0		0	0			0	0	clear	
Fort Shaw, Montana	26.44	671.6	30.29	769.4	32	0.0	71	w.	32	14.3		0	0			0	0	clear	
Fort Sill, Indian Territory	28.85	732.8	30.16	766.1	40	4.4	62	nw.	15	6.7			10 s			0	0	cloudy	
Fort Stevenson, Dakota	28.01	711.4	30.03	762.7	27	— 2.8	88	nw.	23	10.3		0	3 s		w.	0	0	clear	
Fort Verde, Arizona					24.9	— 3.9	76	n.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.12	714.2	29.92	760.0	48	8.9	93	n.	22	9.8			10 n		n.	2.25	57.1	light rain	
Galveston, Texas	29.75	755.6	29.79	756.7	59	15.0	100	e.	13	5.8		0	fg.		se.	0.50	12.7	clear	
Grand Haven, Michigan	29.51	749 5	30.22	767.6	23.5	— 4.7	88	e.	5	2.2		5 ck	3 s			0	0	cloudy	
Hatteras, North Carolina	30.07	763.8	30.09	764.3	47	8.3	86	nw.	10	4.5		4 c	2 s	n.		0	0	fair	
Helena, Montana	25.90	657.8	30.30	769.6	33	0.6	62	sw.	8	3.6		5 k	0	sw.		0	0	fair	
Henrietta, Texas	29.15	740.4	30.20	767.1	37	2.8	69	n.	12	5.4		0	4 s			0.02	0.5	fair	
Huron, Dakota	28.53	724.6	30.05	763.3	30.2	— 1.0	71	w.	13	5.8		3 cs	0	w.		0	0	clear	
Indianapolis, Indiana	29.35	745 5	30.20	767.1	30.5	— 0.8	82	n.	2	0.9		4 c	fg.	calm	calm	inap.	inap.	fair	
Indianola, Texas	29.65	753.1	29.68	753.9	63.9	17.7	100	se.	16	7.2		0	8 ks;n		s.	0.49	12.4	light rain	
Jacksboro, Texas	28.91	734.3	30.15	765.8	43	6.1	74	n.	5	2.2			10 ks		n.	0.02	0.5	cloudy	
Jacksonville, Florida	30.08	764.0	30.13	765.3	58	14.4	93	ne.	2	0.9			fg.			inap.	inap.	dense fog	
Keokuk, Iowa	29.42	747.3	30.12	765.0	31.0	— 0.6	78	s.	1	0.4		0	0			0	0	clear	
Key West, Florida	30.07	763.8	30.10	764.5	74.2	23.4	82	se.	9	4.0		0	3 k		se.	0	0	clear	
Kittyhawk, North Carolina	30.07	763.8	30.09	764.3	43	6.1	78	nw.	8	3.6		3cs;hz	1 s			0	0	fair	
Knoxville, Tennessee	29.14	740.1	30.22	767.6	37	2.8	91	ne.	3	1.3			10 s			0	0	cloudy	
La Crosse, Wisconsin	29.20	741.7	30.04	763.0	29	— 1.7	56	s.	12	5.4			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.30	668 0	30.31	769.9	30.8	— 0.7	81	ne.	2	0.9		0	0			0.73	18.5	clear	
Leavenworth, Kansas	29.20	741.7	30.15	765.8	29	— 1.7	67	n.	1	0.4		0	0			0	0	clear	
Lewiston, Idaho	29.62	752.3	30.49	774.4	33	0.6	50	e.	1	0.4		1 k	0	e.		0	0	clear	
Little Rock, Arkansas	29.73	755.1	30.06	763.5	48	8.9	77	e.	2	0.9			10 s			0	0	cloudy	
Los Angeles, California	29.96	761.0	30.36	771.1	39.3	4.1	73	ne.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	29.60	751.8	30.19	766.8	40.5	4.7	82	n.	2	0.9			fg.		calm	0	0	dense fog	
Lynchburg, Virginia	29.35	745.5	30.07	763.8	45.0	7.2	37	nw.	8	3.6			10 s			0	0	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.05	737.9	30.14	765.5	23	— 5.0	73	s.	7	3.1		4 cs	0	nw.		0	0	fair	
Marquette, Michigan	29.37	746.0	30.15	765.8	15	— 9.4	67	sw.	10	4.5			10 s		sw.	0.07	1.8	cloudy	
Mason, Texas	28.29	718.6	30.02	762.5	47	8.3	89	n.	20	8.9			10 n		n.	1.41	35.8	light rain	
Memphis, Tennessee	29.78	756.4	30.13	765.3	46	7.8	83	calm	0	0			fg.			0	0	dense fog	
Milwaukee, Wisconsin	29.36	745.7	30.16	766.1	27	— 2.8	88	calm	0	0		4 ck	fg.	w.		0	0	fair	
Mobile, Alabama	29.98	761.5	30.02	762.5	54.0	12.2	100	n.	8	3.6			10 s		n.	0.97	24.6	cloudy	

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	29.90	759.4	30.14	765.5	48	8.9	100	e.	3	1.3	.....	.....	10 n	.....	.....	0.34	8.6	light rain	
Moorhead, Minnesota	28.72	729.5	29.82	757.4	22	— 5.6	87	w.	10	4.5	.....	0	0	.....	.....	0	0	clear	
Morgantown, W. Virginia	29.16	740.7	30.23	767.8	37.5	3.1	81	nw.	3	1.3	.....	2 cs	0	.....	.....	0.02	0.5	clear	
Mt. Washington, N. H.	23.17	588.5	29.79	756.7	10.8	—11.8	94	nw.	50	22.3	.....	.....	10n;fg	.....	nw.	0.28	7.1	light snow	
Nashville, Tennessee	29.63	752.6	30.19	766.8	42.2	5.7	91	s.	1	0.4	.....	.....	10ks;fg	.....	.....	0	0	cloudy	
New Haven, Connecticut	29.72	754.9	29.84	757.9	30	— 1.1	88	w.	6	2.7	.....	1 k	sk	w.	.....	inap.	inap.	clear	
New London, Connecticut	29.81	757.2	29.86	758.4	33	0.6	68	nw.	6	2.7	.....	3 c	hz	calm	.....	0	0	fair	
New Orleans, Louisiana	29.90	759.4	29.96	761.0	57.0	13.9	93	e.	10	4.5	.....	.....	10s;fg	.....	.....	0 36	9.1	threatening.	
Newport, Rhode Island	29.74	755.4	29.79	756.7	35.4	1.9	77	w.	20	8.9	.....	1 k	1 s	w.	calm	0	0	clear	
New River, N. Carolina	.....	.....	.....	.....	46	7.8	69	nw.	.....	.....	1	.....	10 s	.....	.....	0	0	cloudy	
New Shoreham, Rhode I'd	29.77	756.1	29.80	756.9	36.2	2.3	79	w.	26	11.6	.....	2 k	0	w.	.....	0	0	clear	
New York, New York	29.74	755.4	29.93	760.2	34	1.1	78	w.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Norfolk, Virginia	30.06	763.5	30.09	764.3	46	7.8	60	nw.	8	3.6	.....	8ck;cs	0	w.	.....	0	0	cloudy	
North Platte, Nebraska	27.11	688.6	30.21	767.3	19.6	— 6.9	78	nw.	8	3.6	.....	2 c	0	.....	.....	0	0	clear	
Olympia, Washington T'y	30.48	774.2	30.52	775.2	34	1.1	88	s.	8	3.6	.....	9 k	0	s.	.....	0.14	3.6	cloudy	
Omaha, Nebraska	28.85	732.8	30.12	765.0	32.8	0.4	68	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.32	744.7	29.34	745.2	—26.2	—32.3	79	ssw.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	
Oswego, New York	29.64	752.8	29.99	761.7	25.5	— 3.6	75	nw.	24	10.7	.....	hz	4 ks	.....	nw.	0.08	2.0	fair	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	29.95	760.7	29.98	761.5	56.6	13.7	97	ne.	12	5.4	.....	.....	10 s	.....	sw.	1.24	31.5	cloudy	
Philadelphia, Pa	29.99	761.7	30.10	764.5	35	1.7	72	sw.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Pike's Peak, Colorado	17.67	448.8	30.39	771.9	9	—12.8	73	nw.	16	7.2	.....	1 cs	0	.....	.....	0	0	clear	
Pioche, Nevada	24.32	617.7	30.49	774.4	16	— 8.9	58	w.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.33	745.0	30.19	766.8	33.0	0.6	78	sw.	10	4.5	.....	0	0	.....	.....	0.04	1.0	clear	
Port Eads, Louisiana	29.94	760.5	29.96	761.0	56.3	13.5	100	ne.	8	3.6	.....	hz	4 s;fg	.....	ne.	0.05	1.3	fair	
Port Huron, Michigan	29.49	749.0	30.22	767.6	16.0	— 8.9	80	nw.	8	3.6	.....	0	3 s	.....	nw.	0	0	clear	
Portland, Maine	29.61	752.1	29.66	753.4	32	0.6	78	sw.	7	3.1	.....	.....	10 s	.....	w.	inap.	inap.	cloudy	
Portland, Oregon	30.46	773.7	30.53	775.4	36.0	2.2	89	s.	2	0.9	.....	.....	fg	.....	calm	0.07	1.8	dense fog	
Portsmouth, N. Carolina	.....	.....	.....	.....	49	9.4	71	w.	9	4.0	.....	10 cs	0	nw.	.....	0	0	cloudy	
Prescott, Arizona	25.04	636.0	30.40	772.1	16	— 8.9	58	sw.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Punta Rassa, Florida	30.07	763.8	30.08	764.0	67	19.4	93	e.	7	3.1	.....	hz	1 ks	.....	se.	0	0	clear	
Red Bluff, California	30.12	765.0	30.50	774.7	33.4	0.8	95	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Rio Grande City, Texas	29.71	754.6	29.96	761.0	66	18.9	93	nw.	25	11.2	.....	7 c	0	nw.	.....	0.04	1.0	fair	
Rochester, New York	29.24	742.7	29.95	760.7	21	— 6.1	84	nw.	21	9.4	.....	.....	10 n	.....	nw.	inap.	inap.	light snow	
Roseburg, Oregon	29.98	761.5	30.55	776.0	34	1.1	92	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	
Sacramento, California	30.39	771.9	30.47	773.9	38.0	3.3	89	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.53	750.0	30.17	766.3	36.9	2.7	82	calm	0	0	.....	.....	10s;sk	.....	.....	0	0	cloudy	
St. Paul, Minnesota	28.96	735.6	29.90	759.4	23.5	— 4.7	78	se.	6	2.7	.....	5 ck	0	w.	.....	0	0	fair	
St. Vincent, Minnesota	28.74	730.0	29.71	754.6	15	— 9.4	83	w	15	6.7	.....	0	0	.....	.....	0	0	clear	
Salt Lake City, Utah	26.02	660.9	30.58	776.7	12	—11.1	64	e.	1	0.4	.....	0	0	.....	.....	0	0	clear	
San Antonio, Texas	29.09	738.9	29.81	757.2	52.6	11.4	93	ne.	14	6.3	.....	2 k	8 ks	.....	ne.	0.93	23.6	cloudy	
San Diego, California	30.27	768.8	30.34	770.6	44.6	7.0	66	ne.	9	4.0	.....	0	0	.....	.....	0	0	clear	
Sandusky, Ohio	29.51	749.5	30.23	767.8	31	— 0.6	88	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Sandy Hook, New Jersey	29.88	758.9	29.92	760.0	35.0	1.7	69	w.	20	8.9	.....	0	0	.....	.....	0	0	clear	
San Francisco, California	30.36	771.1	30.43	772.9	44	6.7	80	w.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Santa Fé, New Mexico	23.30	591.8	30.34	770.6	16.4	— 8.7	70	n.	7	3.1	.....	0	0	.....	.....	0	0	clear	
Savannah, Georgia	30 04	763.0	30.13	765.3	51	10.6	83	n.	2	0.9	.....	.....	10 ks	.....	s.	0	0	cloudy	
Shreveport, Louisiana	29.69	754.1	29.94	760.5	49	9.4	100	e.	12	5.4	.....	.....	10 n	.....	.....	1.15	29.2	heavy rain	
Silver City, New Mexico	24.37	619 0	30.22	767.6	28	— 2.2	61	w.	4	1.8	.....	0	0	.....	.....	0.07	1.8	clear	
Sitka, Alaska	29.19	741.4	29.26	743.2	38.1	3.4	85	s.	25	11.2	.....	.....	10 n	.....	s.	0.86	21.8	light snow	
Smithville, North Carolina	30.07	763.8	30.11	764.8	48	8.9	86	n.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
Spokane Falls, Wash. Ter.	28.32	719 3	30.44	773.2	17	— 8.3	76	ne.	2	0.9	.....	7 cs	0	nw.	.....	0	0	fair	
Springfield, Illinois	29.46	748.3	30.19	766.8	34	1.1	71	s.	4	1.8	.....	5 c	sk	sw.	.....	inap.	inap.	fair	
Springfield, Massachusetts	29.67	753.6	29.81	757.2	33.0	0.6	85	w.	3	1.3	.....	0	3 n	.....	w.	0.01	0.3	light snow	
Springfield, Mo.	28.68	728.5	30.25	768.3	35.4	1.9	53	e.	6	2.7	.....	9 c	0	sw.	.....	0	0	cloudy	
Stockton, Texas	27.09	688.1	30.22	767.6	32.7	0.4	100	nw.	4	1.8	.....	.....	10 n	.....	nw.	0.53	13.5	light snow	
Thatcher's Island, Mass.	29.69	754.1	29.75	755.6	32.0	0.0	100	w.	16	7.2	.....	2 k	0	.....	.....	0.07	1.8	clear	
Toledo, Ohio	29.48	748.8	30.22	767.6	31	— 0.6	78	w.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Tucson, Arizona	27.85	707.4	30.33	770.4	32	0.0	88	se.	3	1.3	.....	0	0	.....	.....	inap.	inap.	clear	
Umatilla, Oregon	30.15	765.8	30.53	775.4	31.2	— 0.4	88	s.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Uvalde, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Vicksburg, Mississippi	29.81	757.2	30.08	764.0	49	9.4	93	ne.	7	3.1	.....	.....	10 n	.....	calm	0.70	17.8	light rain	
Visalia, California	30.02	762.5	30.40	772.1	34.5	1.4	78	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Washington, D. C.	29.97	761.2	30.09	764.3	42	5.6	58	nw.	6	2.7	.....	4 cs	2 s	w.	.....	0	0	fair	
West Los Animas, Colorado	26.12	663 4	30.25	768.3	16	— 8.9	70	sw.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Wickenburg, Arizona	.....	.....	.....	.....	27	— 2.8	84	calm	.....	.....	0	0	0	.....	.....	0	0	clear	
Williamsport, Pa.	29.39	746.5	30.02	762.5	34.5	1.4	68	nw.	14	6.3	.....	hz.	0	.....	.....	inap.	inap.	clear	
Wilmington, N. Carolina	30.07	763.8	30.13	765.3	49	9.4	77	nw.	1	0.4	.....	.....	10 s	.....	calm	0	0	cloudy	
Winnemucca, Nevada	26.01	660.6	30.53	775.4	3	—16.1	76	ne	12	5.4	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Yankton, Dakota	28.62	726.9	30.04	763.0	29	— 1.7	77	nw.	11	4.9	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	30.20	767.1	30.35	770.9	43.8	6.6	63	nw.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.01	559.0	.....	.....	54.0	12.2	82	calm	0	0	.....	5 k	5 s	.....	.....	0.01	0.3	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.05	763.3	30.06	763.5	78	25.6	77	e.	.....	.....	.....	5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.95	760.7	29.97	761.2	77	25.0	90	calm	0	0	.....	.....	10 ks	.....	.....	0.10	2.5	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.97	761.2	29.99	761.7	74	23.3	95	e.	.....	.....	.....	0	5 ks	.....	.....	0.118	3.0	.....	B. Bigar.
Havana, Cuba, W. I.	30.07	763.8	30.12	765.0	72	22.2	90	se.	2.4	1.1	.....	0	0	.....	.....	0	0	clear	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.07	763.8	30.08	764.0	68.5	20.3	78	n.	1	0.4	.....	0	1 s	.....	e.	0	0	.....	Robert Johnstone
Navassa, W. I.	29.98	761.5	30.06	763.5	75.5	24.2	69	ne.	12	5.4	.....	5 ck	2 s	ne.	e.	0	0	fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	77	25.0	86	e.	.....	.....	2	4 c	5 ps	.....	.....	0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.46	748.3	29.92	760.0	79	26.1	80	calm	.....	.....	0	6 ck	3 s	calm	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	92	ne.	.....	.....	3	0	1 ks	.....	ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.08	764.0	30.10	764.5	75	23.9	69	calm	0	0	.....	2 cs	0	.....	.....	0	0	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.11	764.8	30.17	766.3	—29.0	—33.9	.....	ne.	10	4.5	.....	0	0	.....	.....	0	0	clear	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level. Inch	Barometer reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind Up'er 0—10	Clouds. Amount and kind Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours Inch	Rain-fall or melted snow in the past 24 hours Mill	Sea-swell. Character	Sea-swell. Dir'n from.	Weather.	Observers.
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, N. 49° 20′, W. 5° 30′	30.54	775.7	50	10.0	86	se.			4		3	e.				2	wsw.	d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 20° 09′, E. 110° 39′	30.27	768.8	57	13.9		nne.			4–6		10					3		squally	Capt. A. J. Errington.
H. M. S. Alert, Singapore, Malay Pen	29.89	759.2	80.8	27.1	74	ne.			2		5							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.30	769.6	42.5	5.8	54	calm			0		0							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante.																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.76	755.9	71.5	21.9	69	var.			1		3	calm						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.89	759.2	70	21.1	90	sse.			1–2		1							blue sky	Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	29.73	755.1	75	23.9	81	s.			1		4							d. clouds	Capt. A. T. Dale.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock Yard, Bermuda, W. I.	30.11	764.8	64	17.8	62	wsw.			2–3		5	wsw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 18° 11′, W. 76° 27′	30.05	763.3	74	23.3	83	se.			1		7	se.						d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf																			Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 34.° 23′, W. 9° 52′	30.10	764.5	64	17.8	89	s.			2		7	wnw.				3	wnw.	d. clouds	Capt. C. A. G. Bridge.
H. M. S. Fawn, Mocha, Arabia	29.80	756.9	79.5	26.4	74	s.			6		0					4	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.41	772.4	44	6.7	84	n.			1		9					1	e.	misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 16° 55′, W. 76° 00′	29.96	761.0	72	22.2	85	sse.			4		9					1 2	se. s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.49	749.0	48	8.9	100	sse.			6		10							drizzling	Capt. L. F. Jones.
H. M. S. Inconstant.																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Off Rhodes, Asiatic Turkey	29.93	760.2	49	9.4	64	nne.			5–6		6	nne.				6	nne.	squally	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.32	770.1	56	13.3	93	nne.			1–2		7	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark.																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.93	760.2	66	18.9		calm			0		8								Comm. J. Aylen.
H. M. S. Magpie.																			Capt. A. Carpenter.
H. M. S. Malabar.																			Capt. H. Hand.
H. M. S. Mutine.																			Comm. F. Edwards.
H. M. S. Nelson, Sydney, Australia	30.12	765.0	72	22.2	85	nne.			1–2		5	ssw.						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, N. 14° 00′, W. 62° 20′	30.02	762.5	77	25.0	77	ne.			5		1	ne.				2	ne	d. clouds	Capt. E. Drummond
H. M. S. Orontes.																			Capt. R. J. Kinahan.
H. M. S. Pelican, N. 8° 48′, W. 29° 27′	29.93	760.2	78	25.6	98	nne.			3		8					3	nne.	misty	Capt. F. R. Dicken.
H. M. S. Phœnix.																			Capt. H. H. Grenfell.
H. M. S. Rambler, S. 5° 10′, W. 11° 52′	29.87	758.7	80	26.7	95	ese.			1		8	ese.						d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	29.88	758.9	59	15.0		se.			3–6		7							squally	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	30.44	773.2	39	3.9	100	wnw.			1		2							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 2° 13′, E. 40° 59′	29.25	742.9	84	28.9	96	e.			2–3		3	ne.						d. clouds	Capt. E. T. Church.
H. M. S. Thalia.																			
H. M. S. Triumph, S. 8° 52′, W. 79° 43′	29.96	761.0	71	21.7	95	calm			0		2	calm				1	s.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 5° 37′, E. 97° 30′	29.89	759.2	82	27.8	91	ene.			2–3		5	calm				1	ene.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.08	764.0	71	21.7		n.			1		3							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, N. 25° 28′, E. 52° 40′	30.00	762.0	71.5	21.9	71	ene.			4–5		7	calm				4	ene.	showery	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Brava, C. Verd Ids	30.00	762.1	73.4	23.0	83	ne.			2		6		sw.			2	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder																			Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.01	762.2	58	14.4	94	ne.	9	4.0	.....	.....	10	.....	.....	1.48	37.6	.....	.....	light rain	
N. Yard, Portsmouth, N. H.	29.68	753.9	28	— 2.2	.....	wsw.	8	3.6	.....	.....	5	.....	sw.	0	0	.....	.....	fair	
Naval Hospital Yokohama, Japan	30.30	769.6	37.5	3.1	81	nne.	.....	.....	4	.....	10	.....	ne.	0.03	0.8	.....	.....	drizzling	
Adams, Callao, Peru	29.71	754.6	72	22.2	90	sse.	.....	.....	1	.....	0	.....	.....	0	0	gr'd	.....	clear	
Alaska, Valparaiso, Chili	29.90	759.4	61	16.1	94	nw.	.....	.....	1	.....	10	.....	ne.	0.35	8.9	sm'h	.....	cloudy	
Alert, Bang Kok River, India*	29.81	757.2	83	28.3	79	nne.	.....	.....	1	.....	10	.....	ene.	.....	.....	sm'h	.....	showery	
Alliance, Boston, Mass	29.57	751.1	36	2.2	80	wnw.	.....	.....	1	.....	8	.....	.....	snow	snow	.....	.....	cloudy	
Ashuelot, Tientsin, China	30.76	781.3	28	— 2.2	100	se.	.....	.....	1	.....	8	.....	calm	.....	.....	.....	.....	cloudy	
Brooklyn, Montevideo, Uruguay	29.80	756.9	67	19.4	89	nne.	6	2.7	.....	.....	0	.....	.....	0	0	light	nne.	clear	
Colorado, New York, N. Y	29.89	759.2	35	1.7	80	wsw.	8	3.6	.....	.....	5	.....	.....	0	0	.....	.....	fair	
Enterprise, Washington, D. C*	30.03	762.7	44	6.7	76	wnw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Essex, N. 32° 23′, W. 19° 38′	30.23	767.8	62	16.7	83	se.	.....	.....	2	.....	5	.....	se.	.....	.....	long	nw.	fair	
Franklin, Norfolk, Va	30.08	764 0	45	7.2	68	w.	6	2.7	.....	.....	5	.....	wnw'	0	0	.....	.....	fair	
Galena, N. 34° 14′, W. 10° 40′	30.20	767.1	63	17.2	78	e.	.....	.....	3	.....	8	.....	e.	.....	.....	long	n.	cloudy	
Independence, N. Yard, Mare I'd, Cal	30.35	770.9	40	4.4	73	ene.	10.8	4.8	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge, New Orleans, La	29.95	760.7	56	13.3	94	ene.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Lackawanna, Valparaiso, Chili*	29.94	760.5	61	16.1	100	nw.	.....	.....	1	.....	8	.....	nw.	.....	.....	.....	.....	cloudy	
Lancaster, Naples, Italy	30.46	773.7	52	11.1	54	e.	.....	.....	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Marion, S. 30° 21,′ E. 58° 33′	29.98	761.5	74	23.3	81	e.	.....	.....	3	.....	2	.....	e.	0	0	mod.	e.	clear	
Michigan, Erie, Pa	30.00	762.0	28	— 2.2	100	nw.	.....	.....	3	.....	10	.....	.....	.....	.....	.....	.....	hazy	
Minnesota, Newport, R. I	29.76	755.9	35	1.7	90	wnw.	3	1.3	.....	.....	8	.....	wnw.	.....	.....	.....	.....	cloudy	
Monocacy, Yokohama, Japan	30.53	775.4	38	3.3	90	n.	.....	.....	3	.....	10	.....	s.	.....	.....	.....	.....	overcast	
Nipsic, N. 41° 39′, E. 4° 04′	30.48	774.2	54	12.2	73	ese.	.....	.....	4	.....	10	.....	.....	.....	.....	sm'h	ese.	cloudy	
Onward, Callao, Peru†	30.05	763.3	69	20.6	95	se.	.....	.....	2	.....	2	.....	nw.	.....	.....	long	w.	clear	
Palos, Hong Kong, China	30.29	769.4	55	12.8	74	n.	.....	.....	2	.....	10	.....	n;e.	.....	.....	.....	.....	overcast	
Passaic, Washington, D. C	30.11	764.8	39	3.9	46	sw.	.....	.....	1	.....	8	.....	w.	.....	.....	.....	.....	fair	
Pensacola, Valparaiso, Chili	30.04	763.0	61	16.1	94	calm	0	0	.....	.....	8	.....	.....	h'vy	h'vy	sm'h	.....	fair	
Powhatan, Norfolk, Va	30.04	763.0	43	6.1	75	wnw.	.....	.....	1	.....	8	.....	nw.	.....	.....	.....	.....	cloudy	
Quinnebaug, N. 37° 57′, E. 9° 29′	30.46	773.7	55	12.8	74	var.	.....	.....	1–2	.....	10	.....	calm	.....	.....	long	sse.	cloudy	
Ranger, N. 20° 14′, W. 105° 35′*	29.89	759.2	69	20.6	75	nw.	.....	.....	4	.....	2	.....	calm	0	0	long	nw.	fair	
Richmond, N. 15° 50′, E. 168° 10′*	29.83	757.7	78	25.6	86	nne.	.....	.....	4	.....	8	.....	ne.	0	0	mod.	ne.	fair	
Shenandoah, Montevideo, Uruguay*	29.87	758.7	67	19.4	74	n.	.....	.....	2	.....	1	.....	.....	.....	.....	sm'h	.....	clear	
St. Louis, League Island, Pa	30.23	767.8	32	0.0	100	wsw.	10	4.5	.....	.....	2	.....	ese.	0	0	.....	.....	clear	
Swatara, Kobe, Japan*	30.26	768.6	48	8.9	63	nne.	.....	.....	1	.....	8	.....	.....	.....	.....	.....	.....	fair	
Tennessee, New York, N. Y	29.91	759.7	36	2.2	70	wsw.	6	2.7	.....	.....	2	.....	.....	0	0	.....	.....	hazy	
Vandalia, N. 11° 41′, W. 74° 56′	29.93	760.2	74	23.3	90	ene.	.....	.....	6	.....	0	.....	.....	.....	.....	r'gh	ene.	hazy	
Wabash, Boston, Mass	29.73	755.1	32	0.0	90	w.	6	2.7	.....	.....	8	.....	w.	.....	.....	.....	.....	cloudy	
Wachusetts, Mare Isld, Cal†	30.63	778.0	40	4.4	82	se.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Wyoming, Port Royal, S. C	30.12	765.0	51	10.6	93	ne.	6	2.7	.....	.....	10	.....	sw.	0	0	.....	.....	overcast	
Yantic, Aspinwall, Panama*	29.91	759.7	77	25.0	86	n.	.....	.....	4	.....	5	.....	n.	.....	.....	.....	.....	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 51° 39′, W. 13° 35′	30.53	775.4	52	11.1	86	ssw.	6	.....	9	.....	sw.	½h'r	½h'r	2–5	w.	raining	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, N. 54° 24′, W. 22° 23′*	30.08	764.0	50	10.0	.....	ssw.	6	.....	10	.....	.....	.....	.....	h'vy	sw.	drizzling	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.40	772.1	44	6.7	.....	sw.	3	.....	.....	.....	sw.	0	0	.....	.....	overcast	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, Off Mine Head, Ireland†*	30.33	770.4	53	11.7	.....	ssw.	3	.....	5	.....	sw.	2 h'r	2 h'r	sm'h	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 50° 40′, W. 19° 03′	30.12	765.0	50	10.0	93	s.	6	.....	2	.....	ssw.	.....	.....	mod.	ssw.	fine	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 40° 36′, W. 64° 43′†	29.61	752.1	43	6.1	83	nw.	6	.....	5	.....	nw.	0	0	mod.	w.	fine	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, N. 38° 48′, W. 74° 36′* †	30.04	763.0	56	13.3	12	w.	3	.....	2	.....	w.	.....	.....	sm'h	w.	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 45° —′, W. 45° —′†	29.90	759.4	36	2.2	62	sw.	3	.....	.....	.....	nw.	.....	.....	sm'h	.....	foggy	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 48° 31′ W. 42° 15′*†	30.04	763.0	37	2.8	.....	w.	1	.....	10	.....	wnw.	.....	.....	high	wsw.	snowing	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Daw, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 27° 15′, W. 74° 17′*	30.20	767.1	71	21.7	.....	ese.	2	.....	6	.....	ese.	0	0	small	e.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Kingston, Jamaica, W. I*†.	29.80	756.9	74	23.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	fine	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Ponce, Porto Rico, W. I.	.....	.....	.....	.....	.....	ene.	2	.....	5?	.....	ese.	.....	.....	mod.	.....	clear?	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S *†	29.69	754.1	41	5.0	.....	.....	.....	.....	10	.....	.....	snow	snow	.....	.....	snowing	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 57° 00′, W. 90° 26′	28.91	734.3	48	8.9	.....	nnw.	6	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Baroda, Capt. C. J. Russell, N. 5° 14′, W. 26° 27′	29.93	760.2	79.5	26.4	82	une.	4	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Caldew, Capt. W. Peterson S. 54° 46′, W. 65° 00′	29.94	760.5	44	6.7	.....	e.	4	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Cipero, Capt. W. N. Lailey N. 9° 38′, W. 59° 26′	30.03	762.7	79	26.1	73	ene.	4	.....	1	.....	.....	.....	.....	2	ene.	blue sky	.....
S. City of Agra, Capt. Thos. Young. N. 28° 06′, W. 42° 52′	30.15	765.8	72.1	22.3	.....	calm	0	.....	6	.....	.....	.....	.....	.....	.....	gloomy	.....
Coppename, Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, S. 24° 47′, E. 83° 59′	29.94	760.5	78	25.6	86	nnw.	3	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hope, Capt. James Campbell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 34° 06′, E. 27° 05′	29.76	755.9	76	24.4	90	ne.	5	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 47° 27′, W. 59° 35′	29.59	751.6	53	11.7	81	sw.	8	.....	7	.....	.....	.....	.....	.....	.....	gloomy	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Montevideo, Uruguay, S. A.	29.79	756.7	72.9	22.7	80	n.	2	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
Naiad, Capt. J. Smith, N. 20° 38′, W. 46° 13′	30.18	766.6	72.5	22.5	90	ne.	5	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 36° 20′, W. 74° 19′	29.98	761.5	60.8	16.0	76	sse.	3	.....	4	.....	.....	.....	.....	.....	.....	showery	.....
Queen of Cambria, Capt. M. Parry, S. 38° 05′, E. 69° 18′	30.32	770.1	70	21.1	75	nw.	4	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. C. W. Pearson, N. 47° 13′, W. 34° 42′	29.96	761.0	44.5	6.9	67	n.	4	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Superb, Capt. Berridge, N. 32° 44′, W. 38° 21′	30.21	767.3	63	17.2	94	n.	4	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 51° 08′, W. 11° 20′*†	30.40	772.1	.....	.....	.....	s.	4	.....	10	.....	ssw.	0	0	mod.	sw.	cloudy	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman, N. 28° 03′, W. 85° 55′*†	30.11	764.8	74	23.3	.....	s.	5	.....	5?	.....	s.	0	0	mod.	s.	cloudy?	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 24° 30′, W. 83° 00′*†	30.11	764.8	72	22.2	.....	ese.	.....	.....	2	.....	s.	.....	.....	.....	e.	clear	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan, N. 41° 43′, W. 55° 36′	29.84	757.9	.....	.....	.....	s.	2	.....	.....	.....	ssw.	0	0	mod.	ssw.	fair	E. F. Stembridge, 3d offi.
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. E. Frangeul, Havre, France	30.56	776.2	41.0	5.0	.....	calm	0	.....	1	.....	nw.	0	0	.....	.....	clear	.....
S. S. France, Capt. Périer d'Hauterive, N. 48° 07′, W. 37° 20′*†	30.04	763.0	39.2	4.0	.....	wnw.	3	.....	k	.....	w.	0	0	very hv'y	w.	.....	A. Servan.
S. S. St. Laurent, Capt. A. Sérvan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, N. Y.																	
S. S. Gellert, Capt. Kuhlewein, N. 50° 00′, W. 19° 02′*†	30.18	766.6	54	12.2	.....	s.	3	.....	5	.....	ssw.	0	0	long	s.	fair	.....
S. S. Silesia, Capt. A. Albers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich, N. 41° 15′, W. 63° 08′*	29.70	754.4	38.5	3.6	.....	ssw.	2	.....	2	.....	w.	0	0	2	wsw.	clear	Jorgensen, Wolkowotz
JOHNSTON LINE.																	
Patterson, Ramsey & Co., Agents, Baltimore.																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S LINE.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, Argentine Rep. S. A†*.	29.95	760.7	72	22.2	.....	ne.	3	.....	1	.....	se.	0	0	.....	.....	fine	J. Carroll.
LEYLAND LINE.																	
Thayer & Lincoln, Agents, Boston.																	
S. S. Iberian, Capt. E. Parry, N. 43° 09′, W. 60° 27′	.....	.....	.....	.....	.....	ssw.	1	.....	1	.....	sw.	0	0	.....	.....	clear	E. Parry.
MALLORY LINE.																	
C. H. Mallory & Co., Agents, New York.																	
S. S. Colorado, Capt. M. B. Crowell, N. 28° 19′, W. 91° 44′*††	29.90	759.4	70	21.1	.....	se.	3	.....	10	.....	se.	3 h'r	light	mod.	se.	cloudy	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE.																	
Punch, Edye & Co, Agents, New York.																	
S. S. Freja, Capt. A. C. Struckmann, N. 49° 09′, W. 18° 05′*†	30.25	768.3	55	12.8	93	s.	4	.....	10	.....	ssw.	0	0	.....	wnw.	overcast	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO.																	
Jas. E. Ward & Co., Agents, New York.																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, N. 30° 40′, W. 73° 55′†	30.15	765.8	66	18.9	.....	s.	3	.....	10	.....	sw.	0	0	sm'h	.....	cloudy	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, Savanilla, U. S. C.† [man	29.91	759.7	81	27.2	.....	ne.	4	.....	.....	.....	.....	.....	.....	.....	.....	clear	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Elbe, Capt. W. Willigerod [nolds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Lessing, Capt. B. Voss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Maas, Capt. T. H. Bonjer, N. 41° 34, W. 62° 00′*	29.77	756.1	40	4.4	.....	calm	0	.....	.....	.....	.....	.....	.....	light	nw; wsw.	fine	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke N. 42° 04′, W. 52° 00′*†	30.00	762.0	50	10.0	.....	s.	4–5	.....	.....	.....	.....	.....	.....	.....	nw; sw.	gloomy	.....
S. S. P. Caland, Capt. E. Dedden	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 50° 11′, W. 20° 58′	30.03	762.7	52	11.1	.....	s.	5	.....	.....	.....	.....	.....	.....	.....	w.	.....	.....
S. S. Scythia, Capt. M. Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD.																	
A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.																	
S. S. General Werder, Capt. H. Christoffers, N. 43° 10′, W. 51° 32′	30.00	762.0	.....	.....	.....	s.	6	.....	8	.....	w.	2 h'r	2 h'r	mod.	sw.	light rain	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer, N. 43° 39′, W. 53° 07′	29.88	758.9	36	2.2	100	sse.	6	.....	10	.....	sw.	1 h'r	1h'r	mod.	sse.	raining	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 48° 57′, W. 37° 27′*	30.10	764.5	35.6	2.0	.....	ene.	2	.....	5	.....	ene.	0	0	high	var.	.....	.....
S. S. Mosel, Capt. F. Hesse, N. 50° 29′, W. 17° 52′	30.19	766.8	51.1	10.6	.....	s.	5	.....	5	.....	ssw.	0	0	long	wnw.	fair	J. Hesse.
S. S. Neckar, Capt. R. Bussius,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, N. 7° 34′, W. 27° 52′*	29.95	760.7	80.1	26.7	100	nne.	3	.....	6	.....	ne.	0	0	3	nne.	fair	.....
S. S. Oder, Capt. C. Undeutsch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Moutz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, N. 50° 11′, W. 2° 09′	30.65	778.5	.....	.....	.....	ssw.	4	.....	0	.....	.....	0	0	.....	.....	clear	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO.																	
Leland Stanford, President, San Francisco.																	
S. S. Belgic, Capt. H. Davison, N. 33° 25′, W. 162° 54′†	30.43	772.9	62	16.7	83	ne.	3	.....	5	.....	ene.	sh'rs	sh'rs	mod.	ne.	fair	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 45° 49′, W. 156° 19′†*	30.32	770.1	56	13.3	80	ssw.	6	.....	10	.....	.....	.....	.....	mod.	sw.	overcast	.....
S. S. Oceanic, Capt. J. Metcalfe, Hong Kong, China*	30.22	767.6	60	15.6	88	nw.	3	.....	6	.....	sw.	.....	.....	.....	.....	hazy	.....
OCEAN S. S. CO.																	
George Young, Agent, New York.																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.82	757.4	.....	.....	.....	nnw.	1	.....	10	.....	.....	.....	.....	.....	.....	raining	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 33° 36′, W. 77° 20′*†	30.12	765.0	54	12.2	.....	nnw.	3	.....	8	.....	ne.	0	0	sm'h	ne.	cloudy	H. K. Hallett.

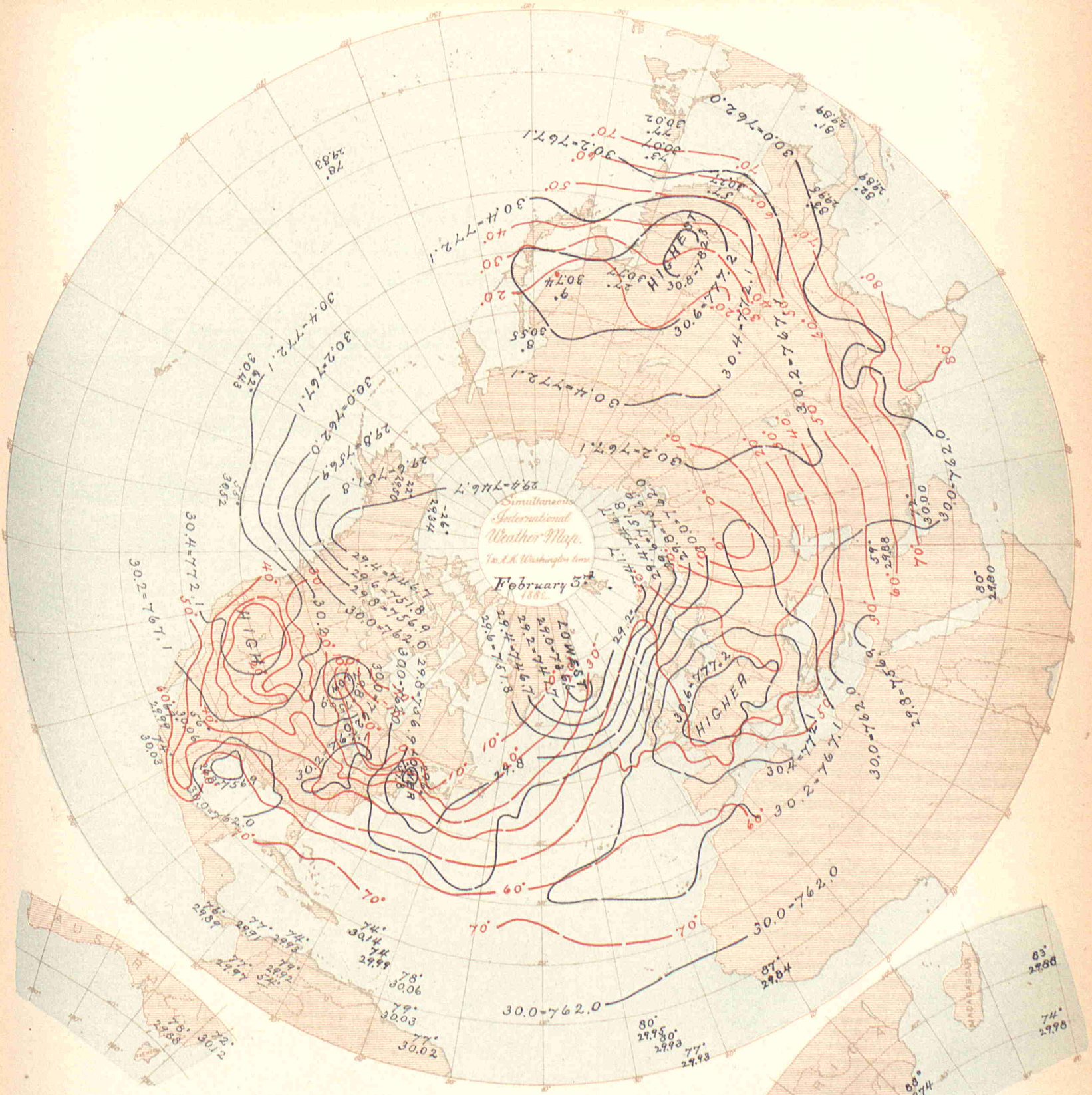
Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.52	775.2	43	6.1	75	s.	1	.....	10	.....	s.	.....	.....	.....	.....	cloudy	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. Fred. Bolles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco Cal†	30.35	770.9	45	7.2	84	nnw.	1	.....	0	.....	.....	.....	.....	.....	.....	clear	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	30.36	771.1	44	6.7	84	e.	2	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
S. S. Geo. W. Elder, Capt. H. G. Morse, San Francisco, Cal†	30.37	771.4	44	6.7	.....	ne.	3	.....	2	.....	n.	0	0	sm'h	.....	clear	.....
S. S. Idaho, Capt. H. M. Hayward, N. 48° 15′, W. 123° 30′†	30.28	769.1	42	5.6	83	se.	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 42′, W. 118° 14′†	30.30	769.6	55	12.8	68	nnw.	2	.....	0	.....	.....	0	0	sm'h	nw.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, N. 34° 22′, W. 119° 32′†	30.43	772.9	51	10.6	78	e.	1	.....	6	.....	e.	.....	.....	light	nw.	light haze	.....
S. S. State of California, Capt. G. Debney, N. 37° 40′, W. 122° 40′†	30.39	771.9	46	7.8	60	ene.	5	.....	0	.....	.....	0	0	sm'h	w.	clear	.....
S. S. Victoria, Capt. W. E. Plummer, N. 38° 57′, W. 122°? 45°†	30.39	771.8	46	7.8	85	nw.	2	.....	8	.....	w.	.....	.....	mod.	w.	foggy	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of New York, Capt. W. B. Cobb, S. 22° 40′, W. 174° —†	29.87	758.7	80	26.7	86	calm	0	.....	1	.....	e.	0	0	h'vy	e.	clear	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 36° 28′, W. 140° 35′†	30.72	780.3	55	12.8	73	e.	4	.....	8	.....	e.	0	0	mod.	e.	cloudy	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, S. 25° 51′, W. 176° 51′†	29.78	756.4	76	24.4	60	s.	5	.....	8	.....	se.	0	0	h'vy	sw.	cloudy	E. Le Salk.
S. S. City of Tokio, Com. J. Maury N. 24° 38′, E. 119° 14′†	30.26	768.6	58	14.4	76	ne.	4	.....	10	.....	ne.	1 h'r	light	light	ne.	cloudy	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 30° 21′, W. 116° 28′†	30.20	767.1	56	13.3	87	nw.	3	.....	0	.....	.....	0	0	small	nw.	clear	.....
S. S. Grenada, Capt. M. Connolley, N. 7° 10′, W. 82° 16′†	29.89	759.2	76	24.4	?	ne.	2	.....	5?	.....	e.	0	0	.....	.....	clear.?	.....
S. S. South Carolina, Capt. W J. Russell, N. 18° 10′, W. 103° 10′†	30.03	762.7	74	23.3	81	ne.	2	.....	0	.....	.....	0	0	small	nw.	.....	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.06	763.5	71	21.7	85	ne.	4	.....	10	.....	ne.	.....	.....	.....	.....	cloudy	.....
QUEBEC S. S. CO. *R. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 37° 40′, W. 72° 33′	.....	.....	.....	.....	.....	wnw.	5	.....	0	.....	.....	0	0	mod.	wnw.	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Nederland, Capt. J. Uberweg, N. 41° 12′, W. 63° 43′*†	30.38	771.6	44	6.7	.....	var.	1	.....	8?	.....	w.	0	0	sm'h	w.	clear?	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, N. 40° 57′, W. 67° 15′*	29.78	756.4	40	4.4	84	s.	3	.....	10	.....	sw.	0	0	light	sw.	cloudy	U. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon N. 49° 17′, W. 25° 38′*†	29.92	760.0	53	11.7	80	w.	3	.....	10	.....	sw.	2h'r	light	high	sw.	overcast	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, N. 49° 28′, W. 14° 20′*	30.15	765.8	54	12.2	.....	s.	5	.....	5	.....	sse.	½h'r	light	cross	nw;s.	clearing	Olsen & Assfeld.
ROTTERDAM LINE. *Fundh, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 44° 06′, W. 47° 00′*	30.07	763.8	48.5	9.2	85	wsw.	4	.....	6	.....	w.	0	0	mod.	n;w.	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Copenhagen, Denmark†	30.52	775.2	35.6	2.0	.....	wsw.	2	.....	2	.....	wsw.	0	0	.....	.....	clear	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters, N. 48° 50′, W. 36° 57′*†	30.19	766.8	42	5.6	.....	nne.	3	.....	7	.....	nne.	0	0	cross	sw;n	cloudy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings, N. 50° 44′, W. 15° 27′*†	30.36	771.1	59	15.0	.....	sse.	4	.....	10	.....	s.	.....	.....	mod.	w.	showery	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell, N. 50° 37′, W. 22° 23′†*	29.90	759.4	50	10.0	78	ssw.	5	.....	5	.....	s.	.....	.....	high	wsw.	fair	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving, N. 41° 32′, W. 65° 13′†	29.85	758.2	49	9.4	85	sse.	3	.....	5	.....	sw.	0	0	mod.	sw.	cloudy	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, Hull, Eng.*	30.63	778.0	46	7.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.

MERCHANT-MARINE SERIES.—Continued.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. Pensacola, Florida †	30.08	764.0	57	13.9	93	n.			10 s		w.	0.91	23.1			cloudy	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey,																	C. Bailey.
Bk. Alpha, Capt. O. Grönn N. 32° 20′, W. 14° 45′*†	30.24	768.1	68	20.0		ne.	2		4		ne.	1 h'r	light	long	w.	fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, Ponce, Porto Rico, W. I.*†	30.10	764.5	75	23.9		ne.	1		2		ese.	0	0			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 25° 16′, W. 33° 37′*†	30.15	765.8	69	20.6		ne.	3		1		s.	0	0	sm'h	n.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 49° 17′, W. 23° 17′*†	29.95	760.7				sw.	3				wsw.	0	0	hv'y	nw.	clear	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill, S. 29° 32′ W. 47° 52′†	29.90	759.4				calm	0		0			0	0	mod.	ne.	clear	A. J. Pettengill.
S. Enoch Train, Capt. H. D. Chapman, Bremerhaven.*	30.58	776.7				sw.	2		1			0	0	sm'h		very fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr. N. 53° 36′ E. 8° 16′*	30.63	778.0				sw.	3		1		sw.	0	0	sm'h		clear	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C†	30.18	766.6	43	6.1	67	wsw.	3		9		w.	0	0			cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 38° 42′, W. 22° 41′			61	16.1		ssw.	4		5		ssw.	0	0	sm'h	s.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, S. 5° 15′, W. 34° 23′*†	29.06	738.1				ene.	6		3		ene.	0	0	long	ene.	clear	
Bk. Geo. Booth, Capt. D. Williams, N. 36° 00′, W. 54° 20′*†	29.80	756.9	60	15.6		sw.	6					shr's	shr's		sw.	squally	D. Williams.
Bk. Granville, Capt. R. Bonney																	
Schr. Henry Denison, Capt Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 39° 38′. E. 0° 56′*	29.66	753.4				sw.	8		2		sw.	hail	hail	long	sw.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo T. L. Compte																	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen,																	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 45° 03′, W. 14° 26′*†	30.50	774.7	54	12.2	93	s.	2		10		ssw.			mod	nnw.	raining	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.46	773.7	51	10.6	59	ne.	1		0							clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 0° 13′, W. 29° 20′*†	29.88	758.9				var.			5		var.	1 h'r	1 h'r				J. Connolly.
Schr. S. B. Hubbard, New London, Conn.†*	29.87	758.7	30	—1.1		wsw.	1		2		wsw.	0	0			fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, N. 1° 00′, W. 24° 45′*	29.83	757.7	77.4	25.2	97	sse.	2		6		s.			sm'h	se.	showery	H. N. T. Sumner.
Bk. Sunbeam, Capt. Joseph Hand, N. 37° 51′, W. 11° 20′*†	30.26	768.6	62	16.7	88	ene.	4		0			0	0	long	nw.	clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 34° 52′, W. 7° 09′*†	30.20	767.1				sw.	6		8		sw.	0	0	light	nw		
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 36° 49′, W. 61° 40′*†	29.75	755.6	60	15.6	88	w.	5				w.			mod.	w.	covered	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, N. 7° 32′, W. 29° 00′*†	30.00	762.0				ne. ene.					ene.			sm'h	ene.	hazy	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 4, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.20	767.0	63.0	17.2	78	e.			4		2			0.354	9.0	fair	Moiroud.
Algiers			30.29	769.3	57.6	14.2	87	e.			1		0			0	0	clear	Nicolas.
La Calle			30.35	770.9	57.6	14.2	72	ene.			4		3			0	0	pretty fair	Fonfrède.
Tunis			30.32	770.0															Jacques.
Sfax																			Gau.
Saida			30.27	768.9	52.9	11.6	69	sw.			3		1			0	0	very fair	Dumas.
Tebessa			30.36	771.2	47.1	8.4	55	se.			1		6			0	0	cloudy	Derché.
Geriville					46.0	7.8	44	s			4		2			0	0	fair	Louchamp.
Laghouat			30.38	771.6	46.8	8.2	48	e.			2		2			0	0	fair	Herbin.
Biskra			30.39	772.0	58.6	14.8	47	nw.			2		4			0	0	cloudy	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.65	753.1	29.74	755.4	80.0	26.7	41	n.	10	4.5			1			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.88	759.0	30.47	773.8	35.2	1.8	63	se.			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.63	752.6	30.44	773.1	35.2	1.8	85	wnw.	4.9	2.2			0			0	0		Dr. Wierzbiski.
Eperies	29.49	749.0	30.42	772.7	33.1	0.6	51	n.			1	0	0			0	0		Julius Mikolik.
Gratz	29.15	740.3	30.47	773.8	34.9	1.6	44	s.			2		0			0	0		Andreas Rospini.
Hermannstadt	28.94	735.0	30.47	773.9	27.9	— 2.3	92	n.			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.05	737.8	30.48	774.3	28.8	— 1.8	76	sw.			1		3			0	0	clear	The Staff.
Lemberg	29.34	745.2	30.39	771.9	30.6	— 0.8	73	nw.			1		0			0	0		Dr. T. Stanecki.
Pola	30.25	768.3	30.37	771.3	45.7	7.6	65	nw.			1		0			0	0		I. R. Hydrographic Office.
Szathmar	29.94	760.5	30.41	772.5	31.3	— 0.4	66	ne.			1		0			0	0		Joseph Midlinszky, S. J.
Szegedin	30.16	766.1	30.46	773.6	35.2	1.8	66	calm			0		0			0	0		Karl Stancel.
Trieste	30.26	768.5	30.36	771.1	52.2	11.2	7	ne.			1		0			0	0		Rieder.
Vienna	29.73	755.1	30.49	774.4	32.0	0.0	65	calm			0		5			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.17	766.3	30.27	768.8	44.9	7.2	85	s.	5	2.2			6			0	0	misty	W. Boswell.
Armagh, Observatory	30.14	765.5	30.39	771.9	46.4	8.0	85	sw.	8	3.6			2					d. clouds	S. Call.
Bidston, Liverpool Obs'y			30.43	772.9	47.9	8.8	75	sw.	10	4.5			5					d. clouds	John Hartnup.
Bolton, Sharples	29.88	758.9	30.44	773.2	39.0	3.9	90	sse.										misty	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.93	760.2	30.33	770.4	45.7	7.6	87	sw.			1		8			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.97	761.2	30.00	762.0	81.0	27.2	63	ne.			4		6					gloomy	Corpl. J. Surgenor, A. H. C.
Cardington			30.45	773.4	38.4	3.6	67	w.			0.2		1					blue sky	John McLaren.
Chatham, School M. E.	30.37	771.4	30.50	774.7	41.9	5.5	84	calm			0		3					d clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.26	768.6	30.49	774.4	44.7	7.1	67	sse.			3		9					overcast	The Staff.
Fort Napier, Natal	27.43	696.7	29.64	752.8	89.4	31.9	46	calm			0		1					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	89.0	31.7	59	nw.			1		4						Sergt. John Robinson.
Galway, Queen's College			30.35	770.9	48	8.9	85	s.			2		10			0	0	overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.20	767.1	30.26	768.6	57.6	14.2	90	ne.			2		6					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.13	765.3	30.33	770.4	46.9	8.3	73	ssw.			2		7 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.32	770.1	30.50	774.7	33.9	1.1	100	nnw.			1		10					foggy	The Staff.
Guernsey	30.19	766.8	30.50	774.7	48.0	8.9	48	ese.			1		3					blue sky	A. Collenette, F. M. S.
Kew, Observatory	30.48	774.2	30.51	774.9	34.2	1.2	89	e.	0	0								foggy	The Staff.
Leicester, Museum	30.20	767.1	30.47	773.9	46.1	7.8	92	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.26	768.6	30.33	770.4	54.8	12.7	63	n.			3		8					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.04	763.0	30.08	764.0	75.0	23.9	85	s.			2		5					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.93	760.2	30.47	773.9	43.8	6.6	79	s.			0—1		6					d. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.26	768.6	30.49	774.4	37.4	3.0	93	sse.			1		0					foggy	The Staff.
Plymouth	30.41	772.4	30.48	774.2	44.8	7.1	71	se.			2		5					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.15	765.8	48	8.9	86	sw.	23	10.3			9					d. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.14	765.5	30.21	767.3	34.0	1.1	88	n.			2		10					snowing	W. H. Lyne.
Sheffield	30.15	765.8	30.44	773.2	47.0	8.3	89	sw.			1		2			0	0	misty	W. F. Cooper.
Silloth Rectory	30.36	771.1	30.39	771.9	46.7	8.2	90	sw.			4		6			0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.44	773.2	43.0	6.1	81	sw.	0	0			10					foggy	I. New.
Stratfield Turgiss	30.27	768.8	30.50	774.7	38.9	3.8	64	calm			0		0					foggy	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.41	772.4	30.47	773.9	49	9.4	71	se.			4		4					d. clouds	W. Newcombe.
Valencia, Observatory	30.32	770.1	30.35	770.9	51.8	11.0	86	se.	15	6.7			7					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.66	753.4	29.69	754.1	75.1	23.9	94	wsw.	11.1	5.0		0	5 s			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.78	756.4	29.81	757.2	77.2	25.1	59	wnw.	12	5.4		8	9			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.93	760.2	29.98	761.5	— 2	—18.9	97	nw.	12	5.4			10 s			0.130	3.3	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	30.01	762.2	30.08	764.0	—10	—23.3	100	nw.	5	2.2		0	0			0.02	0.5	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.20	767.1	30.22	767.6	—13	—25.0	78	nw.	12	5.4		0	2 s		calm	0	0	clear	J. McWilliams.
Fort Garry, Manitoba*	28.94	735.1	29.88	758.9	—15	—26.1	100	se.	4	1.8		0	0			0.042	1.1	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S*	29.86	758.4	30.01	762.2	3	—16.1	83	nw.	8	3.6		0	0			0.09	2.3	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.71	754.6	30.08	764.0	6	—14.4	87	ne.	10	4.5		10 c	0	ne.		0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.01	762.2	30.25	768.3	— 8	—22.2	82	e.	12	5.4		0	0			0	0	clear	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.11	739.4	29.86	758.4	12	—11.1	83	e.	18	8.0			10 n		e.	0.06	1.5	cloudy	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.14	740.1	29.88	758.9	23	— 5.0	98	se.	2	0.9		10 k	0	se.		0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.17	740.9	29.84	757.9	28	— 2.2	92	e.	12	5.4			10 n		e.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.86	758.4	30.24	768.1	—16	—26.7	100	nw.			1	0	0			0.15	3.8	clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.54	750.3	30.05	763.3	— 3	—19.4	87	e.	8	3.6			10 n			0.05	1.3	light snow	W. H. McIntyre.
Sangeen, Ontario*	29.01	736.8	29.76	755.9	25	— 3.9	96	s.	20	8.9			10 s			0	0	cloudy	
St. Andrews, N. B.	30.10	764.5	30.15	765.8	— 5	—20.6	82	nnw.	8	3.6		0	0			0.03	0.8	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.68	753.9	29.75	755.6	13	—10.6	87	nw.	8	3.6		8 cs	5 s			0	0	fair	T. C. Hill, C. E.
Toronto, Ontario*	29.53	750.0	29.93	760.2	24	— 4.4	80	e.	20	8.9			10 ks		se.	0	0	threatening	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.00	762.0	30.07	763.8	9	—12.8	63	n.	13	5.8		0	8 k		n.	0.13	3.3	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.36	745.7	29.61	752.1	27	— 2.8		ne.	3	1.3			10			0.60	15.2		John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.56	776.2	30.85	783.6	37.4	3.0	71	ene.			2		9			0.46	11.7		N. Titoushkin.
Sung-shu-chwang†	24.98	634.4			21.6	— 5.8		calm			0		10			0.47	12.		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.52	775.1	30.54	775.7	39.0	3.9	73	nne.	2.9	1.3		8 ck	0	w.		0	0	al. covered	M. Marc Dechevrens, S.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.32	770.2	30.37	771.4	35.1	1.7	93	w.	14.5	6.5			10						Oversergent Fischer.
Fanöe	30.37	771.5	30.39	772.0	38.5	3.6	92	wsw.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.76	755.8	29.80	756.9	0.9	—17.3	79	nne.			6		0						S. Kleinschmidt.
Stykkisholm, Iceland	29.76	755.9	29.80	757.0	28.0	— 2.2		sw.			2		10					snowing	A. O. Thorlacius.
Thorshavn	30.12	765.0	30.15	765.9	39.9	4.4	76	w.	11	5			7						Overloerer Bergh.
Vestervig	30.22	767.7	30.32	770.0	41.0	5.0	90	wsw.			4		10						Loerer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.80	756.8	30.46	773.6	51.4	10.8	77	se.			1	2 c	0			0	0	slightly cl'dy	M. Labroue, Director.
Alençon, Normal School	29.97	761.1	30.52	775.1	32.4	0.2	85	ne.			1		k	se.	s.	0	0		M. Nicot, Director.
Arras, Engineer School	30.26	768.5	30.54	775.6	28.8	—1.8	71	sse.			1		10			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.35	771.0	30.43	773.0	44.6	7	57	nne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.89	759.3	30.48	774.2	36.0	2.2	88	se.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.26	768.5	30.54	775.8	31.1	—0.5	89	e.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.47	774.0	26.2	—3.2	82	ne.			1		10			0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.13	765.2	30.39	772.0	51.6	10.9	56	e.			1		2			0	0	slightly cld'y	M. Rayet, Director.
Bourges, Normal School	29.91	759.8	30.13	765.4	40.1	4.5	59	nne.			1		n		nne.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.22	767.5	30.46	773.7	47.8	8.8	70	ese.			1		0			0	0	clear	M. de Kennaree, Dir.
Caen, Normal School	30.43	772.8	30.47	773.8	33.8	1	85	ne.			1		0			0	0	clear	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.13	765.2	30.47	773.8	30.0	—1.1	96	se.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.96	760.9	30.50	774.7	34.2	1.2	62	ne.			1		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.03	737.4	30.42	772.7	48.9	9.4	26	w.			1	0	0			0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.61	752.1	30.50	774.8	30.0	—1.1	92	n.			1		fg			0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.58	751.4	30.51	774.9	30.0	—1.1	92	se.			1	1	1	se.	se.	0	0	light fog	Dr. Coulet, Director.
Gap, Normal School	27.99	710.9	30.60	777.3	45.5	7.5	18									0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.24	742.6	30.39	771.8	52.0	11.1	18	sw.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.65	753.2	30.47	773.8	37.8	3.2	63	ese.			1	0	0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.73	729.8	30.44	773.1	42.8	6	79	se.			1	0	0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.17	766.3	30.46	773.6	36.7	2.6	98	e.			1		1		e.	0	0	clear	M. Ollitrault, Director.
Lescar, Normal School	29.79	756.7	30.36	771.1	59.9	15.5	45	nw.			1	c	0			0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.40	772.1	30.50	774.7	32.0	0.0	100	ne.			2		mist			0	0	misty	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.40	746.8	30.53	775.5	27.3	—2.6	100	ne.			1		fg			0	0	dense fog	M. André, Director.
Mans, Normal School	30.17	766.4	30.50	774.8	30.2	—1	96	e.			3		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.13	765.3	30.40	772.2	55.6	13.1	36	ssw.			1		0			0	0	clear	M. Stephan, Director.
Montlouis l'instituteur	25.03	635.7	29.87	758.7	40.1	4.5	53	se.	7.4	3.3			6			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.31	769.8	30.42	772.6	51.1	10.6	48	ne.			2		2			0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.73	755.2	30.57	776.5	29.5	—1.4	64	wsw.			1		mist			0	0	misty	M. Hasse, Director
Nantes, Observatory	30.35	770.9	30.51	775.0	31.3	—0.4	97	ne.			1-2		10			0	0	light fog	M. Larocque, Director.
Nice																0	0		Capt. Boissière, Director
Perpignan, Observatory	30.31	769.9	30.43	772.9	48.2	9.0	78	ne.	5.6	2.5			10			0.181	4.6	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.33	541.8			22.6	—5.2		se.			1		1		se.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.34	745.1	30.45	773.5	31.5	—0.3							2		s.	0	0	foggy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.39	644.9			34.2	1.2	53	s.			1		0			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.42	772.6	30.45	773.4	44.1	6.7	71	ene.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.19	766.9	30.42	772.6	35.6	2	67	ne.			1		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.21	716.6	30.43	772.9	43.5	6.4	58	sw.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.48	774.2	30.53	775.4	32.4	0.2	81	e.			2		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.35	770.8	30.50	774.8	35.2	1.8	67	se.			3		1		se.	0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.34	770.7	30.51	774.9	28.9	—1.7	100	ne.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.69	754.1	30.42	772.7	54.1	12.3	64	se.			1		2		w.	0	0	slightly cl'dy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.98	761.6	30.48	774.1	29.8	—1.2	88	ne.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.22	767.6	30.51	775.0	30.0	—1.1	94	ne.			1		10			0	0	light fog	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.62	752.4	30.49	774.4	27.7	—2.4	63	calm			0	0	3 s			0	0		Prof. Dr. Hoh.
Berlin	30.28	769.2	30.47	774.0	28.8	—1.8	84	ne.			1		7			0	0		Prof. Dr. Arndt.
Breslau	29.92	759.9	30.46	773.6	30.4	—0.9	71	w.			2		10			0	0		Royal University Obs'y.
Carlsruhe	30.06	763.5	30.54	775.7	23.4	—4.8	100	sw.			1		10			0	0	dense fog	Albert Senz.
Cassel	29.72	754.8	30.43	773.0	29.5	—1.4	72	s.			2		4	se.		0	0		Dr. H. Möhl.
Frankfort on the Main	29.31	744.5	29.69	754.1	29.8	—1.2	76	e.			1		3			0	0		Physical Society.
Friedrichshafen	29.01	736.8	30.54	775.8	27.7	—2.4	94	s.			1		10			0	0	dense fog	Wilhelm, Chief Tel
Hamburg	30.39	771.8	30.48	774.2	23.9	—4.5	95	calm			0		10			0	0	foggy	E. Preller.
Kiel	30.43	773.0	30.45	773.4	32.4	0.2	82	wsw.			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.06	763.4	30.50	774.8	29.5	—1.4	76	sw.			1		9			0	0	foggy	H. Leppig, Asst.
Magdeburg	30.28	769.1	30.48	774.3	32.7	0.4	76	nw.			1	6 c	0	ne.		0	0		Dr. Assmann.
Memel	30.33	770.3	30.37	771.5	35.4	1.9	91	wsw.			4		10					smoky	Iserman.
Munich	28.56	725.4	30.45	773.4	24.6	—4.1	83	n.			1		1			0	0		Central Station.
Neufahrwasser	30.39	771.9	30.41	772.3	34.2	1.2	78	w.			1		10			0	0		A. Lothes.
Neustadt, Palatinate	29.95	760.7	30.48	774.3	28.9	—1.7		ese.			2		0			0	0		Dicknether.
Stuttgart	29.47	748.4	30.41	772.5	31.1	—0.5	94	n.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.44	773.1	30.46	773.7	32.4	0.2	100	sw.			3		10			0	0		Profs. Brandes & Reimer.
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.90	759.4	30.30	769.6	45.0	7.2		ne.			1.0		6 k			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.99	761.7	30.04	763.0	78.9	26.1	54	sw.	11	4.9			8	w.		0	0	d. clouds	
Deesa	29.48	748.9	29.96	761.0	82.2	27.9	26	n.	7.3	3.3			5	wnw.		0	0	d. clouds	
Bombay	29.86	758.4	29.90	759.3	79.7	26.5	68	nnw.	21	9.4			0			0	0	blue sky	
Poona, Yarrowda.	28.02	711.8	29.85	758.3	87.0	30.6	24	ne.	4	1.8			0			0	0	blue sky	
Belgaum	27.34	694.5	29.83	757.7	87.0	30.6	12	ne.	2	0.9			0			0	0	blue sky	
Lahore	29.30	744.3	30.07	763.8	66.6	19.2	33	nw.	0.9	0.4			0			0	0	blue sky	
Roorkee	29.10	739.2	30.03	762.8	66.2	19.0	48	nw.	2.0	0.9			2			0	0		
Agra	29.48	748.9	30.07	763.7	69.8	21.0	24	w.	3.9	1.7						0	0		
Nagpur	28.92	734.5	29.96	761.1	80.7	27.1	19	calm	3.3	1.5			0			0	0	blue sky	
Jubbulpore	28.66	727.9	30.05	763.4	67.7	19.8	26	e.	1.0	0.4			0			0	0	blue sky	
Lucknow	29.66	753.3	30.05	763.2	67.3	19.6	35	calm	2.0	0.9			0			0	0	blue sky	
Allahabad	29.72	755.0	30.05	763.2	65.3	18.5	47	calm	1.1	0.5			5	sw.		0	0	d. clouds	
Patna	29.86	758.4	30.05	763.4	64.6	18.1	51	nw.	2.9	1.3			0			0	0	blue sky	
Hazaribagh	27.97	710.5	30.06	763.4	62.8	17.1	17	n.	5.6	2.5			0			0	0	blue sky	
Cuttack	29.93	760.3	30.02	762.4	79.0	26.1	48	e.	1.8	0.8			3			0	0	d. clouds	
Calcutta, Alipore	30.00	761.9	30.02	762.5	69.3	20.7	52	sw.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.88	759.0	30.01	762.2	67.1	19.5	58	calm	3.2	1.4			0			0	0	blue sky	
Chittagong	29.92	760.0	30.01	762.3	73.4	23.0	48	nw.	2.5	1.1			5			0	0	blue sky	
Sibsagar	29.71	754.6	30.06	763.6	63.0	17.2	82	ne.	3.7	1.6			0			0.22	5.6	blue sky	
Jeypore	28.58	725.9	30.05	763.4	71.8	22.1	25	nne.	3.0	1.3			0			0	0	blue sky	
Zanzibar, Africa	29.80	756.9			85.2	29.6	66	n.					3			0	0	d. clouds	
Trichinopoly	29.69	754.1			83.9	28.8	47	ene.	2	0.9			0			0	0	blue sky	
Bellary	28.41	721.6			88.0	31.1	17	e.	3.0	1.3			2			0	0	d. clouds	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.96	760.9	30.38	771.7	48.7	9.3	11	ne.	0.7	0.3			0			0	0		Prof. Giovanni Clodig
Milan	29.89	759.1	30.40	772.1	38.3	3.5	59	w.	2.5	1.1			0			0	0		Prof. Schiaparelli.
Padua	30.28	769.2	30.40	772.1	43.9	6.6	30	nw.	1.8	0.8			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.47	748.5	30.42	772.7	37.0	3.3	68	wsw.	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	30.20	767.1	30.40	772.2	50.9	10.5	51	sw.	2.5	1.1			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.42	721.9	30.45	773.4	37.0	2.8	54	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.33	770.4	30.38	771.7	42.6	5.9	54	n.	4.3	1.9			0			0	0		Prof. Luigi Guidi.
Florence	30.14	765.6	30.41	772.4	43.5	6.4	25	n.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.32	770.2	30.41	772.5	45.0	7.2	40	ne.	4.3	1.9			0			0	0		Prof. P. Monte.
Rome	30.21	767.3	30.39	771.9	47.8	8.8	38	n.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	30.07	763.8	30.33	770.4	50.9	10.5	65	nnw.	19.9	8.9			4	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.46	748.2	30.39	771.8	47.5	8.6	73	ene.	3.1	1.4			0			0	0		Prof. D. Conti.
Cagliari	30.15	765.8	30.35	770.8	52.9	11.6	46	calm			0		0			0	0		Prof. A. Pacinotti.
Palermo	30.13	765.2	30.39	771.8	51.4	10.8	37	ne.	3.8	1.7			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.29	769.3	30.34	770.5	51.3	10.7	63	e.	4.3	1.9			5	ne.		0.059	1.5		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.82	757.5	30.36	771.2	48.4	9.1	52	n.	0	0			1	nw.		0	0		Prof. T. Brioschi.
Stelvio	22.29	566.2			23.7	—4.6	26	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdebbia	22.35	567.7			25.7	—3.5	20	se.			1		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Aral, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.54	775.7	30.58	776.7	20.2	—6.6	80	ese.	1.4	0.6		0	1 s			0	0	fair	
Hakodate	30.61	777.5	30.62	777.7	22.5	—5.3	60	e.	3.0	1.3			10		sse.	0	0	overcast	
Hiroshima, I. M. Obs'y	30.31	769.9	30.32	770.1	40.9	4.9	93	ne.	3.5	1.6			10n;s			0.977	24.8	raining	K. Sasaki.
Kanazawa	30.28	769.1	30.39	771.9	40.8	4.9	82	ese.	3.4	1.5			10 n			0.020	0.5	light rain	S. Endo.
Kioto	30.16	766.0	30.34	770.6	43.3	6.3	88	nw.	1.9	0.8			10 n			0.020	0.5	light rain	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.08	764.0	30.29	769.3	44.1	6.7	82	ne.	7.7	3.4			10 n			0.340	8.6	raining	S. Takehayashi.
Niigata	30.39	771.9	30.42	772.6	38.1	3.4	66	se.	15.9	7.1		ck;cs	5 s			0	0	fair	
Nobiru	30.59	777.0	30.61	777.5	35.8	2.1	67	e.	7.2	3.2			10 s;ks			0	0	overcast	H. Midzushina.
Supporo					18.0	—7.8	83	se.	13.2	5.9			0			0.020	0.5	clear	
Tokei Obs'y, Yeddo	30.46	773.7	30.53	775.4	35.9	2.2	76	n.	7.3	3.3		1 c	0			0	0	clear	The Staff.
Wakayama	30.26	768.6	30.31	769.9	43.3	6.3	96	e.	1.6	0.7			10 n			0.296	7.5	raining	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Se ñor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.39	619.5	30.28	769.2	43.0	6.1	78	n.			1	0	1 s			0	0	foggy	Prof. M. Leal.
Mazatlan	29.71	754.6	29.97	761.3	59.0	15.0	82	ese.	0.9	0.4		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.08	586.3	30.21	767.4	49.1	9.5	74	calm	0	0			10 k			0	0	overcast	The Staff.
Morelia	24.35	618.5	30.61	777.4	48.6	9.2	73	ese.			3	1c	1 k	s.	se.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.00	609.6	30.18	766.5	39.2	4.0	47	n.			2	1 c	0			0	0		M. Y de Leon, M. E.
Puebla, Catholic Institute	23.41	594.6	30.23	767.7	48.2	9.0	88	calm	0	0		0	9		se	0	0	very cloudy	Prof. P. Spina.
San Luis Potosi	24.24	615.7	30.38	771.6	52.0	11.1	54	sse.			1	3	0	w.		0	0	clear	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.53	572.1	30.35	770.9	35.6	1.9	95	ne.	7.8	3.4		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.70	754.4	29.89	759.2	80.0	26.7	79	ese.	16.5	7.4	.....	.....	10u;ks;	k.....	e.	0.27	6.9	overcast	Oliver & Figor..
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.54	775.6	30.54	775.6	36.5	2.5	.....	se.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Groningen	30.45	773.3	30.50	774.7	35.4	1.9	.....	sw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Helder	30.48	774.2	30.48	774.2	37.4	3.0	.....	ssw.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.51	775.0	30.51	775.0	35.8	2.1	71	sse.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	30.48	774.3	30.53	775.5	35.4	1.9	80	se.	.....	.....	2	.....	8	.....	.....	0	0	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.10	764.6	30.17	766.2	43.2	6.2	97	s.	18	8	.....	.....	10	.....	.....	.....	.....	raining	
Brono	29.69	754.0	29.72	755.0	39.4	4.1	72	wsw.	18	8	.....	.....	10	.....	.....	0.256	6.5	raining.	
Christiania	29.96	761.0	30.12	765.0	24.3	— 4.3	100	calm	0	0	.....	.....	10	.....	.....	0	0	foggy	
Gjæsvær	28.96	735.6	28.98	736.2	23.9	— 4.5	.....	wnw.	.....	.....	8	.....	10	.....	.....	.....	.....	.....	
Lödingen	29.39	746.4	29.43	747.6	30.9	— 0.6	70	nw.	.....	.....	6–7	.....	10	.....	.....	0.094	2.4	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	58.3	14.6	84	w.	10.5	4.7	.....	.....	4	.....	.....	0.492	12.5	.....	Dr. J. A. Sampaio.
Campo Major	29.25	743.0	30.27	768.9	56.3	13.5	52	ene.	3.8	1.7	.....	.....	3	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.17	766.4	30.26	768.6	62.6	17.0	65	se.	0.7	0.3	.....	.....	5	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.95	760.6	30.32	770.0	50.0	10.0	79	nne.	8.1	3.6	.....	.....	0	.....	.....	0.106	2.7	.....	The Staff.
Ponta Delgada, Azores	30.04	763.1	30.11	764.9	60.8	16.0	85	s.	15.0	6.7	.....	.....	10	.....	.....	0.161	4.1	.....	
Saint Paul de Loando	29.67	753.5	29.87	758.6	77.0	25.0	90	nnw.	1.3	0.6	.....	.....	5	s.	.....	0	0	.....	
Serra da Estrella	25.43	645.9	30.36	771.1	33.1	0.6	100	se.	10.5	4.7	.....	.....	9	.....	.....	0.492	12.5	.....	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.14	740.1	30.37	771.4	— 8.1	—22.3	.....	sw.	9	4	.....	7 ck	0	.....	.....	0.028	0.7	.....	Major K. Lasarew.
Archangel	29.32	744.6	29.34	745.1	33.6	0.9	83	sw	22	10	.....	.....	6 k	.....	.....	0	0	lt. snowdrift	Capt. Sseliwerstow.
Astrakhan	30.32	770.1	30.24	768.0	17.4	— 8.1	88	ne.	25	11	.....	.....	10 n	.....	.....	0.350	8.9	.....	Capt. Wisganow.
Barnaul	29.71	754.7	30.26	768.6	10.4	—12.0	83	sw.	13	6	.....	.....	1	.....	.....	0.043	1.1	.....	Meteorological Obs'y.
Dorpat	29.92	760.0	30.18	766.5	32.7	0.4	98	sw.	13	6	.....	.....	10 n	.....	.....	0.016	0.4	light rain...	Observatory.
Ekaterinburg	29.00	736.5	30.05	763.2	7.0	—13.9	85	wsw.	31	14	.....	.....	10	.....	.....	0	0	snow drift...	Meteorological Obs'y.
Kasan	30.04	763.0	30.34	770.6	7.0	—13.9	86	ssw.	9	4	.....	.....	10	.....	.....	.....	.....	snowing	Observatory.
Kertch	30.15	765.8	30.17	766.3	13.5	—10.3	83	nne.	16	7	.....	0	5 ks	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	29.68	753.8	30.36	771.1	24.1	— 4.4	81	ene.	2	1	.....	.....	10ks;n	.....	.....	0	0	.....	Observatory.
Lugan	30.17	766.2	30.39	771.9	15.6	— 9.1	66	e.	18	8	.....	.....	5	.....	.....	0	0	.....	Meteorological Obs'y.
Moscow	29.68	753.8	30.19	766.8	26.6	— 3.0	72	s.	4	2	.....	.....	10 s	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	30.36	771.1	30.43	772.9	28.4	— 2.0	72	nne.	13	6	.....	.....	10 n	.....	.....	0	0	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.37	771.3	30.45	773.5	6.4	—14.2	67	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	30.52	775.2	30.66	778.8	27.7	— 2.4	46	calm	0	0	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	30.01	762.2	30.02	762.6	34.5	1.4	83	w.	18	8	.....	.....	10 n	.....	.....	0	0	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.56	725.4	30.16	766.1	43.2	6.2	43	nne.	7.8	3.5	.....	.....	10	.....	.....	0	0	light clouds	Teich, A. M.
Tiflis	28.48	723.5	29.96	761.0	34.9	1.6	53	nw.	13	6	.....	9 ck	0	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	30.58	776.6	30.64	778.3	13.1	—10.5	68	n.	9	4	.....	0	8 k	.....	.....	0	0	.....	
Warsaw	29.97	761.2	30.42	772.6	30.6	— 0.8	79	s.	7	3	.....	0	2 ks	.....	.....	.....	.....	light clouds.	Astronomical Obs'y.
Wilna	29.94	760.5	30.39	771.8	30.4	— 0.9	89	wsw.	2	1	.....	.....	10	.....	.....	0	0	h'vy clouds.	Berg, Assistant.
Yeniseisk	29.78	756.5	30.09	764.3	16.2	— 8.8	79	w.	4	2	.....	.....	6	.....	.....	0.063	1.6	.....	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.21	767.3	50	10.0	93	wsw.	.....	.....	3	.....	10	.....	.....	0.1	3.	hazy	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.27	768.8	30.38	771.6	54.9	12.7	79	e.	3.6	1.6	.....	.....	8	.....	.....	0.043	1.1	misty	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.31	769.9	30.37	771.4	60.4	15.8	51	s.	5.6	2.5	.....	3	0	s.	.....	0	0	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.34	694.3	30.38	771.6	47.7	8.7	59	ne.	3.1	1.4	.....	0	1	.....	.....	0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.07	712.9	30.34	770.6	53.6	12.0	54	e.	11.9	5.3	.....	0	4	.....	.....	0.016	0.4	cloudy	The Staff.
Murcia, Met. Obs'y	30.17	766.3	30.33	770.3	55.4	13.0	85	e.	4.3	1.9	.....	5	5	w.	.....	0.067	1.7	raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.37	745.9	30.27	768.9	57.4	14.1	54	calm	0	0	.....	0	0	.....	.....	0	0	clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.93	760.3	30.00	762.0	69.3	20.7	87	calm	0	0	.....	0	0	.....	.....	0.071	1.8	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.98	761.6	30.04	763.0	77.7	25.4	69	ese.	6.6	3.0	.....	0	1 ks	.....	ene.	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.14	765.4	30.24	768.0	57.7	14.3	59	ne.	2.4	1.1	.....	0	3	.....	ne.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.05	763.2	30.14	765.5	74.1	23.4	92	calm	0	0	.....	4 k	2 kn	se.	se.	0	0	cloudy ...	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.96	761.0	30.09	764.3	72.2	22.3	85	nw.	7.0	3.1	.....	2 c	5 ks	sse.	n.	0.01	0.3	cloudy	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.52	749.9	29.56	750.9	35.6	2.0	85	sw.	.....	.....	4	.....	2	.....	.....	0	0	.....	
Umea	29.71	754.7	29.76	756.0	41.7	5.4	63	ssw.	.....	.....	2	.....	1	.....	.....	0	0	.....	
Hernosand	29.83	757.6	29.88	758.9	44.8	7.1	40	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	
Stockholm	29.89	759.1	30.06	763.6	39.2	4.0	73	wsw.	.....	.....	4	.....	0	.....	.....	0	0	.....	
Wisby	30.15	765.8	30.21	767.3	37.0	2.8	82	sw.	.....	.....	2	.....	7	.....	.....	0	0	.....	
Sub Series.																			
Upsala	29.92	759.9	30.00	762.1	39.6	4.2	76	wsw.	11.6	5.2	.....	.....	0	.....	.....	0	0	.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.02	737.1	30.52	775.2	29.8	— 1.2	90	wsw.	.....	.....	1	.....	.....	.....	.....	0	0	foggy	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.24	768.1	34.2	1.2	90	n.	13	6.0	.....	.....	10	.....	n.	0.079	2.0	snowing	The Observatory.
Valona	.....	.....	30.32	770.1	49.3	9.6	.....	w.	.....	.....	1	.....	0	.....	.....	0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.87	758.6	48.9	9.4	73	w.	.....	.....	4	.....	10 n	.....	w.	0.60	15.2	.....	Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rainfall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	30.12	765.0	30.21	767.3	13.5	—10.3	70	n.	1	0.4			10 s			0.01	0.3	cloudy	
Alpena, Michigan	29.00	736.6	29.71	754.6	25	— 3.9	73	sw.	6	2.7		0	1 s			0.01	0.3	clear	
Atlanta, Georgia	28.28	718.3	29.50	749.3	42.0	5.6	100	e.	12	5.4			10 n		calm	3.07	78.0	light rain	
Atlantic City, New Jersey	30.05	763.3	30.06	763.5	31.7	— 0.2	68	e.	17	7.6			10 s			0	0	cloudy	
Augusta, Georgia	29.31	744.5	29.51	749.5	54.8	12.7	93	se.	7	3.1			10 n			1.14	29.0	light rain	
Baltimore, Maryland	29.98	761.5	30.03	762.7	28	— 2.2	54	ne.	6	2.7			10 s			0	0	cloudy	
Barnegat, New Jersey	30.03	762.7	30.05	763.3	28.5	— 1.9	86	e.	20	8.9			10 s			0	0	cloudy	
Bismarck, Dakota	27.91	708.9	29.89	759.2	27	— 2.8	67	se.	2	0.9			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho																			
Boston, Massachusetts	30.03	762.7	30.19	766.8	5.0	—15.0	76	nw.	9	4.0		4 cs	0			0	0	fair	
Brownsville, Texas	30.14	765.5	30.19	766.8	49	9.4	86	nw.	4	1.8		0	0			inap.	inap.	clear	
Buffalo, New York	29.10	739.1	29.90	759.4	21.8	— 5.7	82	ne.	3	1.3			10 s			0.01	0.3	cloudy	
Burlington, Vermont	29.88	758.9	30.19	766.8	— 1.5	—18.6	93	e.	5	2.2		0	0			0	0	clear	
Cairo, Illinois	29.52	749.8	29.94	760.5	39.5	4.2	73	nw.	16	7.2		9 cs	0	nw.		0	0	cloudy	
Campo, California	27.59	700.8	30.23	767.8	37	2.8	42	e.	1	0.4		2 c	0			0	0	clear	
Camp Thomas, Arizona	27.49	698.2	30.32	770.1	25	— 3.9	96	calm			0	0	0			0	0	clear	
Cape Henry, Virginia	29.83	757.7	29.85	758.2	40	4.4	89	ne.	36	16.1		4	10 n			0.10	2.5	light rain	
Cape May, New Jersey	29.94	760.5	29.98	761.5	35	1.7	79	e.	13	5.8			10 n		e.	0.05	1.3	light snow	
Castroville, Texas	29.37	746.0	30.21	767.3	41	5.0	92	nw.	4	1.8		0	0			0.09	2.3	clear	
Cedar Keys, Florida	29.71	754.6	29.73	755.1	67	19.4	90	s.	40	17.9		0	8 ks		sw.	0	0	threatening	
Champaign, Illinois	29.07	738.4	29.94	760.5	28.5	— 1.9	63	n.	21	9.4		0	3 s		nw.	0	0	clear	
Charleston, S. Carolina	29.56	750.8	29.62	752.3	62	16.7	93	s.	24	10.7		0	9 s		s.	0.10	2.5	cloudy	
Charlotte, N. Carolina	28.72	729.5	29.61	752.1	37.0	2.8	100	n.	7	3.1			10 n		n.	1.34	34.0	heavy rain	
Chattanooga, Tennessee	28.73	729.7	29.59	751.6	40.0	4.4	89	nw.	5	2.2			10 n		nw.	1.48	37.6	light rain	
Cheyenne, Wyoming	23.99	609.3	30.24	768.1	33.2	0.7	41	nw.	18	8.0			9 s			0	0	cloudy	
Chicago, Illinois	29.11	739.4	29.86	758.4	28.9	— 1.7	77	nw.	6	2.7		0	0			0	0	clear	
Chincoteague, Virginia	29.88	758.9	29.90	759.4	37	2.8	100	se.	4	1.8			10 n			0.15	3.8	heavy rain	
Cincinnati, Ohio	29.12	739.6	29.80	756.9	41	5.0	57	e.	3	1.3			10 s			0	0	cloudy	
Cleveland, Ohio	29.04	737.6	29.83	757.7	31	— 0.6	88	se.	9	4.0			10 s			0	0	cloudy	
Coleman City, Texas	28.19	716.0	30.07	763.8	44	6.7	93	ne.	10	4.5		0	0			0	0	clear	
Columbus, Ohio	28.90	734.0	29.80	756.9	36	2.2	69	se.	2	0.9			10 s			0	0	cloudy	
Concho, Texas	28.28	718.3	30.30	769.6	34	1.1	89	w.	4	1.8		0	0			0.12	3.0	clear	
Davenport, Iowa	29.28	743.7	29.98	761.5	30	— 1.1	68	nw.	8	3.6		0	0			0	0	clear	
Dayton, Washington T'y	28.45	722.6	30.26	768.6	34.7	1.5	86	sw.	5	2.2			10 s		sw.	0	0	cloudy	
Deadwood, Dakota	25.20	640.1	30.12	765.0	32.8	0.4	74	sw.	6	2.7			10 s		sw.	inap.	inap.	cloudy	
Decatur, Texas					46	7.8	54	e.	8	3.6		0	0			0	0	clear	
Delaware Breakwater, Del.	29.98	761.5	30.00	762.0	35	1.7	79	se.	26	11.6			10 n		se.	inap.	inap.	light snow	
Denison, Texas	29.33	745.0	30.17	766.3	36.8	2.7	82	nw.	8	3.6		0	0			0	0	clear	
Denver, Colorado	24.74	628.4	30.26	768.6	31.5	— 0.3	60	s.	4	1.8		1 ck	0	nw.		0	0	clear	
Des Moines, Iowa	29.10	739.1	30.07	763.8	29	— 1.7	77	nw.	2	0.9		0	fg.			0	0	clear	
Detroit, Michigan	29.05	737.9	29.80	756.9	37.2	2.9	72	s.	5	2.2		0	0			0	0	clear	
Dodge City, Kansas	27.52	699.0	30.26	768.6	21.9	— 5.6	81	w.	8	3.6		0	0			0	0	clear	
Dubuque, Iowa	29.18	741.2	29.94	760.5	26.8	— 2.9	59	w.	4	1.8		0	0			0	0	clear	
Duluth, Minnesota	29.13	739.9	29.89	759.2	9	—12.8	76	w.	6	2.7		0	0			0	0	clear	
Eagle Pass, Texas	29.45	748.0	30.29	769.4	41.5	5.3	92	nw.	1	0.4		0	0			0.36	9.1	clear	
Eagle Rock, Idaho	25.55	649.0	30.45	773.4	— 7	—21.7	82	n.	5	2.2		0	0			0	0	clear	
Eastport, Maine	30.07	763.8	30.14	765.5	— 3.5	—19.7	65	nw.	25	11.2		0	0			inap.	inap.	clear	
El Paso, Texas	26.45	671.8	30.33	770.4	31.4	— 0.3	81	nw.	3	1.3		1 cs	0	w.		0	0	clear	
Erie, Pennsylvania	29.06	738.1	29.83	757.7	32	0.0	88	se.	20	8.9			10 s			0	0	cloudy	
Escanaba, Michigan	29.00	736.6	29.72	754.9	19	— 7.2	84	w.	6	2.7			10 s		w	0.04	1.0	cloudy	
Fort Apache, Arizona	25.22	640.6	30.32	770.1	17	— 8.3	58	ne.	4	1.8		0	0			0	0	clear	
Fort Assinnaboine, Montana	26.95	684.5	29.99	761.7	35	1.7	66	sw.	22	9.8			10 s		sw.	0	0	cloudy	
Fort Bennett, Dakota	28.26	717.8	29.98	761.5	29	— 1.7	67	sw.	2	0.9			10 s			0	0	cloudy	
Fort Benton, Montana	27.01	686.0	30.01	762.2	40	4.4	67	sw.	34	15.2		10 cs	0	sw.		0	0	cloudy	
Fort Buford, Dakota	27.71	703.8	29.89	759.2	29	— 1.7	67	w.	2	0.9		5 c	0	calm		0	0	fair	
Fort Custer, Montana	26.68	677.7	30.04	763.0	32	0.0	81	w.	3	1.3			10 s		calm	0	0	cloudy	
Fort Davis, Texas	25.18	639.6	30.14	765.5	32	0.0	81	sw.	4	1.8		7 cs	0	calm		0	0	fair	
Fort Elliott, Texas	27.37	695.2	30.27	768.8	24	— 4.4	53	nw.	4	1.8		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.56	750.8	30.16	766.1	32.5	0.3	78	w.	3	1.3		0	0			0	0	clear	
Fort Grant, Arizona	25.38	644.6	30.24	768.1	36	2.2	61	n.	5	2.2		0	0			0	0	clear	
Fort Griffin, Texas	28.91	734.3	30.28	769.1	37	2.8	61	n.	5	2.2		0	0			0	0	clear	
Fort Keogh, Montana	27.31	693.7	29.99	761.7	27	— 2.8	76	s.	3	1.3		10 cs	0	w.		0	0	cloudy	
Fort Macon, North Carolina	29.64	752.8	29.65	753.1	57	13.9	100	s.	34	15.2			10 n		se.	0.09	2.3	heavy rain	
Fort McKavett, Texas	27.96	710.2	30.34	770.6	39	3.9	82	nw.	4	1.8		0	0			0.73	18.5	clear	
Fort Missoula, Montana	26.81	681.0	30.24	768.1	38	3.3	82	sw.	10	4.5			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	29.71	754.6	29.75	755.6	—23	—30.6	100	s.	5	2.2		0	0			0	0	clear	
Fort Shaw, Montana	26.24	666.5	30.09	764.3	38	3.3	64	s.	9	4.0		8 k	0	nw.		0	0	cloudy	
Fort Sill, Indian Territory	28.93	734.8	30.24	768.1	36.7	2.6	70	w.	7	3.1		0	0			0	0	clear	
Fort Stevenson, Dakota	27.82	706.6	29.84	757.9	22	— 5.6	73	nw.	2	0.9		0	8 s		w.	0	0	cloudy	
Fort Verde, Arizona					23.9	— 4.5	64	nw.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.41	721.6	30.21	767.3	43	6.1	76	w	3	1.3		0	0			0.15	3.8	clear	
Galveston, Texas	30.09	764.3	30.13	765.3	46	7.8	84	nw.	14	6.3		0	0			0.47	11.9	clear	
Grand Haven, Michigan	29.08	738.6	29.79	756.7	33.0	0.6	73	w.	12	5.4		0	0			0	0	clear	
Hatteras, North Carolina	29.71	754.6	29.73	755.1	59	15.0	81	se.	36	16.1			10 n			0.72	18.3	heavy rain	
Helena, Montana	25.74	653.8	30.14	765.5	36	2.2	49	w.	1	0.4		4 k	0	sw.		0	0	fair	
Henrietta, Texas	29.22	742.2	30.27	768.8	34	1.1	78	nw.	11	4.9		0	0			0	0	clear	
Huron, Dakota	28.52	724.4	30.04	763.0	23.8	— 4.6	73	w.	9	4.0		3 cs	0			0	0	clear	
Indianapolis, Indiana	28.95	735.3	29.80	756.9	35	1.7	69	nw.	2	0.9			10 s		nw.	0	0	cloudy	
Indianola, Texas	30.15	765.8	30.18	766.6	46.7	8.2	77	nw.	12	5.4		0	0			0.01	0.3	clear	
Jacksboro, Texas	29.01	736.8	30.25	768.3	35	1.7	79	nw.	5	2.2		0	0			0	0	clear	
Jacksonville, Florida	29.62	752.3	29.68	753.9	67	19.4	90	se.	28	12.5			10 s		s.	0	0	cloudy	
Keokuk, Iowa	29.32	744.7	30.02	762.5	29.0	— 1.7	77	nw.	3	1.3		0	0			0	0	clear	
Key West, Florida	29.97	761.2	30.00	762.0	75.0	23.9	85	sw.	13	5.8		0	3 k;ks		sw.	0	0	clear	
Kittyhawk, North Carolina	29.79	756.7	29.81	757.2	45	7.2	83	e.	28	12.5			10 n			0.27	6.9	light rain	
Knoxville, Tennessee	28.48	723.4	29.56	750.8	37	2.8	96	nw.	15	6.7			10 n			0.96	24.4	light rain	
La Crosse, Wisconsin	29.09	738.9	29.93	760.2	27	— 2.8	64	w.	3	1.3		0	0			0	0	clear	
La Mesilla, New Mexico	26.31	668.3	30.32	770.1	29.2	— 1.6	88	calm	0	0		0	1 s			0	0	clear	
Leavenworth, Kansas	29.22	742.2	30.17	766.3	31	— 0.6	68	calm	0	0		0	0			0	0	clear	
Lewiston, Idaho	29.50	749.3	30.37	771.4	40	4.4	65	ne.	2	0.9			10 s		ne.	0	0	cloudy	
Little Rock, Arkansas	29.67	753.6	30.00	762.0	43	6.1	74	nw.	5	2.2		0	0			0.43	10.9	clear	
Los Angeles, California	29.81	757.2	30.21	767.3	53.0	11.7	80	e.	9	4.0		7 c	0	se.		0	0	fair	
Louisville, Kentucky	29.17	740.9	29.76	755.9	40.0	4.4	65	n.	3	1.3		hz.	sk.	calm	calm	0	0	dense haze	
Lynchburg, Virginia	29.09	738.9	29.81	757.2	33.3	0.7	88	ne.	4	1.8			10 n			0.65	16.5	heavy snow	
Mackinac City, Michigan																			
Madison, Wisconsin	28.82	732.0	29.91	759.7	25	— 3.9	64	w.	8	3.6		0	0			0	0	clear	
Marquette, Michigan	28.91	734.3	29.69	754.1	24	— 4.4	73	w.	12	5.4			10 s		w.	0.02	0.5	cloudy	
Mason, Texas	28.55	725.2	30.28	769.1	42.5	5.8	67	nw.	10	4.5		0	0			0.78	19.8	clear	
Memphis, Tennessee	29.58	751.3	29.93	760.2	42	5.6	72	w.	3	1.3		0	0			1.27	32.3	clear	
Milwaukee, Wisconsin	29.04	737.6	29.84	757.9	27	— 2.8	77	sw.	8	3.6		0	2 s			0	0	clear	
Mobile, Alabama	29.76	755.9	29.80	756.9	49.0	9.4	77	nw.	16	7.2			10 s		nw.	0.67	17.0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	29.32	744.7	29.56	750.8	50	10.0	87	w.	22	9.8			10 n		w.	1.64	41.7	light rain	
Moorhead, Minnesota	28.86	733.0	29.96	761.0	3	—16.1	72	calm	0	0			10 s			0	0	cloudy	
Morgantown, W. Virginia	28.77	730.7	29.84	757.9	35.0	1.7	72	se.	6	2.7			10 n			inap.	inap.	light snow	
Mt. Washington, N. H.	23.43	595.1	30.05	763.3	2.0	—16.7	46	nw.	32	14.3		0	1 s			0.08	2.0	clear	
Nashville, Tennessee	29.19	741.4	29.75	755.6	38.0	3.3	91	nw.	9	4.0			10 n		nw.	1.76	44.7	light rain	
New Haven, Connecticut	30.02	762.5	30.14	765.5	10	—12.2	80	ne.	16	7.2			10 s		w.	0	0	cloudy	
New London, Connecticut	30.13	765.3	30.18	766.6	14	—10.0	80	ne.	10	4.5			10 s		ne.	0.02	0.5	cloudy	
New Orleans, Louisiana	29.84	757.9	29.90	759.4	51.5	10.8	67	nw.	20	8.9			10 s		nw.	0.38	9.7	cloudy	
Newport, Rhode Island	30.12	765.0	30.17	766.3	12.3	—10.9	69	n.	6	2.7			10 s		calm	0	0	cloudy	
New River, N. Carolina					55	12.8	100	se.			6		10 n		e.	0.12	3.0	light rain	
New Shoreham, Rhode I'd.	30.13	765.3	30.16	766.1	17.2	— 8.2	56	ne.	16	7.2		10 cs	0			0	0	cloudy	
New York, New York	29.95	760.7	30.14	765.5	19	— 7.2	70	ne.	13	5.8			10 s			0	0	cloudy	
Norfolk, Virginia	29.79	756.7	29.82	757.4	40	4.4	89	e.	16	7.2			10 n		e.	0.23	5.8	light rain	
North Platte, Nebraska	27.11	688.6	30.21	767.3	19.6	— 6.9	82	sw.	8	3.6		5 cs	0			0	0	fair	
Olympia, Washington T'y.	30.26	768.6	30.30	769.6	38.0	3.3	89	s.	12	5.4			10 n		w.	0.01	0.3	light rain	
Omaha, Nebraska	28.86	733.0	30.13	765 3	30.7	— 0.7	72	w.	12	5.4		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.47	748.5	29.49	749.0	—24.2	—31.2	80	calm	0	0		hz	hz			inap.	inap.	dense haze	
Oswego, New York	29.68	753.9	30.03	762.7	14.2	— 9.9	60	se.	10	4.5		2 cs	0			0.02	0.5	clear	
Palestine, Texas																			
Pensacola, Florida	29.70	754.4	29.74	755.4	55.2	12.9	74	w.	19	8.5			10 s		w.	1.10	27.9	cloudy	
Philadelphia, Pa	29.98	761.5	30.09	764.3	24	— 4.4	88	e.	11	4.9			10 s		e.	0	0	cloudy	
Pike's Peak, Colorado	17.62	447.5	30.34	770.6	— 1	—18.3	79	nw.	28	12.5		3 cs	0	w.		0	0	clear	
Pioche, Nevada	24.32	617.7	30.48	774.2	23	— 5.0	56	w.	2	0.9		0	0			0	0	clear	
Pittsburg, Pennsylvania	28.99	736.3	29.85	758.2	32.0	0.0	65	ne.	6	2.7			10 s; fg			0	0	cloudy	
Port Eads, Louisiana	29.89	759.2	29.90	759.4	50.6	10.3	72	nw.	36	16.1			10 k		nw.	0.68	17.3	cloudy	
Port Huron, Michigan	29.06	738.1	29.79	756.7	28.0	— 2.2	77	s.	7	3.1			10 s		s.	0	0	cloudy	
Portland, Maine	30.13	765.3	30.18	766.6	10	—12.2	58	nw.	6	2.7		0	1 s		calm	0	0	clear	
Portland, Oregon	30.31	769.9	30.38	771.6	37.0	2.8	89	calm	0	0			fg.		calm	0	0	dense fog	
Portsmouth, N. Carolina					54	12.2	100	se.	32	14.3			10 n		se.	0.83	21.1	heavy rain	
Prescott, Arizona	24.97	634.2	30.33	770.4	18	— 7.8	61	nw.	4	1.8		0	0			0	0	clear	
Punta Rassa, Florida	29.87	758.7	29.88	758.9	73.5	23.1	87	s.	24	10.7		hz.	1 ks		s.	0	0	clear	
Red Bluff, California	29.96	761.0	30.34	770.6	35.1	1.7	89	nw.	3	1.3		0	0			0	0	clear	
Rio Grande City, Texas	29.97	761.2	30.22	767.6	45	7.2	93	w.	3	1.3		0	0			0	0	clear	
Rochester, New York	29.23	742.4	29.94	760.5	16	— 8.9	83	se.	12	5.4		10 cs	0			0.02	0.5	cloudy	
Roseburg, Oregon	29.84	757.9	30.41	772.4	37.1	2.8	85	calm	0	0			10 s		sw.	0	0	cloudy	
Sacramento, California	30.25	768.3	30.33	770.4	41.6	5.3	74	se.	4	1.8		0	0			0	0	clear	
St. Louis, Missouri	29.37	746.0	30.01	762.2	34.0	1.1	60	n.	20	8.9		0	1 s			0	0	clear	
St. Paul, Minnesota	28.98	736.1	29.92	760.0	22.0	— 5.6	88	w.	6	2.7		0	0			0	0	clear	
St. Vincent, Minnesota	28.92	734.6	29.90	759.4	—13	—25.0	100	s.	7	3.1		4 cs	0	calm		0.03	0.8	fair	
Salt Lake City, Utah	25.98	659.9	30.54	775.7	13	—10.6	48	se.	2	0.9		0	0			0	0	clear	
San Antonio, Texas	29.49	749.0	30.21	767.3	42.7	5.9	74	calm	0	0		0	0			0.19	4.8	clear	
San Diego, California	30.08	764.0	30.15	765.8	44.2	6.8	80	ne.	1	0.4		0	0			c	0	clear	
Sandusky, Ohio	29.08	738.6	29.80	756.9	35	1.7	69	s.	4	1.8			10 s			0	0	cloudy	
Sandy Hook, New Jersey	30.09	764.3	30.13	765.3	23.0	— 5.0	88	ne.	16	7.2		0	0			0	0	clear	
San Francisco, California	30.22	767.6	30.30	769.6	46	7.8	83	s.	6	2.7		6 cs	0	w.		0	0	fair	
Santa Fé, New Mexico	23.36	593.3	30.40	772.1	22	— 5.6	53	ne.	6	2.7		0	0			0	0	clear	
Savannah, Georgia	29.59	751.6	29.68	753.9	64	17.8	87	s.	22	9.8		3 ck	4 ks	s.	s.	0.03	0.8	fair	
Shreveport, Louisiana	29.83	757.7	30.08	764.0	42	5.6	82	nw.	8	3.6		0	0			1.33	33.8	clear	
Silver City, New Mexico	24.40	619.7	30.25	768.3	32	0.0	74	n.	5	2.2		0	0			0	0	clear	
Sitka, Alaska	29.46	748.3	29.53	750.0	30.5	— 0.8	80	w.	8	3.6		5 k	1 s	ne.	calm	0.56	14.2	fair	
Smithville, North Carolina	29.60	751.8	29.64	752.8	60	15.6	100	sw.	16	7.2			10 s		sw.	0.20	5.1	threatening	
Spokane Falls, Wash. Ter.	28.10	713 7	30.22	767.6	33.5	0.8	76	sw.	8	3.6		9 k	0	nw.		0	0	cloudy	
Springfield, Illinois	29.24	742.7	29.98	761.5	33	0.6	54	nw.	13	5.8		0	0			0	0	clear	
Springfield, Massachusetts	30.06	763.5	30.20	767.1	7.0	—13.9	52	ne.	3	1.3			10 s			inap.	inap	cloudy	
Springfield, Mo	28.61	726.7	30.18	766.6	32	0.0	78	n.	12	5.4		0	0			0	0	clear	
Stockton, Texas	27.20	690.9	30.33	770.4	35.0	1.7	89	sw.	4	1.8		0	8 s		sw.	0.39	9.9	cloudy	
Thatcher's Island, Mass.	30.13	765.3	30.19	766.8	15.0	— 9.4	83	n.	7	3.1		6 k	0	n.		0	0	fair	
Toledo, Ohio	29.08	738.6	29.82	757.4	34.5	1.4	65	calm	0	0			10 s; fg			0	0	threatening.	
Tucson, Arizona	27.75	704.8	30.23	767.8	33	0.6	88	se.	2	0.9		0	0			0	0	clear	
Umatilla, Oregon	29.94	760.5	30.32	770.1	38.0	3.3	72	sw.	8	3.6		8 cs	0	w.		0	0	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.71	754.6	29.98	761.5	45	7.2	83	nw.	8	3.6		0	0			2.68	68.1	clear	
Visalia, California	29.90	759.4	30.28	769.1	35.5	1.9	87	se.	3	1.3		5 c	0			0	0	fair	
Washington, D. C.	29.86	758.4	29.98	761.5	25	— 3.9	100	ne.	10	4.5			10 n			0.04	1.0	heavy snow	
West Los Animas, Colorado	26.11	663.2	30.24	768.1	13	—10.6	76	w.	1	0.4		0	0			0	0	clear	
Wickenburg, Arizona					29	— 1.7	88	calm			0	4 c	0	nw.		0	0	fair	
Williamsport, Pa	29.41	747.0	30.04	763.0	21	— 6.1	70	ne.	4	1.8			10 s			0	0	threatening.	
Wilmington, N. Carolina	29.58	751 3	29.64	752.8	52	11.1	93	ne.	7	3.1			10 n		calm	0.65	16.5	light rain	
Winnemucca, Nevada	25.94	658.9	30.46	773.7	10	—12.2	80	ne.	12	5.4		0	0			0	0	clear	
Wood's Holl, Mass																			
Yankton, Dakota	28.68	728.5	30.10	764.5	24	— 4.4	73	sw.	2	0.9		0	0			0	0	clear	
Yuma, Arizona	30.09	764.3	30.24	768.1	41.3	5.2	69	n.	2	0.9		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.00	558.8			54.0	12.2	82	n.	1	0.4		6 k	4 s	w.		0	0	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.02	762.5	30.03	762.7	77	25.0	81	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.96	761.0	29.98	761.5	77	25.0	90	calm	0	0		0	8 k		w.	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.98	761.5	30.00	762.0	75	23.9	90	e.				9 ck	0			0.039	1.0		B. Bigar.
Havana, Cuba, W. I.	30.00	762.0	30.05	763.3	74	23.3	85	calm	0	0		0	1 ks		calm	0	0	clear	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.01	762.2	30.02	762.5	77.0	25.0	74	se.	6	2.7		2 cs	3 s	e.	e.	0	0	fine	Robert Johnstone
Navassa, W. I.	29.93	760.2	30.01	762.2	78	25.6	72	e.	8	3.6		8 k	5 s	se.	e.	0	0	cloudy	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	76	24.4	91	e.			1		8 ps	e.		0.450	11.4	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.48	748.8	29.94	760.5	82	27.8	80	calm			0	7 ck	2 s	calm	calm	0.03	0.8	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua							96	ne.			1	0	3 ks		ne.	0	0	fair	Earl Flint.
Santiago de Cuba, W. I.	30.03	762.7	30.06	763.5	74	23.3	72	calm	0	0		2 c	0			0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.16	766.1	30.22	767.6	—28.0	—33.3		e.	11	4.9		1 c	0	e.		0	0	fair	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, N. 47° 33′, W. 7° 48′	30.43	772.9	51	10.6	78	ese.			3		6	ene.				3	w.	d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 20° 05′, E. 111° 20′	30.36	771.1	59	15.0		nne.			4		10					5	ne.	overcast	Capt. A. J. Errington.
H. M. S. Alert, Singapore, Malay Pen.	29.90	759.4	81	27.2	74	ne.			2		3							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.31	769.9	57	13.9	62	calm			0		1							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.76	755.9	71	21.7	65	nw.			2–3		4	w.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.91	759.7	71	21.7	90	sse.			1		9	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	29.79	756.7	70	21.1	61	nw.			3–5		8	wnw.						squally	Capt. A. T. Dale.
H. M. S. Dido, N. 14° 01′, W. 61° 01′	30.09	764.3	77	25.0		ne.			1–3		6	ne.				3	n.	squally	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.02	762.5	64.5	18.1	89	nne.			1		7	wsw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 18° 11′, W. 76° 27′	30.01	762.2	75	23.9	88	se.			1		7	se.						d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf																			Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 34° 44′, W. 7° 51′	30.06	763.5	60	15.6	?	ene.			1		4					5	ssw.	d. clouds	Capt. C. A. G. Bridge.
H. M. S. Fawn, Mocha, Arabia	29.79	756.7	79.5	26.4	74	s.			5		0					3	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.29	769.4	48	8.9	81	ne.			1		10					1	e.	heavy rain	Capt. R. F. Moskyn.
H. M. S. Gannet, S. 14° 25′, W. 76° 35′	29.87	758.7	70.5	21.4	92	ese.			4		10					2 2	sse. s.	foggy	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	30.13	765.3	44	6.7	75	se.			3		10							overcast	Capt. L. F. Jones.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 36° 05′, E. 23° 58′	29.22	742.2	49	9.4	71	n.			6–7		9	n.				7	n.	squally	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.32	770.1	55	12.8	80	ne.			1–2		3	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.86	758.4	66	18.9		calm			0		6								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, Sydney, Australia	29.87	758.7	73	22.8	85	ne.			1–2		2	sw.						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, N. 13° 55′, W. 64° 23′	29.98	761.5	77	25.0	82	ne.			4		3	ne.				2	ene.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, Bombay, India	29.88	758.9	78.5	25.8	87	n.			4		0					1	ne.	blue sky	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 10° 29′, W. 31° 19′	29.96	761.0	76.5	24.7	97	nne.			4		6					3	ne.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, S. 3° 32′, W. 10° 14′	29.88	758.9	82	27.8	95	se.			3		1	se.						blue sky	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	29.97	761.2	58	14.4		nw.			3–6		4							squally	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	30.16	766.1	40	4.4	?	sse.			1		10							raining	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 2° 13′, E. 40° 59′	29.25	742.9	83	28.3	100	e.			2–3		2	ene.						d. clouds	Capt. E. T. Church.
H. M. S. Thalia																			
H. M. S. Triumph, S. 10° 26′, W. 78° 34′	29.96	761.0	74	23.3	90	s.			1		2	calm				3	s.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.06	763.5	73	22.8		e.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Sharjeh, Arabia	29.94	760.5	76.5	24.7	69	nne.			4		4	wnw.				2	nne.	d. clouds	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Brava, Cape Verd Ids.	30.01	762.2	73.7	23.2	83	ne.			2		6	sw.				2	ne.	d. clouds	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder																			Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	29.71	754.6	54	12.2	87	w.	15	6.7	.....	.....	10	.....	w.	0.86	21.8	.....	.....	cloudy	
N. Yard, Portsmouth, N. H.	30.18	766.6	4	—15.6	.....	nw.	2	0.9	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Naval Hospital, Yokohama, Japan	30.34	770.6	38.5	3.6	68	n.	.....	.....	4	.....	2	.....	e.	slt't	slt't	.....	.....	clearing	
Adams, Callao, Peru	29.71	754.6	72	22.2	90	sse.	.....	.....	2	.....	8	.....	.....	0	0	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	29.94	760.5	61	16.1	71	ne.	.....	.....	4	.....	8	.....	.....	0	0	sm'h	.....	cloudy	
Alert, N. 13° 06′, E. 100° 35′*	29.85	758 2	83	28.3	64	nw.	.....	.....	3	.....	8	.....	se.	0	0	sm'h	.....	fair	
Alliance, Boston, Mass	30.07	763.8	12	—11.1	61	nnw.	.....	.....	2	.....	8	.....	.....	0	0	.....	.....	cloudy	
Ashuelot, Tientsin, China	30.68	779.3	28	— 2.2	100	se.	.....	.....	2	.....	2	.....	calm	.....	.....	.....	.....	clear	
Brooklyn, Montevideo, Uruguay	29.74	755.4	72	22.2	90	nnw.	6	2.7	.....	.....	8	.....	calm	0	0	sm'h	.....	fair	
Colorado, New York, N. Y	30.14	765.5	18	— 7.8	100	ne.	4	1.8	.....	.....	10	.....	calm	0	0	.....	.....	overcast	
Enterprise, Potomac River*	29.90	759.4	34	1.1	90	ne.	.....	.....	2–5	.....	10	.....	.....	.....	.....	.....	.....	snowing	
Essex, N. 32° 38′, W. 16° 55′	30.26	768.6	62	16.7	77	sse.	.....	.....	1	.....	2	.....	se.	.....	.....	sm'h	.....	cloudy	
Franklin, Norfolk, Va	29.87	758.7	41	5.0	82	e.	18	8.0	.....	.....	10	.....	e.	0.05	1.3	.....	.....	raining	
Galena, N. 35° 30′, W. 7° 13′	30.19	766.8	61	16.1	88	ene.	.....	.....	3	.....	2	.....	e.	.....	.....	long	ne.	fair	
Independence, N. Yard, Mare I'd, Cal	30.25	768.3	48	8.9	78	calm	0	0	.....	.....	2	.....	.....	0	0	.....	.....	fair	
Kearsarge, New Orleans, La	29.89	759.2	55	12.8	74	nw.	.....	.....	4	.....	10	.....	se.	.....	.....	.....	.....	cloudy	
Lackawanna, Valparaiso, Chili*	29.89	759.2	61	16.1	82	n.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Lancaster, Naples, Italy	30.36	771.1	50	10.0	65	e.	.....	.....	0–1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Marion, S. 30° 27,′ E. 56° 15′	29.97	761.2	73	22.8	81	e.	.....	.....	3	.....	5	.....	calm	0	0	long	ene.	fair	
Michigan, Erie, Pa	29.84	757.9	31	— 0.6	78	s.	.....	.....	4	.....	10	.....	se.	.....	.....	.....	.....	hazy	
Minnesota, Newport, R. I	30.17	766.3	11	—11.7	.....	nne.	.....	.....	3	.....	2	.....	calm	.....	.....	.....	.....	clear	
Monocacy, Yokohama, Japan	30.56	776.2	39	3.9	91	nnw.	3	1.3	.....	.....	5	.....	nw.	.....	.....	.....	.....	fair	
Nipsic, N. 40° 36′, E. 2° 07′	30.38	771.6	56	13.3	75	s.	.....	.....	1	.....	8	.....	.....	.....	.....	long	sse.	fair	
Onward, Callao, Peru†	30.03	762.7	70	21.1	97	se.	.....	.....	3	.....	5	.....	nnw.	.....	.....	long	w.	fair	
Palos, Hong Kong, China	30.31	769.9	54	12.2	67	n.	.....	.....	2	.....	8	.....	n;e.	.....	.....	.....	.....	cloudy	
Passaic, Washington, D. C	30.00	762.0	26	— 3.3	.....	ne.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	snowing	
Pensacola, Valparaiso, Chili	29.98	761.5	61	16.1	66	calm	0	0	0	.....	.....	.....	.....	hv'y	h'vy	sm'h	.....	clear	
Powhatan, Norfolk, Va	29.90	759.4	40	4.4	91	ene.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	rainy	
Quinnebaug, N. 36° 50′, E. 11° 42′	30.37	771.4	55	12.8	62	sw.	.....	.....	2	.....	8	.....	sw.	.....	.....	sm'h	.....	fair	
Ranger, N. 20° 14′, W. 105° 35′*	29.87	758.7	57	13.9	94	ne.	.....	.....	2	.....	2	.....	calm	0	0	long	wnw.	fair	
Richmond, N. 16° 44′, E. 165° 45′*	29.87	758.7	78	25.6	86	ne.	.....	.....	4	.....	2	.....	ne.	0.15	4.1	mod.	ne.	fair	
Shenandoah, Montevideo, Uruguay*	29.83	757.7	72	22.2	80	nnw.	.....	.....	2	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy	
St. Louis, League Island, Pa	30.32	770.1	20	— 6.7	100	ne.	8	3.6	.....	.....	10	.....	.....	0	0	.....	.....	cloudy	
Swatara, Kobe, Japan*	30.20	767.1	50	10.0	72	ne.	.....	.....	3	.....	10	.....	ne.	.....	.....	.....	.....	light rain	
Tennessee, New York, N. Y	30.12	765.0	20	— 6.7	.....	ne.	8	3.6	.....	.....	10	.....	.....	0	0	.....	.....	cloudy	
Vandalia, Savanilla, U. S. Col	29.87	758.7	73	22.8	95	se.	.....	.....	1	.....	2	.....	se.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass	30.18	766.6	6	—14.4	.....	nw.	.....	.....	.....	.....	10	.....	nw.	.....	.....	.....	.....	hazy	
Wachusetts, Mare Isld, Cal†	30.52	775.2	42	5.6	91	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Wyoming, Port Royal, S. C	29.57	751.1	62	16.7	88	s.	30	13.4	.....	.....	10	.....	s.	1.01	25.7	.....	.....	raining	
Yantic, Aspinwall, Panama*	29.90	759 4	77	25.0	91	n.	.....	.....	2	.....	8	.....	n.	.....	.....	.....	.....	cloudy	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith, N. 51° 52′, W. 20° 45′	30.37	771.4	51	10.6	93	var.	1–2	.....	10	.....	se.	4 h'r	4 h'r	4	nw; sw.	misty	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 44° 48′, W. 59° 20′*	29.47	748.5	31	—0.6	.....	wnw.	5	.....	9	.....	w.	0	0	mod.	w.	cloudy	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen. N. 55° 00′, W. 15° 06′*	30.30	769.6	51	10.6	.....	s.	3	.....	10	.....	.....	.....	.....	con.	.....	rain & fog	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland *	30.41	772.4	45	7.2	.....	sw.	2	.....	.....	.....	sw.	1 h'r	1 h'r	.....	.....	cloudy	.....
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. British Crown, Capt. E. H. Freeth,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 51° 24′, W. 10° 15′	30.38	771.6	53	11.7	86	sse.	3	.....	2	.....	se.	.....	.....	sm'h	e.	clear	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 41° 14′, W. 57° 57′†	29.71	754.6	46	7.8	69	n.	6	.....	5?	.....	n.	h'vy	h'vy	mod.	nw.	cloudy?	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge, N. 43° —′, W. 57° —′.†	29.66	753.4	34	1.1	69	nw.	3	.....	.....	.....	w.	.....	.....	sm'h	.....	foggy	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
S. S. Devonia, Capt. H. Young, N. 46° 23′, W. 48° 18′*†	.....	.....	38	3.3	.....	sw.	3	.....	10	.....	wsw.	.....	.....	high	s;w.	raining	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	cross	.....	.....	John Dan, 3d officer.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 31° 20′, W. 74° 15′*	29.99	761.7	70	21.1	.....	s.	6	.....	8	.....	ssw.	0	0	small	ssw.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Kingston, Jamaica*†	29.92	760.0	69	20.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	fine	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 15° 37′, W. 68° 00′	.....	.....	.....	.....	.....	ene.	3	.....	5	.....	ese.	.....	.....	mod.	.....	fine	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 37° —′, W. 74° —	30.04	763.0	.....	.....	.....	e.	9	.....	10	.....	e.	6 h'r	h'vy	cross	e.	raining	J. Frasher, 3d officer.
BOSTON & HALIFAX. *E. W Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S.	30.06	763.5	.....	.....	.....	n.	.....	.....	0	.....	.....	snow	snow	.....	.....	clear	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 57° 24′, W. 83° 42′	29.09	738.9	49	9.4	.....	nnw.	6	.....	10	.....	.....	.....	.....	.....	.....	drizzling	.....
Baroda, Capt. C. J. Russell, N. 4° 08′, W. 26° 14′	29.91	759.7	79.1	26.2	86	nne.	3	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Caldew, Capt. W. Peterson, S. 53° 38′, W. 65° 20′	30.14	765.5	48	8.9	.....	n.	3	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Cipero, Capt. W. N. Lailey, N. 7° 30′, W. 58° 20	29.99	761.7	79	26.1	86	ene.	3	.....	2	.....	.....	.....	.....	3	ene.	d. clouds	.....
S. City of Agra, Capt. Thos. Young, N. 28° 45′, W. 42° 45′	30.08	764.0	68.0	20.0	.....	s.	3	.....	7	.....	.....	.....	.....	.....	.....	showery	.....
Coppename. Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. S. G. Jones, S. 55° 33′, W. 63° 38′	30.10	764.5	44.7	7.1	84	n.	5	.....	4	.....	.....	.....	.....	...	.....	d. clouds	.....
Hope, Capt. James Campbell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 36° 00′, E. 24° 35′	29.68	753.9	75.8	24.3	90	w.	3	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, S. 47° 50′, W. 60° 03′	30.09	764.3	50	10.0	64	ssw.	3	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Buenos Ayres. Argentine Rep.	29.78	756.4	64.9	18.3	94	wsw.	5	.....	10	.....	.....	.....	.....	.....	.....	thnd'r storm	.....
Naiad, Capt. John Smith, N. 21° 55′, W. 46° 51′	30.21	767.3	73.4	23.0	85	ene.	2	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman, S. 34° 55′, W. 73° 11′	30.07	763.8	60.4	15.8	88	se.	5	.....	1	.....	.....	.....	.....	.....	.....	misty	.....
Queen of Cambria, Capt. M. Parry, S. 36° 53′, E. 71° 27′	30.08	764.0	69.4	20.8	65	sw.	5	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. C. W. Pearson, N. 47° 54′, W. 29° 40′	29.98	761.5	46.5	8.1	85	nne.	3	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Superb, Capt. Berridge N. 33° 04′, W. 37° 25′	30.12	765.0	64.8	18.2	78	e.	1	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham, N. 50° 50′, W. 11° 56′*†	30.28	769.1	.....	.....	.....	s.	5	.....	8	.....	s.	.....	.....	long	s.	showery	Wm. Fitt.
CROMWELL LINE. *Clark & Seaman, Agents, New York*																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 27° 14′, W. 79° 45′*†	29.95	760.7	74	23.3	.....	ssw.	.....	.....	2	.....	sw.	.....	.....	.....	ssw.	clear	T. P. C. Halsey.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Bothnia, Capt. W. McMickan, N. 42° 58′, W. 48° 36′	29.64	752.8	.....	.....	.....	wnw.	5	.....	.....	.....	w.	1 h'r	light	cross	wsw.	cloudy	E. F. Stembridge, 3d off.
S. S. Gallia, Capt. W. H. P. Hains,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Mills, 3d officer.

MERCHANT-MARINE SERIES.—Continued.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, Havre, France	30.50	774.8	41.0	5.0	.....	ese.	2	.....	8	.....	e.	0	0	sm'h	.....	.....	.....
S. S. France, Capt. Périer d'Hauterive, N. 46° 39′, W. 44° 21′*†	29.53	750.0	41.0	5.0	.....	se.	6	.....	ks	.....	s.	0	0	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Sérvan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein, N. 49° 56′, W. 12° 00′*†	30.35	770.9	54	12.2	.....	sse.	3	.....	8	.....	s.	0	0	mod.	se.	fair	.....
S. S. Silesia, Capt. A. Albers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich, N. 40° 57′, W. 68° 30′*	30.02	762.5	29	—1.7	.....	n.	3	.....	10	.....	w.	0	0	3	wsw.	overcast	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, La Plata, S. A*†	29.99	761.7	73	22.8	.....	sw.	1	.....	10	.....	w.	0	0	.....	.....	fine	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 43° 27′, W. 54° 29′	.....	.....	.....	.....	.....	wnw.	3	.....	.....	.....	nw.	0	0	light	wnw.	fine	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, Nem York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 26° 44′, W. 87° 34′*†	29.93	760.2	65	18.3	.....	w.	6	.....	5	.....	wsw.	0	0	high cross	sw.	fair	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 49° 29′, W. 13° 06′*†	30.35	770.9	57	13.9	87	sse.	3–5	.....	5	.....	se.	0	0	long	wnw.	fine	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d off.
S. S. Santiago, Capt. S. F. Phillips, N. 26° 20′, W. 74° 14′†	30.07	763.8	70	21.1	.....	sse.	3	.....	1	.....	sse.	0	0	sm'h	.....	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom Savanilla, U. S. C† [man	29.91	759.7	81	27.2	.....	calm	0	.....	.....	.....	.....	.....	.....	.....	.....	hazy	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Elbe, Capt. W. Willigerod [nolds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Lessing, Capt. B. Voss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Maas, Capt. T. H. Bonjer, N. 40° 37′ W. 66° 51′*	30.04	763.0	27	—2.8	.....	nnw.	1	.....	.....	.....	.....	.....	.....	.....	w.	.....	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke, N. 41° 58′, W. 51° 30′*†	29.60	751.8	42	5.6	.....	nw.	8–9	.....	.....	.....	.....	.....	.....	high cross	nw; sw.	showery	.....
S. S. P. Caland, Capt. E Deddes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 50° 03′, W. 27′ 01′†	29.89	759 2	51	10.6	.....	nw.	5	.....	.....	.....	.....	.....	.....	.....	nw.	foggy	.....
S. S. Scythia, Capt. M Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co, Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers, N. 42° 23′, W. 57° 13′	29.69	754.1	.....	.....	.....	wnw.	6	.....	10	.....	wnw.	4 h'r and	snow hail	r'gh	sw; nw.	covered	H. Christoffers. E. Schmidt.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d offi.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Leipzig, Capt. F. Pfeiffer, N. 42° 19′, W. 58° 26′	29.76	755.9	36.5	2.5	95	w.	6	.....	5	.....	wnw.	3 h'r	3 h'r	mod.	wsw.	fair	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 50° 36′, W. 29° 14′..*	30.10	764.5	42.8	6.0	.....	ne.	3	.....	6	.....	e.	0	0	high	var.	cloudy	.....
S. S. Mosel, Capt. F. Hesse, N. 50° 34′, W. 28° 36′	29.98	761.5	53.4	11.9	.....	e.	1	.....	8	.....	se.	3 h'r	light	long	nw.	light fog	J. Hesse. Steinbronn & Tanke.
S. S. Neckar, Capt. R. Bussius	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Nurnberg, Capt. J. Jaeger, N. 3° 52′, W. 29° 04′*	29.93	760.2	82.4	28.0	?	nne.	2	.....	7	.....	ene.	2 h'r	hv'y	2	nne.	fair	.....
S. S. Oder, Capt. Undeutsch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, N. 48° 13′, W. 7° 46′	30.42	772.7	.....	.....	.....	ssw.	4	.....	0?	.....	.....	0	0	mod.	nw.	cloudy?	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Helmbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 57′, W. 168° 08′†	30.47	773.9	66	18.9	84	ne.	4	.....	8	.....	ene.	sh'rs	shr's	mod.	ne.	cloudy	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 45° 08′, W. 149° 03′*†	30.60	777.2	49	9.4	64	nw.	4	.....	6?	.....	nw.	.....	.....	mod.	w.	clear?	.....
S. S. Oceanic, Capt. J. Metcalfe, Hong Kong, China*	30.31	769.9	56	13.3	74	nw.	4	.....	6?	.....	w.	.....	.....	.....	.....	clear?	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Ga*†	29.32	744.7	.....	.....	.....	ssw.	4	.....	10	.....	sw.	.....	.....	.....	.....	squally	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, N. 36° 00′ W. 75° 00′†	29.77	756.1	50	10.0	.....	ese.	6	.....	10	.....	e.	8 h'r	8 h'r	r'gh	ene.	rainy	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.24	768.1	44	6.7	84	s.	6	.....	8	.....	s.	.....	.....	.....	.....	fair	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 40° 19′, W. 124° 37′†	30.33	770.4	45	7.2	92	nnw.	5	.....	10	.....	nnw.	.....	.....	light	nw.	overcast	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	30.22	767.6	45	7.2	84	w.	3	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
S. S. G. W. Elder, Capt. H. G. Morse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Idaho, Capt. H. M. Hayward, Seattle, Wash. Ter †	30.45	773.4	43	6.1	83	sse.	7	.....	10	.....	nnw.	.....	.....	.....	.....	cloudy	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 34° 27′, W. 120° 25′..†	30.12	765.0	54	12.2	61	nw.	5	.....	.....	.....	nw.	0	0	mod.	nw.	fair	Harisson & McCallum.
S. S. Senator. Capt. Thos. Wallace, N. 35° 12′, W. 120° 55′†	30.24	768.1	51	10.6	78	nnw.	2	.....	8	.....	.....	0	0	light	nw.	light haze	.....
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.27	768.8	45	7.2	84	nne.	3	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. Victoria, Capt. W. E. Plummer, N. 41° 12′, W. 124° 40′.†	30.34	770.5	45	7.2	84	nnw.	3	.....	0	.....	.....	.....	.....	mod.	w.	clear	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of New York, Capt. W. B. Cobb, S. 18° 00′, W. 172° —†	29.91	759.7	80	26.7	91	ne.	2	.....	1	.....	se.	0	0	light	e.	clear	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 36° 50′, W. 134° 38′†	30.64	778.2	54	12.2	79	e.	4	.....	10	.....	ne.	0	0	mod	cross	misty	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, S. 29° 29′, W. 179° 42′†	30.00	762.0	72	22.2	67	se.	5	.....	2	.....	se.	0	0	mod.	se.	fair	E. Le Saik. W. Thaxter.
S. S. City of Tokio, Com. J. Maury,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Colima, Capt. Robert R. Searle, N. 33° 38′, W. 119° 18′..†	30.13	765.3	55	12.8	80	nw.	3	.....	10	.....	nw.	0	0	mod.	nw.	cloudy	.....
S. S. Grenada, Capt. M. Connolley, N. 7° 45′, W. 79° 50′†	29.89	759.2	74	23.3	?	nw.	2	.....	5	.....	nw.	0	0	.....	.....	hazy	.....
S. S. South Carolina, Capt. W. J. Russell, N. 16° 58′, W. 98° 20′†	30.05	763.3	77	25.0	72	n.	1	.....	5	.....	sw.	0	0	sm'h	.....	hazy	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	29.90	759.4	73	22.8	85	ne.	4	.....	10	.....	ne.	.....	.....	.....	.....	cloudy	.....
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, Off Barnegat, N. J.	.....	.....	.....	.....	.....	ne.	4	.....	10	.....	.....	14 h'r	h'vy snow	mod.	e.	threatening.	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 40° 23′, W. 73° 13′*†	29.99	761.7	32	0.0	.....	ene.	7	.....	10	.....	n.	3 h'r	snow	mod.	ne.	snowing	.....
S. S. Nederland, Capt J. Ueberweg, N. 42° 10′, W. 58° 06′*†	30.29	769.4	39	3.9	.....	w.	5	.....	8	.....	wnw.	0	0	mod.	wnw.	cloudy	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, N. 40° 23′ W. 72° 04′*	30.22	767.6	27	—2.8	.....	ene.	4	.....	10	.....	ene.	0	0	mod.	ene.	cloudy	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A Beynon, N. 49° 08′, W. 31° 52′*†	30.02	762.5	49	9.4	71	ene.	1	.....	10	.....	ssw.	0	0	high	wsw.	cloudy	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels. N. 49° 47′, W. 6° 36′*	30.28	769.1	49	9.4	.....	se.	5	.....	5	.....	se.	shr's	shr's	cross	wnw; sse.	fair	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W A. Scholten, Capt. G. I. Vis. N. 43° 32′, W. 55° 14′*	29.36	745.7	43.0	6.1	67	nw.	7	.....	6	.....	wnw.	5½h'r	rain snow	mod.	nw.	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Copenhagen, Denmark†	30.42	772.7	36.5	2.5	.....	wnw.	2	.....	10	.....	wnw.	0	0	sm'h	wnw.	covered	J. T. Elberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 50° 12′, W. 30° 23′*†	30.21	767.3	50	10.0	.....	ne.	3	.....	2	.....	ne.	1 h'r	light	cross	n;w.	fair	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings, Off Waterford, Ireland *†	30.48	774.2	48	8.9	.....	s.	2	.....	5	.....	s.	0	0	sm'h	.....	d. clouds	J. Moore. W. Brownless, 4th off.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Celtic, Capt. Benjamin Gleadell N. 49° 26′ W. 29° 52′*†	29.92	760.0	47	8.3	85	n.	4	.....	2	.....	n.	2 h'r	light	high	w.	fair	B. Gleadell H. Day, 4th officer.
S. S. Germanic. Capt. C. W. Kennedy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Republic, Capt. P. J. Irving, N. 40° 41′ W. 71° 34′†	30.15	765.8	34	1.1	79	n.	3	.....	10	.....	.....	0	0	sm'h	sw.	overcast	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, Hull, Eng.*	30.57	776.5	42	5.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. Pensacola, Florida †	29.81	757.2	55	12.8	80	wnw.			10 s		wnw.	1.02	25.9			cloudy	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey,																	C. Bailey.
Bk. Alpha, Capt. O. Grönn N. 31° 45′, W. 15° 55′*†	30.25	768.3	70	21.1		ne.	2		2		ne.	0	0	long	nw.	fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, Ponce, Porto Rico, W. I.*†	30.07	763.8	76	24.4		ne.	1		2		se.	0	0			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 24° 24′, W. 33° 21′*†	30.21	767.3	77	25.0		ene.	2		5		ene.	0	0	sm'h	ene.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 49° 16′, W. 25° 00′*†	29.82	757.4				e.	1					20 h'r	light	long	nw.	raining	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill, S. 31° 35′ W. 49° 25′†	29.90	759.4				ne.	3		0			0	0	sm'h	s.	clear	A. J. Pettengill.
S. Enoch Train, Capt. H. D. Chapman, Bremerhaven.*	30.46	773.7				sw.	3		10		sw.	0	0			foggy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.																	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C†	30.00	762.0	26	—3.3		nne.	4		10		calm	snow	snow			snowing	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison S. 35° 27′, W. 80° 58′†	30.04	763.0	66	18.9		nnw.	4		10		nnw. sw.	0	0	sm'h		cloudy	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 38° 03′, W. 21° 27′			60	15.6		sse.	4		5		sse.	0	0	sm'h	w.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, S. 4° 15′, W. 35° 10′*†	29.06	738.1				ese.	6		0			0	0	long	ene.	fair	
Bk. Geo. Booth, Capt. D. Williams, N. 35° 00′, W. 51° 46′*†	29.85	758.2	60	15.6		sw;nw	4					rain	rain		sw. nw.	squally	D. Williams.
Bk. Granville, Capt. R. Bonney																	
Schr. Henry Denison, Capt Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 39° 41′. E. 5° 39′*†	29.78	756.4				sw.	7		2		ssw.	rain&	hail	cross	ssw.	squally	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo T. L. Compte																	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen, N. 36° 18′, W. 4° 45′*†	30.30	769.6				var.	4				e;w	16 h'r	h'vy	mod	e.	fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 44° 37′, W. 16° 31′*†	30.40	772.1	55	12.8	97	sw.	3		10		sw.			hv'y	nw.	raining	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.26	768.6	55	12.8	55	calm	0		0							clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 2° 13′, W. 30° 34′*†	29.85	758.2				se.					se.	0	0				J. Connolly.
Schr. S. B. Hubbard, New London, Conn.†*	30.19	766.8	15	—9.4		ene.	1		10		ne.	0	0			threatening.	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, N. 0° 17′, W. 26° 20′*	29.85	758.2	78.4	25.8	96	s.	2		6		s.			sm'h	se.	showery	H. N. T. Sumner.
Bk. Sunbeam, Capt. Joseph Hand, N. 37° 15′, W. 12° 55′*†	30.26	768.6	64	17.8	89	ene.	2		5		e.	0	0	long	nw	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 35° 17′, W. 4° 26′*†	30.20	767.1				ssw.	4		2		ssw.	0	0	sm'h	sw.		
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 37° 12′, W. 58° 26′*†	29.75	755.6	58	14.4	64	nw.	7				nw.			h'vy	wnw.	cloudy	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, N. 4° 59′, W. 28° 12′*†	29.50	749.3				ne.					ne.			sm'h	ne.		N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 5, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.24	768.0	63.7	17.6	82	w.			3		0			0	0	clear	Moiroud.
Algiers			30.25	768.3	57.2	14.0	82	nw.			1		0			0	0	clear	Nicolas.
La Calle			30.28	769.0	61.9	16.6	71	nne.			1		3			0	0	pretty fair	Foufréde.
Tunis			30.26	768.5															Jacques.
Sfax																			Gau.
Saida			30.28	769.1	61.2	16.2	65	nw.			2		3			0.020	0.5	pretty fair	Dumas.
Tebessa			30.32	770.1	45.7	7.6	55	nw.			2		8			0	0	very cloudy	Derché.
Geriville					49.6	9.8	31	s.			2		3			0	0	pretty fair	Lonchamp.
Laghouat			30.37	771.3	45.0	7.2	86	s.			2		2			0	0	fair	Herbin.
Biskra			30.35	770.8	57.6	14.2	47	se.			1		6			0	0	cloudy	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.04	763.0	30.13	765.7	60.2	15.7	66	s.	14	6.3			10			0	0	dull	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.73	755.2	30.31	769.8	37.0	2.8	39	se.			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.54	750.2	30.36	771.2	23.0	— 5.0	95	nw.	4.9	2.2			10			0	0		Dr. Wierzbiski.
Eperies	29.30	744.2	30.22	767.6	36.0	2.2	52	calm			0	7 cs	0			0	0		Julius Mikolik.
Gratz	28.98	736.0	30.28	769.1	36.7	2.6	46	s.			2		0			0	0		Andreas Rospini.
Hermannstadt	28.74	730.0	30.28	769.0	25.2	— 3.8	95	se.			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.93	734.7	30.35	770.8	31.6	— 0.2	72	sw.			1		0			0	0	clear	The Staff.
Lemberg	29.19	741.3	30.22	767.7	31.5	— 0.3	70	nw.			1		9			0	0		Dr. T. Stanecki.
Pola	30.11	764.7	30.22	767.7	45.5	7.5	65	nw.			1		5			0	0	foggy	I. R. Hydrographic Office.
Szathmar	29.74	755.5	30.20	767.1	28.6	— 1.9	90	e.			2		9			0	0		Joseph Midlinszky, S. J.
Szegedin	29.95	760.7	30.24	768.2	35.6	2.0	64	nw.			1		4			0	0		Karl Stancel.
Trieste	30.13	765.4	30.24	768.0	48.2	9.0	51	calm			0		0			0	0		Rieder.
Vienna	29.58	751.2	30.32	770.1	39.0	3.9	38	nw.			1		0			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.25	768.3	30.35	770.9	44.6	7.0	94	s.	4	1.8			10			0	0	misty	W. Boswell.
Armagh, Observatory	30.16	766.1	30.41	772.4	46.2	7.9	88	ssw.	8	3.6									S. Call.
Bidston, Liverpool Obs'y			30.44	773.2	44.1	6.7	75	sse.	3	1.3			10					overcast	John Hartnup.
Bolton, Sharples	29.88	758.9	30.43	772.9	43.9	6.6	85	nw.					10					gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire																0	0		J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	81.0	27.2	70	ne.			2		6					gloomy	Corpl. J. Surgenor, A.H.C.
Cardington			30.42	772.7	38.4	3.6	93	sw.			0.2		10					foggy	John McLaren.
Chatham, School M. E.	30.34	770.6	30.47	773.9	37.0	2.8	60	calm			0		9					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.22	767.6	30.46	773.7	44.0	6.7	75	ne.			1		1					foggy	The Staff.
Fort Napier, Natal	27.48	698.0	29.70	754.4	88.2	31.2	49	ne.			2		2					blue sky	Pvt. E. K. Annis, A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	89.0	31.7	63	w.			1		3						Sergt. John Robinson.
Galway, Queen's College			30.33	770.4	47	8.3	92	s.			2		10					overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.22	767.6	30.28	769.1	58.0	14.4	87	e.			3		5					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.13	765.3	30.33	770.4	44.1	6.7	91	wsw.			2							foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.28	769.1	30.47	773.9	36.7	2.6	85	ssw.			1		9					overcast	The Staff.
Guernsey	30.11	764.8	30.42	772.7	41.9	5.5	79	ne.			4		8					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.43	772.9	30.46	773.7	36.7	2.6	85	sse.	2	0.9			10					misty	The Staff.
Leicester, Museum	30.16	766.1	30.43	772.9	46.2	7.9	58	calm			0		10					overcast	J. C. Smith.
Malta, Mediterranean	30.17	766.3	30.24	768.1	56.4	13.6	71	nw.			2		4					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.11	764.8	30.16	766.1	69.0	20.6	67	ne.			4		10					overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.90	759.4	30.45	773.4	42.1	5.6	85	wnw.			1		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.24	768.1	30.47	773.9	38.5	3.6	87	s.			1		10					overcast	The Staff.
Plymouth	30.36	771.1	30.44	773.2	41.8	5.4	90	calm			0		10					misty	John Merrifield.
Sandwick Manse, Orkneys			30.31	769.9	44	6.7	97	ssw.	15	6.7			10					drizzling	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.10	764.5	30.17	766.3	34.0	1.1	79	e.			1		10					snowing	W. H. Lyne.
Sheffield	30.14	765.5	30.43	772.9	45.2	7.3	84	calm			0		10			0	0	misty	W. F. Cooper.
Stilloth Rectory	30.37	771.4	30.40	772.1	45.4	7.4	94	sw.			1		10			0	0	misty	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.44	773.2	43.7	6.5	87	w.	4	1.8			10					foggy	I. New.
Stratfield Turgiss	30.23	767.8	30.46	773.7	38.3	3.5	80	calm			0		10					foggy	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.36	771.1	30.43	772.9	49	9.4	71	se.			4		5					d. clouds	W. Newcombe.
Valencia, Observatory	30.36	771.1	30.38	771.6	49.9	9.9	86	se.	16	7.2			7			blank	blank	misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.00	762.0	30.03	762.7	69.0	20.6	83	sw.	11.2	5.0			10 8			0.040	1.0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.99	761.7						wnw.	13	5.8		8	2			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.63	752.6	29.68	753.9	5	—15.0	100	ne.	17	7.6			10 n			0	0	threatening.	H. J. Cundall, C. E.
Chatham, N. B.*	29.68	753.9	29.75	755.6	— 1	—18.3	100	nw.	12	5.4			10 n		nw.	0	0	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.84	757.9	29.86	758.4	— 5	—20.6	83	ne.	25	11.2			10 s		calm	0	0	threatening	J. McWilliams.
Fort Garry, Manitoba*	28.85	732.8	29.75	755.6	8	—13.3	96	nw.	10	4.5		5 k	5 ks	nw.	nw.	0.010	0.3	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	29.29	744.0	29.43	747.5	11	—11.7	96	ne.	22	9.8			10 n			0.08	2.0	light snow	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.27	743.4	29.64	752.8	7	—13.9	87	ne.	8	3.6			10 n			0.24	6.1	snowing	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.40	746.7	29.63	752.6	2	—16.7	83	ne.	18	8.0			10 n		e.	0.08	2.0	light snow	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	28.91	734.3	29.65	753.1	16	— 8.9	83	nw.	7	3.1			10 n		ne.	0.06	1.5	cloudy	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	28.99	736.3	29.71	754.6	24	— 4.4	100	sw.	3	1.3		10 k	0	sw.		0.05	1.3	cloudy	H. Morgan.
Port Stanley, Ontario	29.08	738.6	29.76	755.9	22	— 5.6	87	w.	6	2.7		2 ck	0	nw.		inap.	inap.	clear	M. Payne.
Quebec, Quebec*	29.34	745.2	29.70	754.4	—1	—18.3	100	e.			8		10 n		e.	0.60	15.2	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.18	741.2	29.67	753.6	3	—16.1	72	calm	0	0			10 n		nw.	0.87	22.1	light snow	W. H. McIntyre.
Saugeen, Ontario*	28.92	734.6	29.66	753.4	26	— 3.3	92	w.	16	7.2			10 ks		w.	0.06	1.5	cloudy	
St. Andrews, N. B.	29.38	746.2	29.43	747.5	2	—16.7	97	e.	37	16.5			10 n			0.60	15.2	heavy snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.68	753.9	29.75	755.6	11	—11.7	100	n.	5	2.2			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.29	744.0	29.70	754.4	20	— 6.7	84	w.	8	3.6			10 ks		w.	0.07	1.8	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.01	736.8	29.08	738.6	13	—10.6	66	ne.	43	19.2			10 n			0.45	11.4	heavy snow	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.60	751.8	29.87	758.7	15	— 9.4		ne.	2	0.9			0			0.60	15.2	fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.50	774.7	30.79	782.1	37.8	3.2	79	nw.			2		7			0	0		N. Titoushkin.
Sung-shu-chwangf	24.84	630.8			24.1	— 4.4		calm			0	1 c	0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.53	775.4	30.55	776.0	37.4	3.0	74	ne.	5.1	2.3			10			0	0	covered	M. Marc Dechevrens, S.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.23	767.8	30.28	769.0	36.5	2.5	96	wnw.	11	5			10					foggy	Oversergent Fischer.
Fanöe	30.31	769.8	30.33	770.3	38.7	3.7	98	w.			2		10					foggy	Overloerer Lauridsen.
Godthaab, Greenland	29.98	761.6	30.03	762.7	2.3	—16.5	100	nne.			6		5						S. Kleinschmidt.
Stykkisholm, Iceland	30.03	762.7	30.07	763.8	22.3	— 5.4		e.			4		10					snowing	A. O. Thorlacius.
Thorshavn	30.19	766.9	30.23	767.8	38.5	3.6	85	w.	9	4			5						Overloerer Bergh.
Vestervig	30.18	766.6	30.27	768.9	41.7	5.4	95	w.			2		9						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.66	753.4	30.34	770.6	44.6	7	80	se.			2	2 ck	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.85	758.1	30.40	772.1	29.8	—1.2	96	ne.			3		k			0	0		M. Nicot, Director.
Arras, Engineer School	30.15	765.9	30.43	773.0	34.7	1.5	76	e.			1		k			0	0		M. Klein, Commandant.
Avignon, Normal School	30.24	768.0	30.32	770.0	41.0	5	39	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.84	758.0	30.45	773.3	26.6	—3.0	100	se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.19	766.8	30.48	774.1	29.8	—1.2	96	e.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.36	771.2	25.5	—3.6	92	ne.			1		10		n.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.04	763.0	30.31	769.8	45.9	7.7	74	n.			1		0			0	0	clear	M. Rayet, Director.
Bourges, Normal School	29.81	757.2	30.39	772.0	32.9	0.5	89	nne.			1		n		nne.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.15	765.9	30.39	772.0	42.1	5.6	71	ene.			2		3		ene.	0	0		M. de Kennaree, Dir.
Caen, Normal School	30.35	771.0	30.43	773.0	29.5	—1.4	92	e.			1		10			0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N. Sch'l	30.04	762.9	30.37	771.4	28.6	—1.9	94	ese.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.90	759.5	30.45	773.4	28.4	—2	63	ne.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.91	734.3	30.32	770.1	40.1	4.5	69	w.			1	0	0			0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.50	749.4	30.40	772.1	26.4	—3.1	100	nw.			2		fg			0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.50	749.3	30.42	772.6	27.9	—2.3	87	ne.			1		10 n	ne.	ne.	0	0	covered	Dr. Coulet, Director.
Gap, Normal School	27.70	703.6	30.34	770.5	46.0	7.8	42									0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.10	739.0	30.26	768.6	50.5	10.3	28	nw.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.53	750.0	30.34	770.5	35.2	1.8	71	ese.			1	0	0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.68	728.5	30.32	770.2	42.1	5.6	80	ese.			1		0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.13	765.3	30.41	772.5	36.5	2.5	98	ene.			1		8 n		ene.	0	0	foggy	M. Ollitrault, Director.
Lescar, Normal School	29.76	756.0	30.34	770.5	56.8	13.8	80	ene.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.32	770.1	30.42	772.7	34.7	1.5	93	ne.			2		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.29	744.0	30.43	772.8	25.7	—3.5	95	nw.			1		mist			0	0	misty	M. André, Director.
Mans, Normal School	30.13	765.3	30.47	773.8	28.4	—2	90	e.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.01	762.2	30.28	769.1	52.7	11.5	55	sw.			1		0			0	0	clear	M. Stephan, Director.
Montlouis l'Instituteur	24.97	634.3	29.82	757.3	41.0	5.0	46	w.	9.4	4.2			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.17	766.4	30.29	769.3	48.2	9	58	se.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.61	752.2	30.45	773.5	25.9	—3.4	100	wnw.			1		fg			0	0	foggy	M. Hasse, Director
Nantes, Observatory	30.27	768.9	30.43	773.0	29.5	—1.4	94	ne.			0–2		10			0	0	foggy	M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.18	766.6	30.29	769.4	52.0	11.1	73	se.	1.8	0.8			1			0.020	0.5		Dr. Fines, Director.
Pic-du-Midi, Summit	21.26	540.0			22.1	—5.5		se.			1	1	1	se.	nw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.25	742.9	30.37	771.4	22.8	—5.1		s.			1		2		s.	0	0	slightly cl'dy.	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.28	642.2			33.8	1.0	75	w.			1		0			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.35	771.0	30.39	771.8	30.6	—0.8	90	ene.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.11	764.7	30.30	769.5	34.5	1.4	89	n.			1		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	28.08	713.3	30.30	769.6	42.4	5.8	51	w.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.41	772.5	30.46	773.7	29.1	—1.6	96	e.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.26	768.6	30.42	772.6	27.0	—2.8	90	e.			1		10		e.	0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.28	769.0	30.44	773.2	27.5	—2.5	100	ne.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.59	751.5	30.32	770.0	51.4	10.8	76	nnw.			1		0			0	0	clear	M. Baillard, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.93	760.1	30.42	772.6	27.0	—2.8	100	ne.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.16	766.0	30.45	773.4	28.2	—2.1	98	ne.			1		1c			0	0	dense fog	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.48	748.8	30.34	770.7	32.0	0.0	73	n.			2	0	28			0	0	foggy	Prof. Dr. Hoh.
Berlin	30.17	766.4	30.36	771.2	32.7	0.4	85	w.			1		10			0	0		Prof. Dr. Arndt.
Breslau	29.83	757.6	30.37	771.3	25.7	— 3.5	98	nnw.			2		10					snowy	Royal University Obs'y.
Carlsruhe	29.97	761.2	30.45	773.3	24.4	— 4.2	100	ne.			1		10			0	0	foggy	Albert Senz.
Cassel	29.64	752.9	30.35	771.0	30.0	— 1.1	86	n.			1		10			0	0		Dr. H. Möhl.
Frankfort on the Main	30.02	762.6	30.41	772.5	32.5	0.3	78	e.			1		1			0	0		Physical Society.
Friedrichshafen	28.88	733.5	30.41	772.5	25.9	— 3.4	91	nnw.			1		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.29	769.4	30.39	771.8	32.7	0.4	89	w.			3		10			0	0	foggy	E. Preller.
Kiel	30.32	770.2	30.34	770.6	37.8	3.2	77	wsw.			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.94	760.5	30.39	771.9	30.9	— 0.6	88	wsw.			1		10			0	0		H. Leppig, Asst.
Magdeburg	30.18	766.6	30.39	771.8	34.7	1.5	78	n.			2		10 ks		n.			snowy	Dr. Assmann.
Memel	30.16	766.1	30.21	767.2	36.3	2.4	94	w.			4		10 s						Issermann.
Munich	28.46	722.8	30.35	770.8	23.5	— 4.7	84	n.			2		1	ne.		0	0		Central Station.
Neufahrwasser	30.24	768.1	30.26	768.5	35.8	2.1	91	wnw.			2		10			0	0	foggy	A. Lothes.
Neustadt, Palatinate	29.86	758.4	30.39	771.9	28.8	— 1.8		nw.			3		10			0	0		Dicknether.
Stuttgart	29.42	747.2	30.38	771.6	23.4	— 4.8	95	n.			1		10			0	0		Prof. Dr. Schoder.
Wustrow	30.31	769.9	30.34	770.6	37.0	2.8	82	w.			3		10			0	0		Profs. Brandes & Reimer.
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.80	756.8	30.20	767.1	47.1	8.3		ne.			2.0		2 k			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	30.03	762.6	30.08	763.9	80.3	26.8	39	wsw.	18	8.0			5			0	0	d. clouds	
Deesa	29.52	749.9	30.00	762.0	82.0	27.8	29	nnw.	8.4	3.8			6	nnw.		0	0	d. clouds	
Bombay	29.88	759.0	29.92	759.9	81.8	27.7	69	nnw.	16	7.2			0			0	0	blue sky	
Poona, Yarrowda.	28.05	712.4	29.87	758.8	87.8	31.0	25	w.	1	0.4			0			0	0	blue sky	
Belgaum	27.37	695.3	29.88	758.8	84.3	29.2	18	e.	5	2.2			0			0	0	blue sky	
Lahore	29.32	744.8	30.09	764.3	68.5	20.3	34	calm	0.6	0.3			8			0	0	d. clouds	
Roorkee	29.13	739.9	30.06	763.6	66.6	19.2	55	sw.	1.0	0.4			5			0	0		
Agra	29.51	749.5	30.09	764.4	69.2	20.7	32	w.	1.8	0.8						0	0		
Nagpur	28.95	735.3	30.00	761.9	81.5	27.5	17	calm	3.9	1.7			0			0	0	blue sky	
Jubbulpore	28.68	728.6	30.06	763.6	73.8	23.2	15	ne.	2.8	1.2			3			0	0	d. clouds	
Lucknow	29.68	754.0	30.07	763.8	72.2	22.3	34	calm	0.6	0.3			0			0	0	blue sky	
Allahabad	29.75	755.6	30.08	763.9	67.0	19.4	43	calm	0.7	0.3			2	w.		0	0	d. clouds	
Patna	29.87	758.6	30.06	763.5	69.1	20.6	47	nw.	1.7	0.8			0			0	0	blue sky	
Hazaribagh	27.99	711.0	30.06	763.5	67.8	19.9	20	nw.	3.0	1.3			0			0	0	blue sky	
Cuttack	29.94	760.5	30.02	762.6	79.0	26.1	57	sse.	1.2	0.5			4			0	0	d. clouds	
Calcutta, Alipore	30.02	762.5	30.04	763.1	67.3	19.6	57	wsw.	2.0	0.9			0			0	0	blue sky	
Dhubri	29.90	759.5	30.02	762.6	70.4	21.3	54	calm	2.8	1.2			1		w.	0	0	d. clouds	
Chittagong	29.95	760.8	30.04	763.1	69.6	20.9	42	w.	2.5	1.1			0			0	0	blue sky	
Sibsagar	29.70	754.4	30.05	763.3	63.9	17.7	80	ne.	2.1	0.9			0			0	0	blue sky	
Jeypore	28.60	726.4	30.08	763.9	71.7	22.1	25	nne.	2.8	1.2			6		nne.	0	0	d. clouds	
Zanzibar, Africa	29.83	757.7			84.7	29.3	79	nnw.	6.6	3.0		c	6k;fk		ne.	0.39	9.9	d. clouds	
Trichinopoly	29.72	754.9			84.0	28.9	31	ene.	2	0.9			3			0	0	d. clouds	
Bellary	28.44	722.4			87.2	30.7	22	e.	4.1	1.8			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.81	757.2	30.24	768.0	49.5	9.7	8	calm	0	0			2			0	0		Prof. Giovanni Clodig
Milan	29.73	755.2	30.24	768.2	41.4	5.2	54	sw.	3.1	1.4			0			0	0		Prof. Schiaparelli.
Padua	30.14	765.5	30.25	768.4	43.3	6.3	33	se.	0.7	0.3			1	ne.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.32	744.6	30.27	768.8	40.3	4.6	62	e.	2.5	1.1			0			0	0		Prof. P. F. Denza.
Genoa	30.08	763.9	30.28	769.0	51.8	11.0	54	sw.	0.7	0.3			2	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.24	717.3	30.27	768.8	42.1	5.6	33	e.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.19	766.7	30.24	768.0	42.4	5.8	55	nw.	5.6	2.5			7	nw.		0	0		Prof. Luigi Guidi.
Florence	30.02	762.5	30.29	769.3	42.3	5.7	30	n.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.12	765.0	30.21	767.3	48.2	9.0	62	nne.	3.1	1.4			2			0	0		Prof. P. Monte.
Rome	30.07	763.8	30.25	768.4	48.2	9.0	32	wnw.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	29.93	760.2	30.19	766.8	52.2	11.2	55	nne.	9.8	4.4			3	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.34	745.1	30.26	768.7	48.9	9.4	74	ne.	1.8	0.8			2	e.		0	0		Prof. D. Conti.
Cagliari	30.05	763.2	30.24	768.2	53.2	11.8	41	calm			0		0			0	0		Prof. A. Pacinotti.
Palermo	30.01	762.3	30.27	768.9	52.9	11.6	50	ene.	1.3	0.6			3	nw.		0	0		Prof. G. Ciacciatore.
Syracuse	30.19	766.8	30.24	768.0	52.5	11.4	69	wnw.	6.3	2.8			3	w.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.71	754.6	30.25	768.3	49.6	9.8	58	n.	4.9	2.2			1	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.23	564.6			24.4	— 4.2	32	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.25	565.2			27.1	— 2.7	17	se.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.31	769.9	30.34	770.6	36.9	2.7	73	ese.	13.6	6.1			10 s		se.	0.007	0.2	cloudy	
Hakodate	30.39	771.9	30.40	772.1	36.8	2.7	64	ese.	27.0	12.1			10		ese.	0.382	9.7	covered	
Hiroshima, I. M. Obs'y †	30.13	765.3	30.15	765.8	38.8	3.8	94	ne.	6.5	2.9			10 n			1.100	27.9	raining	K. Sasaki.
Kanazawa	30.10	764.5	30.20	767.1	43.9	6.6	93	e.	1.7	0.8			10 n			0.770	19.6	raining	S. Endo.
Kioto	29.91	759.7	30.09	764.3	45.8	7.7	90	n.	2.6	1.2			10 s			0.755	19.2	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.98	761.5	30.19	766.8	45.7	7.6	84	n.	8.7	3.9			2 ck	0	n.	0.040	1.0	clear	S. Takehayashi.
Niigata	30.19	766.8	30.23	767.8	43.7	6.5	64	se.	13.2	5.9			10 ck	0	sw.	0.110	2.8	cloudy	
Nobiru	30.37	771.4	30.39	771.9	39.1	3.9	86	ene.	6.0	2.7			10n;ks			0.015	0.4	light rain	H. Midzushina.
Sapporo					30.4	— 0.9	68	se.	21.0	9.4			10			0	0	covered	
Tokei Obs'y, Yeddo	30.24	768.1	30.31	769.9	41.3	5.2	89	n.	9.2	4.1			10 n			0.226	5.7	light rain	The Staff.
Wakayama	29.98	761.5	30.03	762.7	48.5	9.2	86	nne.	2.2	1.0			10 n			0.805	20.4	light rain	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Sefi or Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																0	0	foggy	Prof. M. Leal.
Mazatlan	24.48	621.8	30.39	771.9	43.7	6.5	81	sw.			1	0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	29.82	757.4	30.08	764.1	61.5	16.4	91	e.	1.6	0.8		0	0			0	0	overcast	The Staff.
Morelia	23.13	587.6	30.32	770.2	43.9	6.6	81	calm	0	0			10 k			0	0		M. Tena, M. D.
Pabellon, Aguascalientes	24.37	619.0	30.63	778.1	49.1	9.5	76	sw.			5	2 c	0	se.		0	0	very fine	M. Y de Leon, M. E.
Puebla, Catholic Institute	24.01	609.7	30.18	766.6	40.3	4.6	79	calm			0	0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	23.45	595.5	30.45	773.3	37.4	3.0	83	calm	0	0		0	0			0	0	clear	G. Barroeta, M. D.
Tlacotalpam	24.25	615.8	30.30	769.7	44.8	7.1	59	se.			1	1	0	w.					Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.55	572.8	30.34	770.7	40.5	4.7	75	ne.	6.3	2.8		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.74	755.4	29.93	762.2	76.6	24.8	82	ese.	14.0	6.3			10 n;ks;k		ese.	0.46	11.7	overcast	Oliver & Figor.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.47	773.9	30.47	773.9	35.8	2.1		w.			2					0	0		
Groningen	30.39	771.9	30.45	773.3	38.5	3.6		w.			1					0	0		
Helder	30.41	772.4	30.41	772.4	40.8	4.9		wsw.			1					0	0		
Hellevoetsluis	30.45	773.4	30.45	773.4	36.0	2.2	92	wsw.			1					0	0		
Utrecht	30.40	721.1	30.45	773.3	35.6	2.0	89	sse.			2		10			0	0	dull	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.24	768.1	30.30	769.7	36.3	2.4	85	sw.	4	2			3			0.283	7.2		
Brono	29.88	759.0	29.92	760.0	39.0	3.9	56	wsw.	36	16			10			0.039	1.0		
Christiania	30.16	766.0	30.31	769.9	34.7	1.5	64	calm	0	0			3			0	0		
Gjæsvær	29.46	748.3	29.48	748.9	15.8	— 9.0		nw.			6		10						
Lodingen	29.74	755.3	29.78	756.5	16.3	— 8.7	82	calm			0		10			0.020	0.5	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					58.5	14.7	84	w.	6.3	2.8			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.21	742.0	30.23	767.9	51.6	10.9	73	ene.	4.3	1.9			1			0.118	3.0		Dr. A. M. R. dos Santos
Funchal, Maderia	30.16	766.0	30.25	768.3	61.0	16.1	61	se.	1.3	0.6			10			0	0		Capt. D. A. de Oanha.
Lisbon, Observatory	29.94	760.5	30.31	769.9	51.4	10.8	72	ne.	7.4	3.3			1			0	0		The Staff.
Ponta Delgada, Azores	30.01	762.2	30.08	764.0	61.5	16.4	85	s.	8.1	3.6			3			0.150	3.8		
Saint Paul de Loando	29.66	753.4	29.86	758.4	82.4	28.0	77	nw.	0.7	0.3			3	sse.		0	0		
Serra da Estrella	25.41	645.5	30.26	768.7	39.6	4.2	68	se.	11.2	5.0			4			0.008	0.2		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.97	735.7	30.19	766.7	— 5.6	—20.9		ssw.	7	3		6 cs	0			0	0	light clouds	Major K. Lasarew.
Archangel	29.47	748.4	29.48	748.9	22.6	— 5.2	93	w.	9	4			10			0.118	3.0	snowing	Capt. Sseliwerstow.
Astrakhan	30.02	762.5	29.94	760.4	17.4	— 8.1	74	calm	0	0		0	1 s			0.004	0.1		Capt. Wisganow.
Barnaul	29.50	749.2	30.03	762.8	16.0	— 8.9	71	sw.	18	8			10			0	0		Meteorological Obs'y.
Dorpat	29.87	758.6	30.12	765.1	34.3	1.3	96	wnw.	4	2			10 n			0	0		Observatory.
Ekaterinburg	28.82	732.1	29.86	758.5	10.6	—11.9	84	w.	22	10			10			0	0	snow-drift	Meteorological Obs'y.
Kasan	29.69	754.1	29.98	761.5	15.6	— 9.1	87	sw.	7	3			10			0	0		Observatory.
Kertch	30.09	764.3	30.11	764.8	20.7	— 6.3	82	nne.	11	5		0	7 k			0	0		Lagorio & Sastyrez.
Kieff	29.55	750.6	30.23	767.9	23.9	— 4.5	79	s.	4	2		cs	10ks;n			0	0		Observatory.
Lugan	30.01	762.3	30.24	768.0	15.1	— 9.4	72	nne.	9	4			8			0	0	light clouds	Meteorological Obs'y.
Moscow	29.47	748.7	29.98	761.5	28.0	— 2.2	81	s	4	2			9 ks			0	0		Meteorological Obs'y.
Nikolaiev	30.26	768.7	30.34	770.5	23.4	— 4.8	67	calm	0	0		0	0			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.22	767.6	30.31	769.8	— 1.1	—18.4	90	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.40	772.1	30.54	775.7	26.1	— 3.3	52	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	29.98	761.5	30.00	761.9	32.4	0.2	89	wnw.	11	5		c	4 ks			0	0	light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.46	722.9	30.07	763.8	43.9	6.6	63	calm	0	0			10			0	0	heavy cld's	Teich, A. M.
Tiflis	28.58	725.8	30.07	763.8	29.7	— 1.3	86	calm	0	0			10			0.087	2.2	snowing	Physical Observatory.
Vladivostok	30.34	770.6	30.41	772.3	15.3	— 9.3	66	n.	4	2		0	0			0	0		
Warsaw	29.84	757.8	30.28	769.2	30.2	— 1.0	92	w.	7	3			10 ks						Astronomical Obs'y.
Wilna	29.76	756.0	30.21	767.3	29.7	— 1.3	93	sw.	2	1			10			0	0	heavy cl'ds	Berg, Assistant.
Yeniseisk	29.31	744.5	29.61	752.2	13.8	—10.1	81	w.	16	7			10			0.378	9.6	snowing	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.32	770.1	49	9.4	93	ssw.			3		10			0.2	5.	hazy	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Oos'y	30.15	765.8	30.26	768.5	54.5	12.5	75	s.	1.8	0.8			2			0.012	0.3	clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.26	768.6	30.32	770.1	57.9	14.4	63	se.	2.0	0.9		2	0	e.		0	0	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.28	692.9	30.35	770.9	42.6	5.9	82	ne.	3.4	1.5		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.01	711.5	30.28	769.1	52.7	11.5	64	sw.	2.5	1.1		0	8			0.008	0.2	cloudy	The Staff.
Murcia, Met. Obs'y	30.12	765.1	30.28	769.0	54.9	12.7	72	nnw.	0.4	0.2		5	5	se.		0.386	9.8	covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.32	744.8	30.23	767.8	57.7	14.3	58	calm	0	0		0	1			0	0	almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.06	763.4	30.12	765.1	69.3	20.7	80	nne.	15.7	7.0		5 ck	3 k;s	sw.	nne.	0.016	0.4	fair	Benito Vines, S. J.
Manilla, Philippine Islands	30.00	762.0	30.06	763.5	77.1	25.1	77	se.	4.4	2.0		4 ck	3 ks		ene.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.15	766.1	30.26	768.7	58.8	14.9	68	se.	1.9	0.8			10		e.	0.034	0.9		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I.	30.03	762.8	30.12	765.1	70.9	21.6	98	calm	0	0			10 kn		e.	0.394	10.0	overcast	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.01	762.2	30.14	765.5	70.9	21.6	86	nw.	8.9	4.0			10 ks		n.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.88	758.9	29.92	759.9	21.9	— 5.6	60	w.			2		0			0	0		
Umea	30.04	763.0	30.09	764.3	33.1	0.6	85	nw.			2		0			0	0		
Hernosand	30.17	766.3	30.22	767.6	35.8	2.1	49	wsw.			2		0			0	0		
Stockholm	30.10	764.5	30.28	769.1	38.1	3.4	46	ne.			2		0			0	0		
Wisby	30.13	765.4	30.19	766.9	41.0	5.0	63	ene.			6		3			0	0		
Sub-Series.																			
Upsala	30.17	766.4	30.26	768.6	38.1	3.4	44	n.	9.4	4.2			0			0	0		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.89	733.8	30.39	771.9	29.5	— 1.4	86	ne.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.21	767.2	34.9	1.6	71	n.	6	2.5			10		n.			snowing	The Observatory.
Valona			30.15	765.8	54.0	12.2		w.			1		2			0	0	slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.00	762.1	50.5	10.3	81	ne.			1	0	7 n		sw.	0.235	6.0		Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Barometer. Corrected for instrumental error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Albany, New York	29.48	748.8	29.57	751.1	20.5	— 6.4	76	n.	3	1.3			10 n			0.84	21.3	light snow	
Alpena, Michigan	29.02	737.1	29.73	755.1	17	— 8.3	83	w.	6	2.7			10 s			0.06	1.5	cloudy	
Atlanta, Georgia	28.97	735.8	30.19	766.8	35.0	1.7	64	w.	12	5.4		0	0			0.15	3.8	clear	
Atlantic City, New Jersey	29.67	753.6	29.68	753.9	23	— 5.0	61	w.	13	5.8		0	0			0.77	19.6	clear	
Augusta, Georgia	30.03	762.7	30.23	767.8	37.7	3.2	53	calm	0	0		0	0			0.32	8.1	clear	
Baltimore, Maryland	29.70	754.4	29.75	755.6	25	— 3.9	73	nw.	4	1.8		0	0			0.42	10.7	clear	
Barnegat, New Jersey	29.62	752.3	29.64	752.8	23.0	— 5.0	88	nw.	20	8.9		0	2 k		nw.	3.90	99.1	clear	
Bismarck, Dakota	27.90	708.6	29.88	758.9	25	— 3.9	76	calm	0	0		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho																			
Boston, Massachusetts	29.16	740.7	29.32	744.7	10.0	—12.2	100	nw.	28	12.5			10 n			1.28	32.5	heavy snow.	
Brownsville, Texas	30.21	767.3	30.26	768.6	46	7.8	100	sw.	4	1.8			fg.			0	0	dense fog	
Buffalo, New York	28.92	734.6	29.72	754.9	23	— 5.0	80	w.	17	7.6			10s;ks		w.	0.13	3.3	cloudy	
Burlington, Vermont	29.26	743.2	29.57	751.1	5.5	—14.7	85	n.	14	6.3			10 n		w.	0.10	2.5	light snow	
Cairo, Illinois	29.65	753.1	30.07	763.8	42.0	5.6	75	sw.	17	7.6		0	0			0	0	clear	
Campo, California	27.43	696.7	30.07	763.8	28.3	— 2.1	77	e.	3	1.3		6 ck	0	w.		0	0	fair	
Camp Thomas, Arizona	27.34	694.4	30.17	766.3	28	— 2.2	77	calm			0	3 cs	0			0	0	clear	
Cape Henry, Virginia	29.87	758.7	29.89	759.2	33	0.6	68	sw.	17	7.6		0	0			2.93	51.6	clear	
Cape May, New Jersey	29.68	753.9	29.71	754.6	28	— 2.2	88	w.	30	13.4		0	0			0.53	13.5	clear	
Castroville, Texas	29.42	747.3	30.26	768.6	37	2.8	89	nw.	4	1.8		0	0			0	0	clear	
Cedar Keys, Florida	30.23	767.8	30.25	768.3	45	7.2	60	n.	13	5.8		4 ck	0	sw.		0.07	1.8	fair	
Champaign, Illinois	28.98	736.1	29.85	758.2	33.8	1.0	78	w.	19	8.5		0	0			0	0	clear	
Charleston, S. Carolina	30.11	764.8	30.17	766.3	41	5.0	65	w.	8	3.6		0	0			0.14	3.6	clear	
Charlotte, N. Carolina	29.21	741.9	30.10	764.5	33.0	0.6	60	nw.	4	1.8		0	0			0.76	19.3	clear	
Chattanooga, Tennessee	29.29	744.0	30.15	765.8	36.0	2.2	53	sw.	12	5.4		1 k	0	calm		0.11	2.8	clear	
Cheyenne, Wyoming	23.96	608.6	30.21	767.3	34.4	1.3	44	w.	4	1.8		0	0			0	0	clear	
Chicago, Illinois	29.05	737.9	29.80	756.9	33.1	0.6	96	w.	4	1.8			10 s			0.05	1.3	cloudy	
Chincoteague, Virginia	29.75	755.6	29.77	756.1	30	— 1.1	78	nw.	17	7.6		0	0			1.06	26.9	clear	
Cincinnati, Ohio	29.16	740.7	29.85	758.2	39.1	3.9	65	s.	4	1.8		5 k	0	w.		0	0	fair	
Cleveland, Ohio	29.04	737.6	29.83	757.7	26	— 3.3	82	w.	2	0.9		0	2 s		nw.	inap.	inap.	clear	
Coleman City, Texas	28.33	719.6	30.21	767.3	43	6.1	68	sw.	10	4.5		0	0			0	0	cloudy	
Columbus, Ohio	28.93	734.8	29.83	757.7	33	0.6	68	sw.	11	4.9			10 s			0	0	clear	
Concho, Texas	28.20	716.3	30.22	767.6	39	3.9	82	sw.	12	5.4		0	0			0	0	clear	
Davenport, Iowa	29.20	741.7	29.90	759.4	32	0.0	68	w.	4	1.8		0	hz.		calm	inap.	inap.	clear	
Dayton, Washington T'y	28.07	713.0	29.88	758.9	37	2.8	92	sw.	12	5.4			10 s		sw.	0.10	2.5	heavy rain	
Deadwood, Dakota	25.19	639.8	30.11	764.8	31	— 0.6	65	s.	5	2.2		0	0			0	0	clear	
Decatur, Texas					50	10.0	52	se.	6	2.7		0	0			0	0	clear	
Delaware Breakwater, Del.	29.70	754.4	29.72	754.9	25	— 3.9	88	w.	18	8.0		0	0			0.17	4.3	clear	
Denison, Texas	29.31	744.5	30.15	765.8	44.8	7.1	76	sw.	12	5.4		0	0			0	0	clear	
Denver, Colorado	24.73	628.1	30.25	768.3	36.4	2.4	57	s.	8	3.6		4 cs	0	calm		0	0	fair	
Des Moines, Iowa	28.99	736.3	29.96	761.0	33	0.6	78	w.	5	2.2		0	0			0	0	clear	
Detroit, Michigan	29.05	737.9	29.80	756.9	30.0	— 1.1	88	w.	4	1.8		0	0			inap.	inap.	clear	
Dodge City, Kansas	27.44	697.0	30.18	766.6	31.5	— 0.3	69	nw.	4	1.8		0	0			0	0	clear	
Dubuque, Iowa	29.08	738.6	29.84	757.9	30.2	— 1.0	80	sw.	2	0.9		0	3 ks		nw.	0.03	0.8	clear	
Duluth, Minnesota	28.91	734.3	29.67	753.6	23	— 5.0	73	sw.	7	3.1		0	0			0	0	clear	
Eagle Pass, Texas	29.44	747.8	30.28	769.1	41.0	5.0	92	calm	0	0		0	0			0	0	clear	
Eagle Rock, Idaho	25.31	642.9	30.21	767.3	—10	—23.3	78	n.	7	3.1		0	0			0	0	clear	
Eastport, Maine	29.31	744.5	29.38	746.2	5	—15.0	100	ne.	44	19.7			10 n			0.25	6.3	heavy snow	
El Paso, Texas	26.38	670.0	30.26	768.6	29.9	— 1.2	80	calm	0	0		0	0			0	0	clear	
Erie, Pennsylvania	29.02	737.1	29.79	756.7	27	— 2.8	88	nw.	15	6.7		7 k	0	nw.		0.04	1.0	fair	
Escanaba, Michigan	29.09	738.9	29.81	757.2	9	—12.8	76	w.	3	1.3			10 s		sw.	0	0	cloudy	
Fort Apache, Arizona	25.10	637.5	30.20	767.1	22	— 5.6	53	ne.	2	0.9		0	3 s		calm	0	0	clear	
Fort Assinnaboine, Montana	26.80	680.7	29.84	757.9	38	3.3	48	sw.	17	7.6		6 c	0	sw.		0	0	fair	
Fort Bennett, Dakota	28.22	716.8	29.95	760.7	27	— 2.8	77	calm	0	0		0	0			0	0	clear	
Fort Benton, Montana	26.87	682.5	29.87	758.7	38	3.3	47	sw.	16	7.2		0	0			0	0	clear	
Fort Buford, Dakota	27.72	704.1	29.90	759.4	22	— 5.6	61	s.	1	0.4		0	0			0	0	clear	
Fort Custer, Montana	26.60	675.6	29.96	761.0	40	4.4	67	s.	13	5.8			10 s		sw.	0	0	cloudy	
Fort Davis, Texas	25.25	641.3	30.21	767.3	33	0.6	74	s.	2	0.9		0	0			0	0	clear	
Fort Elliott, Texas	27.25	692.1	30.15	765.8	30	— 1.1	41	nw.	8	3.6		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.53	750.0	30.13	765.3	35.0	1.7	69	se.	4	1.8		0	0			0	0	clear	
Fort Grant, Arizona	25.27	641.8	30.13	765.3	38	3.3	59	ne.	3	1.3		2 cs	0			0	0	clear	
Fort Griffin, Texas	28.83	732.3	30.20	767.1	42	5.6	65	se.	1	0.4		0	0			0	0	fair	
Fort Keogh, Montana	27.25	692.1	29.93	760.2	26	— 3.3	67	calm	0	0		4 c	0			0	0	fair	
Fort Macon, North Carolina	30.01	762.2	30.02	762.5	37	2.8	61	nw.	15	6.7		hz.	hz.	calm	calm	0.60	15.2	light haze	
Fort McKavett, Texas	27.91	708.9	30.29	769.4	41	5.0	76	sw.	2	0.9		0	0			0	0	clear	
Fort Missoula, Montana	26.44	671.6	29.87	758.7	35	1.7	89	ne.	1	0.4			10 s			0	0	threatening	
Fort St. Michaels, Alaska	30.10	764.5	30.14	765.5	—31	—35.0	100	sw.	1	0.4		0	0			0	0	clear	
Fort Shaw, Montana	26.02	660.9	29.87	758.7	39	3.9	57	sw.	26	11.6		0	0			0	0	clear	
Fort Sill, Indian Territory	28.83	732.3	30.14	765.5	33.5	0.8	83	calm	0	0		0	0			0	0	clear	
Fort Stevenson, Dakota	27.84	707.1	29.86	758.4	13	—10.6	83	nw.	6	2.7		0	0			0	0	clear	
Fort Verde, Arizona					25.9	— 3.4	56	w.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.43	722.1	30.23	767.8	43	6.1	83	w.	1	0.4		0	0			0	0	clear	
Galveston, Texas	30.23	767.8	30.27	768.8	52.5	11.4	93	w.	4	1.8		0	0			0	0	clear	
Grand Haven, Michigan	29.04	737.6	29.76	755.9	21.0	— 6.1	84	e.	2	0.9		0	0			1.39	35.3	clear	
Hatteras, North Carolina	29.94	760.5	29.96	761.0	40	4.4	73	nw.	26	11.6		0	0			0	0	clear	
Helena, Montana	25.51	647.9	29.91	759.7	36	2.2	58	w.	4	1.8		2 k	0	sw.		0	0	clear	
Henrietta, Texas	29.13	739.9	30.18	766.6	40	4.4	73	sw.	8	3.6		0	0			0	0	clear	
Huron, Dakota	28.43	722.1	29.95	760.7	30	— 1.1	78	sw.	13	5.8		0	0			0	0	clear	
Indianapolis, Indiana	28.97	735.8	29.82	757.4	35.5	1.9	73	sw.	4	1.8		0	0			0	0	clear	
Indianola, Texas	30.23	767.8	30.26	768.6	51.4	10.8	80	s.	5	2.2		0	0			0	0	clear	
Jacksboro, Texas	28.95	735.3	30.19	766.8	39	3.9	82	sw.	2	0.9		0	0			0.03	0.8	clear	
Jacksonville, Florida	30.21	767.3	30.26	768.6	43	6.1	68	w.	6	2.7		0	0			0	0	clear	
Keokuk, Iowa	29.25	742.9	29.95	760.7	34.0	1.1	72	sw.	6	2.7		0	0			0.03	0.8	clear	
Key West, Florida	30.14	765.5	30.18	766.6	62.3	16.8	68	n.	24	10.7		0	1 s			2.32	58.9	clear	
Kittyhawk, North Carolina	29.91	759.7	29.93	760.2	36	2.2	65	nw.	21	9.4		hz.	0			0.21	5.3	clear	
Knoxville, Tennessee	29.02	737.1	30.10	764.5	31.5	— 0.3	72	sw.	10	4.5		0	2 s			0.02	0.5	clear	
La Crosse, Wisconsin	28.95	735.3	29.79	756.7	28	— 2.2	77	s.	4	1.8		0	0			0	0	clear	
La Mesilla, New Mexico	26.23	666.2	30.24	768.1	27.8	— 2.3	74	n.	2	0.9		0	0			0	0	clear	
Leavenworth, Kansas	29.11	739.4	30.06	763.5	33	0.6	68	calm	0	0		0	0			0	0	cloudy	
Lewiston, Idaho	28.99	736.3	29.86	758.4	41.8	5.4	50	ne.	2	0.9			10 s		calm	0	0	clear	
Little Rock, Arkansas	29.81	757.2	30.14	765.5	40	4.4	73	sw.	3	1.3		0	0			0	0	clear	
Los Angeles, California	29.63	752.6	30.03	762.7	53.2	11.8	66	n.	9	4.0		3 c	0	calm		0	0	clear	
Louisville, Kentucky	29.28	743.7	29.87	758.7	41.0	5.0	48	sw.	11	4.9		0	0			0.42	10.7	clear	
Lynchburg, Virginia	29.17	740.9	29.89	759.2	33.0	0.6	60	sw.	3	1.3		0	0						
Mackinac City, Michigan																			
Madison, Wisconsin	28.72	729.5	29.81	757.2	30	— 1.1	77	w.	3	1.3			10 s		w.	inap.	inap.	cloudy	
Marquette, Michigan	28.94	735.1	29.72	754.9	16	— 8.9	83	w.	7	3.1			10 s		w.	inap.	inap.	cloudy	
Mason, Texas	28.52	724.4	30.25	768.3	44.6	7.0	61	sw.	4	1.8		0	0			0	0	clear	
Memphis, Tennessee	29.79	756.7	30.14	765.5	44	6.7	60	sw.	10	4.5		0	0			0	0	clear	
Milwaukee, Wisconsin	28.99	736.3	29.79	756.7	29	— 1.7	77	w.	1	0.4		0	9 s		w.	0	0	cloudy	
Mobile, Alabama	30.26	768.6	30.30	769.6	39.0	3.9	82	calm	0	0		0	0			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	30.01	762.2	30.25	768.3	37	2.8	72	se.	3	1.3		0	0			inap.	inap.	clear	
Moorhead, Minnesota	28.68	728.5	29.78	756.4	22.2	— 5.4	87	w.	12	5.4		0	0			0	0	clear	
Morgantown, W. Virginia	28.82	732.0	29.88	758.9	30.5	— 0.8	78	sw.	2	0.9			10 s			0.80	20.3	cloudy	
Mt. Washington, N. H.	22.88	581.1	29.50	749.3	8.0	—13.3	87	ne.	54	24.1			10n;fg		ne.	0.35	8.9	light snow	
Nashville, Tennessee	29.48	748.8	30.04	763.0	41.0	5.0	53	sw.	8	3.6		0	0			inap.	inap.	clear	
New Haven, Connecticut	29.39	746.5	29.51	749.5	17	— 8.3	83	n.	11	4.9			10 s			0.50	12.7	cloudy	
New London, Connecticut	29.38	746.2	29.43	747.5	15	— 9.4	100	nw.	20	8.9			10 n		nw.	1.45	36.8	light snow	
New Orleans, Louisiana	30.23	767.8	30.29	769.4	49.3	9.6	77	calm	0	0		hz.	hz			0	0	dense haze.	
Newport, Rhode Island	29.25	742.9	29.30	744.2	14.6	— 9.7	85	nw.	28	12.5			10 n		calm	1.25	31.7	light snow	
New River, N. Carolina					32	0.0	88	nw.			4	0	0			0.92	23.4	clear	
New Shoreham, Rhode I'd.	29.32	744.7	29.34	745.2	15.0	— 9.4	91	n.	52	23.2			10 n		n.	2.07	52.6	light snow	
New York, New York	29.41	747.0	29.60	751.8	20	— 6.7	100	w.	6	2.7			10 s		w.	0.88	22.4	cloudy	
Norfolk, Virginia	29.88	758.9	29.91	759.7	35	1.7	64	w.	12	5.4		0	0			1.54	39.1	clear	
North Platte, Nebraska	27.02	686.3	30.12	765.0	26.6	— 3.0	78	w.	9	4.0		0	0			0	0	clear	
Olympia, Washington T'y	29.83	757.7	29.87	758.7	38.0	3.3	86	sw.	12	5.4			10 s		calm	0.37	9.4	cloudy	
Omaha, Nebraska	28.79	731.3	30.06	763.5	36.6	2.6	64	sw.	4	1.8		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.79	756.7	29.81	757.2	—37.0	—38.3	77	ssw.	18	8.0			10 s			0	0	cloudy	
Oswego, New York	29.26	743.2	29.61	752.1	20.0	— 6.7	79	se.	2	0.9			10 n			0.32	8.1	light snow	
Palestine, Texas	29.67	753.6	30.25	768.3	48	8.9	58	sw.	10	4.5		0	0			0	0	clear	
Pensacola, Florida	30.27	768.8	30.30	769.6	38.8	3.8	76	nw.	5	2.2		0	0			0	0	clear	
Philadelphia, Pa.	29.56	750.8	29.68	753.9	25	— 3.9	88	w.	8	3.6		0	0			1.31	33.3	clear	
Pike's Peak, Colorado	17.67	448.8	30.39	771.9	9	—12.8	73	nw.	14	6.3		0	0			0	0	clear	
Pioche, Nevada	24.08	611.6	30.24	768.1	29	— 1.7	54	s.	5	2.2		10 k	0	sw.		0	0	cloudy	
Pittsburg, Pennsylvania	29.00	736.6	29.86	758.4	27.0	— 2.8	77	sw.	8	3.6			10 s		w.	0.60	15.2	cloudy	
Port Eads, Louisiana	30.30	769.6	30.31	769.9	50.1	10.1	96	n.	8	3.6		0	hz			0	0	clear	
Port Huron, Michigan	29.06	738.1	29.79	756.7	17.0	— 8.3	80	sw.	6	2.7		5 c	0	calm		0.03	0.8	fair	
Portland, Maine	29.28	743.7	29.34	745.2	6	—14.4	76	ne.	28	12.5			10 n		calm	0.66	16.8	heavy snow	
Portland, Oregon	29.81	757.2	29.88	758.9	41.2	5.1	86	s.	13	5.8			10 n		s.	0.17	4.3	light rain	
Portsmouth, N. Carolina					38	3.3	53	n.	34	15.2		0	0			1.12	28.4	clear	
Prescott, Arizona	24.80	629.9	30.16	766.1	18	— 7.8	61	w.	3	1.3		0	0			0	0	clear	
Punta Rassa, Florida	30.21	767.3	30.22	767.6	51	10.6	62	n.	10	4.5		0	0			0.17	4.3	clear	
Red Bluff, California	29.63	752.6	30.01	762.2	37.3	2.9	91	nw.	3	1.3		7 cs	0	w.		0	0	fair	
Rio Grande City, Texas	29.86	758.4	30.11	764.8	53	11.7	86	se.	6	2.7		0	0			0	0	clear	
Rochester, New York	28.94	735.1	29.66	753.4	24	— 4.4	88	nw.	11	4.9			10 n			0.12	3.0	light snow	
Roseburg, Oregon	29.45	748.0	30.02	762.5	36.3	2.4	95	sw.	3	1.3			10 s		sw.	0	0	cloudy	
Sacramento, California	29.94	760.5	30.02	762.5	41.4	5.2	92	e.	4	1.8		9 cs	0			0	0	cloudy	
St. Louis, Missouri	29.38	746.2	30.02	762.5	39.1	3.9	73	w.	11	4.9		0	0			0	0	clear	
St. Paul, Minnesota	28.82	732.0	29.76	755.9	22.5	— 5.3	78	sw.	9	4.0		0	0			0.03	0.8	clear	
St. Vincent, Minnesota	28.78	731.0	29.75	755.6	12	—11.1	80	nw.	11	4.9		0	0			0	0	clear	
Salt Lake City, Utah	25.64	651.2	30.20	767.1	18	— 7.8	42	nw.	5	2.2		9 cs	0	w.		0	0	cloudy	
San Antonio, Texas	29.54	750.3	30.26	768.6	38.7	3.7	89	calm	0	0		0	0			0	0	clear	
San Diego, California	29.90	759.4	29.97	761.2	48.6	9.2	62	ne.	3	1.3		5 c;cs	0			0	0	fair	
Sandusky, Ohio	29.09	738.9	29.81	757.2	29.7	— 1.3	78	nw.	3	1.3			10 s			0	0	cloudy	
Sandy Hook, New Jersey	29.56	750.8	29.60	751.8	23.0	— 5.0	88	w.	26	11.6		8 k	0	w.		0.20	5.1	cloudy	
San Francisco, California	29.95	760.7	30.02	762.5	47	8.3	86	nw.	1	0.4		9 c	0	sw.		0	0	cloudy	
Santa Fé, New Mexico	23.29	591.6	30.33	770.4	21	— 6.1	64	n.	6	2.7		0	0			0	0	clear	
Savannah, Georgia	30.14	765.5	30.23	767.8	42	5.6	55	w.	9	4.0		0	0			0.02	0.5	clear	
Shreveport, Louisiana	29.98	761.5	30.23	767.8	42	5.6	82	s.	3	1.3		0	0			0	0	clear	
Silver City, New Mexico	24.33	618.0	30.18	766.6	24	— 4.4	67	nw.	4	1.8		0	0			0	0	clear	
Sitka, Alaska	29.55	750.6	29.62	752.3	34.5	1.4	82	sw.	23	10.3			10 ks		w.	0.21	5.3	cloudy	
Smithville, North Carolina	30.05	763.3	30.09	764.3	36	2.2	61	nw.	6	2.7		0	0			0.30	7.6	clear	
Spokane Falls, Wash. Ter.	27.71	703.8	29.84	757.9	37	2.8	72	s.	12	5.4			10 s		sw.	0	0	cloudy	
Springfield, Illinois	29.22	742.2	29.95	760.7	37	2.8	61	w.	11	4.9		0	0			0	0	clear	
Springfield, Massachusetts	29.33	745.0	29.47	748.5	18.8	— 7.3	76	nw.	8	3.6			10 n			1.47	37.3	light snow	
Springfield, Mo.	28.60	726.4	30.17	766.3	39.2	4.0	65	w.	6	2.7		0	0			0	0	clear	
Stockton, Texas	27.07	687.6	30.20	767.1	36.0	2.2	82	calm	0	0		0	0			0	0	clear	
Thatcher's Island, Mass.	29.22	742.2	29.28	743.7	14.0	—10.0	100	n.	48	21.5			10 n			0.90	22.9	heavy snow	
Toledo, Ohio	29.06	738.1	29.80	756.9	29.8	— 1.2	71	calm	0	0			10 s		w.	inap.	inap.	cloudy	
Tucson, Arizona	27.58	700.5	30.06	763.5	38	3.3	65	se.	4	1.8		2 c	0			0	0	clear	
Umatilla, Oregon	29.50	749.3	29.88	758.9	39.5	4.2	80	se.	6	2.7			10 s		w.	0	0	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.99	761.7	30.26	768.6	42	5.6	58	s.	6	2.7		0	0			0	0	clear	
Visalia, California	29.60	751.8	29.98	761.5	40.5	4.7	82	se.	2	0.9		9 ck	0			0	0	cloudy	
Washington, D. C.	29.67	753.6	29.79	756.7	32	0.0	68	nw.	12	5.4		0	0			1.38	35.1	clear	
West Los Animas, Colorado	26.08	662.4	30.21	767.3	20	— 6.7	80	sw.	4	1.8		0	0			0	0	clear	
Wickenburg, Arizona					32	0.0	88	calm			0	9 c	0	nw.		0	0	cloudy	
Williamsport, Pa.	29.02	737.1	29.65	753.1	25	— 3.9	80	w.	13	5.8		hz	3 ks		w.	0.68	17.3	fair	
Wilmington, N. Carolina	30.02	762.5	30.08	764.0	39	3.9	46	nw.	7	3.1		0	0			0.21	5.3	clear	
Winnemucca, Nevada	25.57	649.5	30.09	764.3	13	—10.6	66	ne.	10	4.5		0	0			0	0	clear	
Wood's Holl, Mass.																			
Yankton, Dakota	28.58	725.9	30.00	762.0	30	— 1.1	68	sw.	10	4.5		0	0			0	0	clear	
Yuma, Arizona	29.85	758.2	30.00	762.0	47.5	8.6	59	ne.	2	0.9		0	7 s			0	0	fair	
Sub-Series.																			
Bogota, U. S. Columbia	22.04	559.8			53.5	11.9	79	calm	0	0		3 k	7 s;n			0.17	4.3	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.05	763.3	30.06	763.5	77	25.0	86	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	30.00	762.0	30.02	762.5	77	25.0	86	s.	2	0.9			10 ks		sw.	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.96	761.0	29.98	761.5	76	24.4	86	e.				3 k	2 ks			0.039	1.0		B. Bigar.
Havana, Cuba, W. I.	30.13	765.3	30.18	766.6	69	20.6	57	n.	3.6	1.6		0	5 ks		calm	0.08	2.0	fair	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.06	763.5	30.07	763.8	65.0	18.3	89	calm	0	0		0	0			0	0	fine	Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	76	25.6	86	e.			2		8 ps	e.		0.100	2.5	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.53	750.0	29.99	761.7	77	25.0	84	n.			1		9 ks		n.	0.02	0.5	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua							90	ne			2	0	ks			0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.04	763.0	30.07	763.8	73	22.8	81	calm	0	0		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.07	763.8	30.12	765.0	—34.0	—36.7		e.	8	3.6		5 k	5 s	ne.	e.	0	0	cloudy	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, N. 45° 12′, W. 9° 08′	30.35	770.9	52	11.1	79	e.			3		3	e.				3	wnw.	d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 19° 37′, E. 113° 15′	30.27	768.8	65	18.3		nne.			3-5		10					7	ne.	squally	Capt. A. J. Errington.
H. M. S. Alert, N. 1° 14′, E. 103° 30′	29.91	759.7	80	26.7	86	ne.			3		3							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.14	765.5	56.5	13.6	65	calm			0		2							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante																			Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.01	762.2	66.5	19.2	66	ene.			1-2		1	calm						blue sky	Com. Sir F. W. Richards.
H. M. S. Champion, Callao, Peru	29.85	758.2	68	20.0	90	calm			0		9	calm						d. clouds	Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	30.06	763.5	64	17.8	67	sw.			2		8	w.						d. clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 13° 05′, W. 59° 36′	30.04	763.0	77	25.0		ene.			5		4	ne.						misty	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.79	756.7	69.5	20.8	86	ssw.			4-5		5	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid, N. 18° 11′, W. 76° 27′	30.13	765.3	73	22.8	83	se.			1		4	se.						d. clouds	Capt. W. R. Kennedy.
H. M. S. Dwarf																			Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 35° 20′, W. 4° 22′	29.79	756.7	67	19.4	90	wnw.			4-5		9					5	w.	showery	Capt. C. A. G. Bridge.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.04	763.0	51.5	10.8	72	ne.			5-6		10	ne.				3	ene.	misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 12° 04′, W. 77° 11′	29.87	758.7	70	21.1	92	calm			0		8					2	sse.	misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	30.12	765.0	46	7.8	69	ene.			3		10							overcast	Capt. L. F. Jones.
H. M. S. Inconstant																			
H. M. S. Iris, Off Cape Matapan, Greece	30.16	766.1	56	13.3	67	nnw.			1		2							d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.35	770.9	53	11.7	86	ne.			1		4	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey, Coquimbo, Chili	29.92	760.0	65	18.3		n.			1		4								Capt. J. T. R. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, Sydney, Australia	29.91	759.7	72	22.2	75	calm			0		7	sw.						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, N. 13° 46′, W. 67° 00′	30.01	762.2	77.5	25.3	79	e.			5		4	e.				2	ene.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 17° 45′, E. 71° 53′	29.91	759.7	83.5	28.6	84	n.			2		0					1	n.	blue sky	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 12° 30′, W. 33° 17′	30.01	762.2	75	23.9	95	nne.			4		6					2	nne.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, S. 2° 08′, W. 8° 53′	29.88	758.9	81	27.2	100	se.			4		3	se.						d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.04	763.0	64	17.8		nw.			1		0							blue sky	Capt. W. H Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id.	29.88	758.9	38	3.3	90	calm			0		3							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 2° 13′, E 40° 59′	29.25	742.9	83	28.3	95	e.			2-3		1	ne.						blue sky	Capt. M. Byles.
H. M. S. Thalia																			
H. M. S. Triumph, S. 11° 43′, W. 77° 41′	29.98	761.5	68	20.0	95	calm			0		1	calm				4	s.	foggy	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica W I.	30.04	763.0	74	23.3	69	nnw.			1		4							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Ras el Khyma, Arabia	30.01	762.2	77.5	25.3	77	nnw.			3		3	nw.						d. clouds	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon																			
Quanza, Brava, Cape Verd Ids.	29.99	761.8	73.4	23.0	83	ne.			2		10					2	ne.	overcast	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder																			Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.31	769.9	41	5.0	65	n.	3	1.3			0			0	0			clear	
N. Yard, Portsmouth, N. H.	29.37	746.0	10	—12.2		n.	12	5.4			10		ne.					snowing	
Naval Hospital, Yokohama, Japan	30.17	766.3	42	5.6	87	ne.	6	2.7			10		n.	sli't	sli't			light rain	
Adams, Callao, Peru	29.70	754.4	70	21.1	90	calm			0		10			0	0	gr'd		cloudy	
Alaska, Valparaiso, Chili	29.89	759.2	63	17.2	83	calm			0		0			0	0	sm'h		clear	
Alert, N. 10° 30′, E. 101° 24′*	29.86	758.4	82	27.8	67	ese.			3		2		calm	0	0	mod.	ese.	fair	
Alliance, Boston, Mass	29.24	742.7	13	—10.6	80	n.			4		10		n.	h'vy	snow			snowing	
Ashuelot, Tientsin, China	30.58	776.7	27	— 2.8	100	se.			1		0							clear	
Brooklyn, Montevideo, Uruguay	29.76	755.9	65	18.3	89	wsw.	25	11.2			10		w.	0	0	mod.	w.	cloudy	
Colorado, New York, N. Y	29.67	753.6	22	— 5.6	100	w.	6	2.7			10			0	0			overcast	
Enterprise, Potomac River*	29.79	756.7	30	— 1.1		ssw.			2		0							clear	
Essex, Madeira I'd, Africa	30.21	767.3	65	18.3	68	s.			1		2		s.			sm'h		clear	
Franklin, Norfolk, Va	29.91	759.7	34	1.1		w.	13.5	6.0			0			0.12	3.0			clear	
Galena, Tangier, Morocco, Africa	30.24	768.1	60	15.6	88	ene.			2		2		se.			sm'h		clear	
Independence, N. Yard, Mare I'd, Cal	29.94	760.5	40	4.4	82	calm	0	0			8			0	0			cloudy	
Kearsarge, New Orleans, La	30.29	769.4	50	10.0	79	calm			0		0							clear	
Lackawanna, Valparaiso, Chili*	29.85	758.2	60	15.6	94	calm			0		10?							clear?	
Lancaster, Naples, Italy	30.22	767.6	55	12.8	56	nnw.			1		2					sm'h		fair	
Marion, S. 30° 19′, E. 53° 37′	29.98	761.5	73	22.8	81	ese.			4		8		ese.			mod.	e.	fair	
Michigan, Erie, Pa	29.69	754.1	26	— 3.3	77	wnw.			3		2		wnw.					fair	
Minnesota, Newport, R. I	29.30	744.2	15	— 9.4		nnw.	7	3.1			10							snowing	
Monocacy, Yokohama, Japan	30.36	771.1	45	7.2	92	nne.			3		10		nne.					cloudy	
Nipsic, N. 40° 06′, E. 1° 28′	30.30	769.6	63	17.2	61	ne.			2		5					sm'h		fair	
Onward, Callao, Peru†	30.03	762.7	67	19.4	100	calm			0		10		nnw.			long	w.	cloudy	
Palos, Hong Kong, China	30.36	771.1	52	11.1	93	ne.			1		0							clear	
Passaic, Washington, D. C	29.73	755.1	25	— 3.9		w.			2		8		w.					cloudy	
Pensacola, Valparaiso, Chili	29.98	761.5	62	16.7	72	ne.	3	1.3			0			0	0			clear	
Powhatan, Norfolk, Va	29.86	758.4	31	— 0.6	79	wsw.			1		0							clear	
Quinnebaug, N. 34° 59′, E. 12° 28′	30.28	769.1	60	15.6	60	w.			1		0					long	e.	clear	
Ranger, N. 20° 26′, W. 105° 41′*	29.95	760.7	64	17.8	89	sse.			2		2		calm	0	0	long	sw.	clear	
Richmond, N. 17° 49′, E. 163° 14′*	29.92	760.0	78	25.6	82	ne.			5		8		ne.	0	0	mod.	ne.	fair	
Shenandoah, S. 34° 52′, W. 53° 59′*	29.82	757.4	61	16.1	?	wnw.			4		2					mod.	nw.	clear	
St. Louis, League Island, Pa	29.85	758.2	34	1.1	62	w.	12	5.4			5			0.04	1.0			fair	
Swatara, Kobe, Japan*	29.91	759.7	52	11.1	66	ene.			5		10		ene.			mod.	ene.	cloudy	
Tennessee, New York, N. Y	29.54	750.3	22	— 5.6		wnw.	8	3.6			10			0	0			cloudy	
Vandalia, Savanilla, U. S. Col	29.77	756.1	75	23.9	90	ne.			2		5		e.					fair	
Wabash, Boston, Mass	29.28	743.7	11	—11.7		ne.	24	10.7			10		ne.					snowing	
Wachusetts, San Francisco, Cal	30.05	763.3	47	8.3	92	wnw.			1		2		w.					fair	
Wyoming, Port Royal, S. C	30.21	767.3	40	4.4	73	wsw.	13	5.8			2		calm	0.20	5.1			clear	
Yantic, Aspinwall, Panama*	29.91	759.7	79	26.1	78	nnw.			3		5		nw.					fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 51° 50′, W. 28° 15′	30.03	762.7	46	7.8	85	s.	5	.....	8	.....	sw.	2 h'r	2 h'r	sm'h	.....	misty	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, N. 55° 28′, W. 7° 00′*	30.47	773.9	47	8.3	.....	sse.	4	.....	9	.....	s.	.....	.....	light	s.	hazy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.46	773.7	49	9.4	.....	wsw.	1	.....	.....	.....	sw.	0	0	.....	.....	clear	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Liverpool, England	30.41	772.4	46	8.3	92	ssw.	2	.....	10	.....	s.	.....	.....	.....	.....	overcast	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 42° 07′, W. 51° 16′†	29.85	758.2	35	1.7	70	ene.	3	.....	2	.....	ne.	h'vy	h'vy	mod.	n.	rain & sleet	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, Philadelphia, Penn.†*	29.70	754.4	23	—5.0	100	sw.	1	.....	1	.....	sw.	.....	.....	.....	.....	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 45° 00′ W. 50° 45′*†	29.71	754.6	33	0.6	.....	w.	1	.....	.....	.....	w.	.....	.....	high	w.	fine	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Daw, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 34° 45′, W. 74° 00′*	29.87	758.7	48	8.9	.....	wnw.	8	.....	9	.....	wnw.	0	0	r'gh	wnw.	squally	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Kingston, Jamaica, W. I*†	29.99	761.7	74	23.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	fine	W. H. Bennett.
S. S. Arden, Capt. F. de Echevarrieta, N. 12° 37′, W. 70° 30′	.....	.....	.....	.....	.....	ene.	2	.....	5	.....	ese.	.....	.....	mod.	.....	fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 34° —′, W. 74° —′	29.86	758.4	.....	.....	.....	nw.	9	.....	2	.....	nw.	sh'rs	shr's	cross	w.	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 57° 43′, W. 77° 16′	29.30	744.2	48	8.9	.....	n.	6	.....	10	.....	.....	.....	.....	.....	.....	misty	.....
Baroda, Capt. C. J. Russell,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Caldew, Capt. W. Peterson S. 53° 24′, W. 61° 03′	30.18	766.6	45	7.2	.....	nne.	5	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Cipero, Capt. W. N. Lailey Georgetown, British Guiana, S. A.	30.03	762.7	76.6	24.8	90	nne.	2	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. City of Agra, Capt. Thos. Young. N. 31° 00′, W. 41° 00′	30.12	765.0	66.0	18.9	.....	nw.	4	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Coppename, Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hermine, Capt. S. G. Jones, S. 54° 48′, W. 59° 52′	30.18	766.6	43.6	6.4	84	n.	4	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Hope, Capt. James Campbell,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 36° 09′, E. 23° 13′	30.01	762.2	68.5	20.3	70	wsw.	6	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 49° 17′, W. 62° 46′	30.05	763.3	49	9.4	64	ene.	3	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	29.83	757.7	62.2	16.8	94	w.	5	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Naiad, Capt. J. Smith, N. 22° 34′, W. 47° 36′	30.19	766.8	73.7	23.2	81	nne.	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry. S. 34° 58′, E. 74° 24′	30.07	763.8	61.4	16.3	61	sse.	6	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. J. W. Pearson, N. 48° 38′, W. 24° 36′	29.84	757.9	51.5	10.8	93	sw.	3	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Superb, Capt. Berridge. N. 34° 13′, W. 36° 22′	30.04	763.0	62	16.7	100	w.	2	.....	10	.....	.....	.....	.....	.....	.....	raining	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 50° 39′, W. 22° 22′*†	30.08	764.0	.....	.....	.....	sse.	5	.....	8	.....	se.	.....	.....	sm'h	s.	showery	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 31° 55′, W. 78° 20′*†	30.00	762.0	60	15.6	.....	nw.	6	.....	0	.....	.....	.....	.....	r'gh	nw.	clear	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan, N. 45° 09′, W. 41° 59′	29.97	761.2	.....	.....	.....	nw.	4	.....	.....	.....	wnw.	2 h'r	light	cross	wnw.	cloudy	E. F. Stembridge, 3d offi.
S. S. Gallia, Capt. W. H. P. Hains, Queenstown, Ireland*	30.36	771.1	48	8.9		s.	4	.....	8	.....	sw.	shr's	sh'rs	.....	.....	showery	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, N. 49° 35′, W. 10° 45′	30.43	772.8	50.0	10.0	.....	se.	3	.....	3	.....	e.	0	0	sm'h	w.	clear	.....
S. S. France, Capt. Périer d'Hauterive, N. 45° 57′, W. 45° 48′*†	29.69	754.0	30.2	—1.0	.....	w.	6	.....	ks	.....	wsw.	0	0	very hv'y	sw.	.....	.....
S. S. St. Laurent, Capt. A. Sérvan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein, Off Start Point, England*†	30.43	772.9	58	14.4	.....	e.	2	.....	5	.....	se.	0	0	.....	e.	fair	.....
S. S. Silesia, Capt. A. Albers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich, Fire Island, New York*	29.40	746.7	23	—5.0	.....	wnw.	5–7	.....	10	.....	wnw.	16h'r	snow	3	e.	cloudy	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, Argentine Rep. S. A†*.	30.00	762.0	66	18.9	.....	sw.	3	.....	10	.....	w.	12 h'r	12h'r	.....	.....	overcast	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 44° 52′, W. 48° 29′	.....	.....	.....	.....	.....	w.	3	.....	5	.....	nnw.	1 h'r	snow	light	wnw.	.....	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 24° 39′, W. 83° 18′*†	30.22	767.6	62	16.7	.....	n.	5	.....	3	.....	n.	0	0	mod.	n.	.....	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 49° 33′, W. 8° 12′*†	30.44	773.2	54	12.2	73	ese.	4	.....	2	.....	sse.	0	0	sm'h	.....	fine	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, N. 21° 55′, W. 74° 20′†	30.10	764.5	76	24.4	.....	sse.	1	.....	1	.....	sw.	1 h'r	light	sm'h	.....	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, Savanilla, U. S. C.† [man	29.91	759.7	79	26.1	.....	nne.	1	.....	.....	.....	.....	.....	.....	.....	.....	fair	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Elbe, Capt. W. Willigerod [nolds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Lessing, Capt. B. Voss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Maas, Capt. T. H. Bonjer, N. 40° —, W. 71° —′*	29.46	748.3	27	—2.8	.....	nw.	4	.....	.....	.....	.....	.....	.....	high	nw.	snowing	.....
S. S. New York, Capt. R. B. Quick	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke N. 42° 00′, W. 51° 00′*†	29.35	745.5	47	8.3	.....	e.	2–3	.....	.....	.....	.....	.....	.....	.....	wnw.	.....	.....
S. S. P. Caland, Capt. E. Deddes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 48° 58′, W. 32° 40′	29.53	750.0	43	6.1	.....	s to w	6	.....	....	.....	.....	.....	.....	.....	w.	raining	.....
S. S. Scythia, Capt. M. Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers, N. 41° 44′, W. 63° 06′	28.97	735.8	.....	.....	.....	sw.	9	.....	10	.....	.....	4 h'r and	rain snow	h'vy	s;sw.	threatening.	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer, N. 40° 59′, W. 63° 13′	28.96	735.6	54	12.2	96	ssw.	6	.....	10	.....	sse; sw.	11 h'r	11h'r	cross	ese.	raining	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 56° 28′, W. 20° 49′*	30.00	762.0	51.8	11.0	.....	s.	3–4	.....	9	.....	sse.	0	0	light	s.	covered	.....
S. S. Mosel, Capt. F. Hesse, N. 49° 38′, W. 33° 25′	29.49	749.0	46.6	8.1	.....	sw.	6	.....	10	.....	.....	4 h'r	4 h'r	mod.	sse.	rainy	J. Hesse.
S. S. Neckar, Capt. R. Bussius	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, N. 0° 07′, W. 30° 04′*	29.95	760.7	78.8	26.0	?	ese.	1	.....	9	.....	se.	2 h'r	h'vy	1	ese.	cloudy	.....
S. S. Oder, Capt. C. Undeutsch, Off Sandy Hook, N. J*	29.60	751.8	26.4	—3.1	.....	nw.	5	.....	5	.....	nw.	2 h'r	snow	long	nw.	squally	Montz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, N. 45° 37′, W. 12° 51′	30.33	770.4	.....	.....	.....	s.	4	.....	5	.....	s.	light	light	high	nw.	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 25′, W. 173° 19′†	30.40	772.1	68	20.0	84	se.	2	.....	5	.....	ssw.	0	0	light	e.	fair	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 43° 52′, W. 142° 29′*†	30.78	781.8	48	8.9	71	nw.	3	.....	7?	.....	n.	.....	.....	mod.	nw.	clear.?	.....
S. S. Oceanic, Capt. J. Metcalfe, Hong Kong, China*	30.30	769.6	58	14.4	87	ne.	2	.....	2	.....	w.	.....	.....	.....	.....	clear.	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.84	757.9	.....	.....	.....	w.	1	.....	0	.....	.....	.....	.....	.....	.....	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 38° 30′, W. 74° 10′*†	29.72	754.9	32	0.0	.....	nw.	6	.....	1	.....	nw.	0	0	mod.	sw.	clear	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	29.92	760.0	40	4.4	82	e.	2		10		se.					rain & snow	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d offi.
S. S. Columbia, Capt. Fred. Bolles																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 45° 06′, W. 124° 18′†	29.93	760.2	41	5.0	91	nw.	5		8		nw.			mod.	wnw.	light rain	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	29.97	761.2	45	7.2	84	calm	0		2							fair	
S. S. Geo. W. Elder, Capt. H. G. Morse,																	
S. S. Idaho, Capt. H. M. Hayward, Tacoma, Washington Ter†	30.22	767.6	41	5.0	73	se.	2		8							rainy	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 37 12′, W. 122° 25′†	29.96	761.0	54	12.2	61	nw.	5				nw.	0	0	sm'h	nw.	fair	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, Monterey, Cal.†	29.91	759.7	48	8.9	92	calm	0		10							foggy	
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	29.99	761.7	43	6.1	91	calm	0		6?		nw.	0	0			cloudy?	
S. S. Victoria, Capt. W. E. Plummer, N. 45° 06′, W. 124° 30′†	29.94	760.5	41	5.0	83	nnw.	4		10					h'vy	w.	rainy	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh																	
S. S. City of New York, Capt. W. B. Cobb, S. 13° 50′, W. 170° 20′†	29.92	760.0	82	27.8	91	n.	3		5?		n.	0	0	light	e.	overcast?	W. H. Hawes, 2d offi.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 37° 10′, W. 128° 25′†	30.36	771.1	54	12.2	73	nnw.	4		5		nw.	0	0	mod.	nw.	fair	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, S. 33° 34′, E. 177° 12′†	30.11	764.8	72	22.2	63	sse.	3		5		se.	0	0	h'vy	se.	fair	E. Le Saik.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	30.32	770.1	57	13.9	62	w.	2		5		w.	0	0			fair	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 36° 37′, W. 122° 22′†	29.96	761.0	55	12.8	68	nw.	3		10		nw.	0	0	mod.	nw.	cloudy	
S. S. Grenada, Capt. M. Connolley, Panama, Panama†	29.93	760.2	73	22.8	95	nw.	4		8		nnw.	1 h'r	light			cloudy	
S. S. South Carolina, Capt. W. J. Russell, N. 16° 29′, W. 98° 10′†	30.08	764.0	76	24.4	72	nne.	2		0			0	0	sm'h		hazy	A. W. Hart, 2d offi.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	29.95	760.7	76	24.4	76	calm	0		10		s.					rainy	
QUEBEC S. S. CO. *E. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M. Faircloth																	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, Off Sandy Hook, N. J.						nw.	6		10			h'vy	snow	r'gh cross	e. nw.	snow sq'lls	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes, N. 39° 56′, W. 69° 22′*†	29.48	748.8	34	1.1		nw.	9		10		nw.	20 h'r	rain snow	h'vy	wnw.	snowing	
S. S. Nederland, Capt. J. Uberweg, N. 43° 53′, W. 52° 41′*†	30.54	775.7	35	1.7		var.	1		10			1 h'r	snow	mod.	w.	overcast	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Off Sandy Hook, N. J*	29.60	751.8	25	—3.9		wnw.	6		5		wnw.	1.0	25.	long	ene.	clearing	C. H. Grant, 2d offi.
S. S. Switzerland, Capt. J. C. Jamison,																	
S. S. Vaderland, Capt. W. A. Beynon N. 47° 58′, W. 37° 23′*†	29.33	745.0	47	8.3	92	sw.	6		8		sw.	0	0	high	sw.	overcast	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, N. 50° 37′, E. 0° 25′*	30.29	769.4	38	3.3		e.	4		0			0	0	sm'h	e.	clear	Olsen & Assfeld.
ROTTERDAM LINE. *Fundh, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 42° 37′, W. 57° 24′*	29.66	753.4	48.0	8.9	77	wnw.	4		10		nw.	3 h'r	snow	mod.	wnw.	foggy	
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Christiania, Norway†	30.44	773.2	37.4	3.0		nne.	2		4		nne.	0	0	sm'h	nne.	clear	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters, N. 51° 02′, W. 23° 26′*†	30.07	763.8	53	11.7		sse.	4		10		sse.	3 h'r	light	cross	nw;s.	misty	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings, Liverpool, England*†	30.51	774.9	48	8.9		sse.	2		10		se.	0	0	sm'h		foggy	J. Moore.
S. S. Britannic, Capt. H. H. Perry,																	W. Brownless, 4th offi.
S. S. Celtic, Capt. Benjamin Glendell, N. 47° 54′, W. 37° 12′*†	29.35	745.5	44	6.7	92	ssw.	6		8		sw.	4 h'r	light	h'vy	w.	cloudy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy, N. 40° 19′, W. 70° 40′*†	29.20	741.7	26	—3.3		nw.	6		10		w.	snow	snow	hv'y	nnw.	snowing	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving																	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell,																	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Swell		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.37	771.4	49	9.4	71	calm	0	0	0			0	0			clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey,																	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 31° 05′, W. 16° 50′.*†	30.24	768.1	70	21.1		ene.	3		2		ne.	0	0	sm'h		fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. Ponce, Porto Rico, W. I †*	30.08	764.0	73	22.8		n.	1		10			0	0			hazy	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 23° 50′ W. 33° —′*†	30.10	764.5	71	21.7		e.	2		3		e.	0	0	sm'h	nw.	fair	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 49° 16′, W. 25° 45′*†.	29.79	756.7				sw.	1					light	light	mod	n.	foggy	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill. S. 34° 00′, W. 51° 08′†	29.90	759.4				w.	3		5?		w.	0	0	sm'h	sse.	clear?	A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	30.36	771.1				calm	0		10			0	0			foggy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.,																	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner, U.S.N., Washington, D. C†	29.91	759.7	32	0.0		w.	3		1		calm	snow	snow			clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison, S. 32° 37′, W. 78° 52′†	30.12	765.0	69	20.6		nw.	4		1		nw.	0	0	mod.	sw.	clear	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, S. 36° 48′, W. 20° 40′			63	17.2		ssw.	3		5		sw.	4 h'r	h'vy	sm'h	ssw.	squally	
Bk. Gamaliel, Capt. D. J. Anthony, S. 1° 58′, W. 36° 50′*†	29.06	738.1				ese.	7		2		ese.	0	0	h'vy	ese.		
Bk. Geo. Booth, Capt D. Williams, N. 33° 50′, W. 49° 30′*†	29.95	760.7	65	18.3		sw.	3					0	0		nw.	clear	D. Williams.
Bk. Granville, Capt. R. Bonney,																	
Schr Henry Denison, Capt. Jno. Fehring,																	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt, S. 39° 44′, E. 9° 48′*	29.65	753.1				nnw.	7		5?		n.	6 h'r	light	high	var.	cloudy?	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte.																	G. T. Lecompte.
Bk. New York, Capt. J. E. Sorensen, N. 36° 20′ W. 4° 16′*†	30.40	772.1				e.	3				e.	0	0	sm'h	e.	fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 43° 45′ W. 19° 56′*†	30.28	769.1	56	13.3	97	sw.	4		5		sw;w			h'vy	nw.	fine	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.16	766.1	56	13.3	50	calm	0		2		w.					fair	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 4° 45′, W. 32° 25′*†	29.85	758.2				se.					se.	0	0				J. Connolly.
Schr. S. B. Hubbard, New London, Conn*†	29.46	748.3	18	—7.8		var.	3		10		n.	snow	snow			clearing	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 0° 49′, W. 27° 35′*	29.80	756.9	78.4	25.8	94	s.	2		6		s.			sm'h	se.	showery	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 37° 02′. W. 13° 23′*†	30.23	767.8	62	16.7	88	sse.	2		5		s.	0	0	mod.	nw.	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 35° 14′, W. 0° 30′*†	30.30	769.6				nnw.	8		10		nnw.			h'vy	sw.	covered	
S. Wm. Woodbury Capt. H. T. Schmidt, N. 37° 37′, W. 56° 00′*†	29.54	750.3	66	18.9	90	sw.	9				w.			h'vy	wsw.	cloudy	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton,																	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 6, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.25	768.3	68.0	20.0	79	sw.			2		0			0	0	clear	Moiroud.
Algiers			30.31	769.8	57.2	14.0	86	nw.			2		0			0.047	1.2	clear	Nicolas.
La Calle			30.30	769.5	63.3	17.4	80	n.			1		3			0	0	pretty fair	Fonfrède.
Tunis			30.30	769.7															Jacques.
Sfax																			Gau.
Saida			30.33	770.4	61.9	16.6	72	nw.			1		5			0.098	2.5	cloudy	Dumas.
Tebessa			30.35	770.9	48.6	9.2	41	ne.			1		5			0	0	cloudy	Derché.
Geriville					45.7	7.6	41	nw.			3		3			0	0	pretty fair	Louchamp.
Laghouat			30.39	771.8	49.3	9.6	71	s			1		2			0	0	fair	Herblu.
Biskra			30.37	771.3	58.3	14.6	53	se.			1		8			0	0	very cloudy	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.08	764.0	30.17	766.3	60.0	15.6	63	sse.	11	4.9			3			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.79	756.6	30.36	771.2	36.7	2.6	57	se.			2		2			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.52	749.7	30.33	770.4	30.6	— 0.8	92	w.	7.4	3.3			10			0	0		Dr. Wierzbiski.
Eperies	29.35	745.4	30.27	768.8	34.9	1.6	66	calm			0		10 s			0	0		Julius Mikolik.
Gratz	29.04	737.5	30.36	771.1	33.1	0.6	63	s.			1		0			0	0		Andreas Rospini.
Hermannstadt	28.79	731.2	30.33	770.3	24.1	— 4.4	100	se.			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.02	737.0	30.45	773.5	28.0	— 2.2	87	sw.			1		3			0	0	clear	The Staff.
Lemberg	29.14	740.2	30.19	766.7	29.8	— 1.2	90	nw.			2		10			0.047	1.2		Dr. T. Stanecki.
Pola	30.13	765.4	30.25	768.3	48.9	9.4	44	w.			1		0			0	0	foggy	I. R. Hydrographic Office.
Szathmar	29.78	759.5	30.25	768.4	29.8	— 1.2	71	e.			2		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.00	761.9	30.29	769.4	35.2	1.8	67	calm			0		3			0	0		Karl Stancel.
Trieste	30.15	765.8	30.25	768.4	52.9	11.6	23	calm			0		0			0	0		Rieder.
Vienna	29.63	752.6	30.39	771.8	33.8	1.0	62	nw.			3		0			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.39	771.9	30.49	774.4	45.8	7.7	80	wsw.	4	1.8			6			0.040	1.0	drizzling	W. Boswell.
Armagh, Observatory	30.28	769.1	30.52	775.2	44.4	6.9	88	s.	1	0.4			10					overcast	S. Gall.
Bidston, Liverpool Obs'y			30.52	775.2	43.0	6.1	85	sse.	3	1.3			10					misty	John Hartnup.
Bolton, Sharples	29.96	761.0	30.51	774.9	40.3	4.6	97	nnw.					10					foggy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.08	764.0	30.48	774.2	45.3	7.4	85	s.			1		10			0	0	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.04	763.0	30.07	763.8	81.0	27.2	66	ne.			3		3					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			30.51	774.9	39.6	4.2	90	sw.			0.4		10					foggy	John McLaren.
Chatham, School M. E.	30.40	772.1	30.53	775.4	40.1	4.5	87	nw.			1		10					foggy	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.24	768.1	30.47	773.9	42.3	5.7	71	ese.			4		10					foggy	The Staff.
Fort Napier, Natal	27.74	704.6	29.90	761.0	78.2	25.7	38	calm			0		3					blue sky	Pvt. E. K. Annss, A. H. C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	88.0	31.1	69	nw.			1		3						Sergt. John Robinson.
Galway, Queen's College			30.42	772.7	47	8.3	77	s.			2		8					overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.26	768.6	30.32	770.1	59.4	15.2	87	ne.			2		7					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.30	769.6	30.50	774.7	42.6	5.9	83	nnw.			1		5 k					d. clouds.	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.35	770.9	30.53	775.4	36.5	2.5	90	nw.			1		10					foggy	The Staff.
Guernsey	30.17	766.3	30.48	774.2	34.0	1.1	90	ene.			3		7					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.50	774.7	30.54	775.7	40.0	4.4	77	se.	3	1.3			9					misty	The Staff.
Leicester, Museum	30.20	767.1	30.46	773.7	42.9	6.1	92	sw.			1		10					foggy	J. C. Smith.
Malta, Mediterranean	30.15	765.8	30.23	767.8	56.4	13.6	66	nw.			2		8					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.27	768.8	30.32	770.1	69.0	20.6	70	ne.			3		6					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.98	761.5	30.52	775.2	43.0	6.1	92	wnw.			0-1		10					overcast	John Mac Emall.
Oxford, Radcliffe Obs'y	30.30	769.6	30.53	775.4	34.1	1.2	96	calm			0		10					foggy	The Staff.
Plymouth	30.41	772.4	30.49	774.4	39.9	4.4	77	se.			2		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.48	774.2	43.2	6.2	98	calm	0	0			6					d. clouds	Rev. C. Clouston, L. L.D
Scutari Cemetery, Turkey	30.21	767.3	30.28	769.1	35.8	2.1	82	ne.			1		8					d. clouds	W. H. Lyne.
Sheffield	30.24	768.1	30.54	775.7	42.7	5.9	94	calm			0		10			0	0	foggy	W. F. Cooper.
Silloth Rectory	30.48	774.2	30.51	774.9	45.7	7.6	95	nw.			1		8			0	0	misty	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.52	775.2	42.3	5.7	93	sw.	1	0.4			10					foggy	I. New.
Stratfield Turgiss	30.31	769.9	30.54	775.7	39.6	4.2	87	se.			1.0		10					foggy	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.38	771.6	30.46	773.7	42	5.6	65	e.			6		10					gloomy	W. Newcombe.
Valencia, Observatory	30.43	772.9	30.46	773.7	49.1	9.5	68	se.	8	3.6			10					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Co mmission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.00	762.0	30.03	762.7	73.0	22.8	94	e.	12.4	5.5		0	1 k			0.060	1.5	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.99	761.7	30.02	762.5	87.0	30.6	35	nw.	17	7.6		0	0			0.110	2.8		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.													10 s						Hon. J. Ferguson.
Charlottetown, P. E. Island	29.62	752.3	29.67	753.6	8	—13.3	98	nw.	9	4.0			10 s			1.700	43.2	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	29.71	754.6	29.78	756.4	4	—15.6	91	w.	5	2.2			10 s		w.	0.21	5.3	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.89	759.2	29.91	759.7	— 4	—20.0	83	nnw.	15	6.7		5 k	5 s	calm	calm	0.02	0.5	cloudy	J. McWilliams.
Fort Garry, Manitoba*	28.95	735.3	29.83	757.7	17	— 8.3	100	se.	2	0.9			10 n			0.050	1.3	light snow	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	29.59	751.6	29.73	755.1	11	—11.7	91	nw.	10	4.5			10 s			0.93	23.6	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.79	756.7	30.15	765.8	16	— 8.9	87	sw.	4	1.8			10 s		nw.	0.07	1.8	threatening.	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.84	757.9	30.06	763.5	9	—12.8	80	w.	19	8.5			10 ks		nw.	0.07	1.8	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.43	747.5	30.21	767.3	2	—16.7	72	calm	0	0		0	0			0	0	clear	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.50	749.3	30.23	767.8	26	— 3.3	88	nw.	2	0.9		10 k	0	nw.		0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.50	749.3	30.20	767.1	17	— 8.3	83	w.	6	2.7		0	0			0.020	0.5	clear	M. Payne.
Quebec, Quebec*	29.56	750.8	29.92	760.0	3	—16.1	100	w.			5		10 n		w.	0.06	1.5	light snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.63	752.6	30.13	765.3	10	—12.2	80	nw.	4	1.8		8 cs	0	nw.		0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.40	746.7	30.16	766.1	23	— 5.0	96	ne.	6	2.7			10 ks			0.01	0.3	cloudy	
St. Andrews, N. B.	29.79	756.7	29.85	758.2	5	—15.0	92	nnw.	5	2.2			hz			1.00	25.4	cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.37	746.0	29.43	747.5	10	—12.2	91	nw.	12	5.4			10 n			0.60	15.2	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.79	756.7	30.20	767.1	22	— 5.6	84	w.	3	1.3			10 ks		w.	0	0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.76	755.9	29.83	757.7	17	— 8.3	73	n.	9	4.0			10 n			0.85	21.6	heavy snow	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.30	744.2	29.56	750.8	17	— 8.3		ne.	5	2.2			10			0	0		John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.43	772.9	30.72	780.3	39.8	4.3	76	calm			0		10			0	0		N. Titoushkin.
Sung-shu-chwang†	24.92	632.9			23.5	4.7		calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.48	774.2	30.50	774.8	33.6	0.9	80	nw.	1.3	0.6			5			0	0	cloudy	M. Marc Dechevrens, S.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.18	766.6	30.23	767.8	38.7	3.7	82	nw.	14.5	6.5			5						Oversergent Fischer.
Fanöe	30.33	770.3	30.35	770.8	39.7	4.3	100	w.			4		10					foggy	Overloerer Lauridsen.
Godthaab, Greenland	29.24	742.7	29.28	743.8	18.1	—7.7	95	ene.			3		10						S. Kleinschmidt.
Stykkisholm, Iceland	30.10	764.5	30.14	765.6	24.1	—4.4		e.			6		8						A. O. Thorlacius.
Thorshavn	30.47	773.8	30.50	774.7	32.9	0.5	92	e.	13	6			10					snowing	Overloerer Bergh.
Vestervig	30.20	767.1	30.29	769.4	42.4	5.8	84	wnw.			4		2						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.52	749.8	30.18	766.6	46.4	8	89	nw.			1		fg			0	0	foggy	M. Labroue, Director.
Alençon, Normal School	29.94	760.4	30.49	774.4	32.0	0	93	ne.			2		fg			0	0	foggy	M. Nicot, Director.
Arras, Engineer School	30.22	767.6	30.49	774.5	38.7	3.7	91	e.			1		k			0	0		M. Klein, Commandant.
Avignon, Normal School	30.21	767.3	30.29	769.3	37.4	3	50	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.87	758.6	30.46	773.6	33.4	0.8	89	se.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.24	768.1	30.53	775.4	36.3	2.4	79	ne			1		8		ene.	0	0	very cloudy	M. Frère Eugène Marié.
Besançon, Normal School			30.38	771.6	28.4	—2	92	ne.			1		10		ne.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.11	764.7	30.39	771.8	30.4	—0.9	98	nne.			1		10			0	0	covered	M. Rayet, Director.
Bourges, Normal School	29.85	758.2	30.45	773.4	24.3	—4.3	91	nne.			1		n		nne.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.20	767.0	30.44	773.1	39.6	4.2	80	se.			1		6		se.	0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.43	772.8	30.50	774.8	34.2	1.2	81	ese.			1		10			0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N. Sch'l	30.08	763.9	30.41	772.5	33.4	0.8	77	sw.			2		0			0	0	clear	M. Jadot, Director.
Charleville, Normal School	29.94	760.5	30.48	774.3	35.2	1.8	53	ne.			1		10		nw.	0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.98	736.1	30.45	773.3	24.1	—4.4	92	sw.			1		10			0	0	foggy	M. Allnard, Director.
Cluny, Normal School	29.52	749.9	30.41	772.4	23.0	—5	100	n.			1		fg			0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.55	750.6	30.47	774.0	29.3	—1.5	90	ne.			2		10 n	ne.	ne.	0	0	covered	Dr. Coulet, Director.
Gap, Normal School	27.66	702.5	30.26	768.5	47.1	8.4	96	nw.			2					0	0		M. Jeanginard, Director.
Gréasque, du. Rhone	29.10	739.0	30.24	768.1	52.3	11.3	43	ne.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.58	751.4	30.40	772.2	30.4	—0.9	96	ene.			1		10			0	0	covered	M. Ablard, Director.
Guéret, Normal School	28.73	729.7	30.43	773.0	22.1	—5.5	80	se.			1		10			0	0	foggy	M. Rivoire, Director.
Lamballe, Normal School	30.19	766.7	30.48	774.3	27.0	—2.8	96	e.			2		10		e.	0	0	covered	M. Ollitrault, Director.
Lescar, Normal School	29.75	755.6	30.32	770.2	49.3	9.6	86	n.			1		k			0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.39	771.9	30.49	774.5	28.4	—2.0	100	se.			1		fg			0	0	foggy	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.34	745.3	30.48	774.2	22.8	—5.1	92	nnw.			1		fg			0	0	light fog	M. André, Director.
Mans, Normal School	30.09	764.2	30.42	772.6	30.2	—1	61	ne.			4		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	29.99	761.8	30.27	768.8	54.7	12.6	51	ssw.			1		0			0	0	clear	M. Stephan, Director.
Montlouis l'Instituteur	24.94	633.4	29.78	756.4	37.4	3.0	43	sw.	5.6	2.5			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.16	766.1	30.28	769.0	47.1	8.4	52	nne.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.64	752.8	30.48	774.1	28.8	—1.8	88	nw.					1c kn			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.32	770.0	30.48	774.1	29.1	—1.6	89	ne.			1-2		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.18	766.5	30.29	769.3	53.2	11.8	55	se.	3.8	1.7			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.25	539.7			19.6	—6.9		e.			1		1		e.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.24	742.8	30.37	771.4	29.7	—1.3		s.			1		2			0	0	slightly cl'dy	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.28	642.2			32.5	0.3	56	wsw.			2		0			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.37	771.4	30.40	772.2	32.0	0.0	79	ne.			2		2		e.	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.13	765.3	30.37	771.3	28.4	—2	100	ne.			1		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	28.11	713.9	30.32	770.2	41.0	5	47	w.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.47	774.0	30.52	775.2	36.3	2.4	96	e.			3		8			0	0	very cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.35	770.8	30.50	774.8	30.0	—1.1	63	e.			3		10		e.	0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.30	769.7	30.47	773.9	33.4	0.8	81	n.			1		10		ene.	0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.62	752.4	30.35	770.9	48.6	9.2	71	nw.			1		1		w.	0	0	clear	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.96	760.9	30.45	773.4	28.8	—1.8	88	ne.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.19	766.8	30.48	774.2	33.4	0.8	85	nne.			1		10			Inap.	Inap.	misty	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.59	751.5	30.45	773.5	31.1	— 0.5	77	se.			1	0	8 ks			0	0		Prof. Dr. Hoh.
Berlin	30.17	766.4	30.30	771.1	34.9	1.6	94	nw.			1		10			0.008	0.2		Prof. Dr. Arndt.
Breslau	29.79	756.6	30.32	770.2	32.2	0.1	90	w.			2		10					showery	Royal University Obs'y.
Carlsruhe	30.02	762.5	30.49	774.5	31.8	— 0.1	84	ne.			1		10	ne.		0	0		Albert Senz.
Cassel	29.70	754.4	30.41	772.5	34.5	1.4	78	s.			1		10			0	0		Dr. H. Möhl.
Frankfort on the Main	30.10	764.5	30.49	774.4	37.6	3.1	53	nw.			1		9			0	0		Physical Society.
Friedrichshafen	28.92	734.5	30.44	773.2	30.2	— 1.0	68	se.			2		8	ne.		0	0		Wilhelm, Chief Tel.
Hamburg	30.32	770.0	30.41	772.4	36.3	2.4	96	wsw.			3		8			0.008	0.2	light fog	E. Preller.
Kiel	30.34	770.6	30.35	771.0	39.6	4.2	93	w.			2		3			0.024	0.6		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.00	762.1	30.45	773.3	36.3	2.4	72	w.			1		9	wnw.		0.020	0.5		H. Leppig, Asst.
Magdeburg	30.21	767.4	30.41	772.5	37.2	2.9	80	w.			2		10 ks			0	0		Dr. Assmann.
Memel	30.02	762.6	30.07	763.8	35.6	2.0	91	wnw.			5		10 s						Issermann.
Munich	28.53	724.7	30.42	772.6	23.9	— 4.5	87	ne.			1		0			0	0		Central Station.
Neufahrwasser	30.15	765.7	30.16	766.1	36.9	2.7	84	nw.			2		10			0.016	0.4		A. Lothes.
Neustadt, Palatinate	29.94	760.4	30.47	773.9	30.6	— 0.8		e.			3		10	w.		0	0		Dicknether.
Stuttgart	29.48	748.8	30.43	773.0	30.6	— 0.8	96	n.			1		10			0	0		Prof. Dr. Schoder.
Wustrow	30.31	769.9	30.34	770.6	35.8	2.1	93	wnw.			4	0	3s			0	0		Profs. Brandes & Reimer.
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.89	759.1	30.29	769.4	45.0	7.2		ne.			2.0		7 k			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.97	761.3	30.02	762.6	79.0	26.1	73	wsw.	17	7.6			2			0	0	d. clouds	
Deesa	29.49	749.0	29.96	761.0	86.3	30.2	27	nnw.	8.1	3.6			2	nnw.		0	0	d. clouds	
Bombay	29.91	759.8	29.95	760.8	82.9	28.3	61	w.	6	2.7			0			0	0	blue sky	
Poona, Yarrowda.	28.06	712.6	29.88	759.0	88.3	31.3	25	nw.	7	3.1			0			0	0	blue sky	
Belgaum	27.38	695.6	29.88	759.1	85.1	29.5	23	ne.	6	2.7			0			0	0	blue sky	
Lahore	29.34	745.3	30.11	764.8	67.7	19.8	47	w.	1.4	0.6			3			0	0	blue sky	
Roorkee	29.12	739.7	30.05	763.3	67.0	19.4	60	nw.	0.7	0.3			2			0	0		
Agra	29.51	749.5	30.09	764.3	71.2	21.8	28	w.	1.2	0.5						0	0		
Nagpur	28.93	734.9	29.97	761.3	83.2	28.4	21	n.	2.8	1.2			0			0	0	blue sky	
Jubbulpore	28.68	728.4	30.07	763.8	68.2	20.1	20	calm	1.5	0.7			0			0	0	blue sky	
Lucknow	29.67	753.6	30.05	763.3	75.2	24.0	26	calm	0.6	0.3			0			0	0	blue sky	
Allahabad	29.74	755.3	30.06	763.5	68.0	20.0	50	calm	0.5	0.2			0			0	0	blue sky	
Patna	29.86	758.4	30.05	763.3	68.2	20.1	58	nw.	2.1	0.9			2	nw	nw.	0	0		
Hazaribagh	27.99	710.9	30.04	763.1	69.8	21.0	22	nw.	4.0	1.8			0			0	0	blue sky	
Cuttack	29.93	760.2	30.01	762.3	79.2	26.2	57	s.	0.8	0.4			2			0	0	d. clouds	
Calcutta, Alipore	30.01	762.2	30.03	762.8	74.0	23.3	36	nnw.	2.0	0.9			0			0	0	blue sky	
Dhubri	29.90	759.3	30.02	762.5	70.8	21.6	53	calm	1.4	0.6			0			0	0	blue sky	
Chittagong	29.93	760.3	30.03	762.7	67.6	19.8	62	w.	2.7	1.2			0			0	0	blue sky	
Sibsagar	29.70	754.3	30.05	763.2	64.7	18.2	79	ne.	2.4	1.1			0			0	0	blue sky	
Jeypore	28.57	725.7	30.04	762.9	75.2	24.0	28	e.	3.3	1.5			0			0	0	blue sky	
Zanzibar, Africa	29.84	757.9			83.7	28.7	76	nnw.	7.9	3.5			2			0	0	d. clouds	
Trichinopoly	29.72	754.9			84.0	28.9	43	ene.	1	0.4			0			0	0	blue sky	
Bellary	28.46	722.9			86.2	30.1	29	e.	6.3	2.8			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.84	758.0	30.27	768.8	49.6	9.8	11	e.	1.3	0.6			1			0	0		Prof. Giovanni Clodig.
Milan	29.75	755.7	30.26	768.7	41.9	5.5	68	e.	0	0			5			0	0		Prof. Schiaparelli.
Padua	30.16	766.1	30.28	769.0	44.6	7.0	26	n.	1.8	0.8			2			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.34	745.1	30.29	769.3	41.4	5.2	57	ne.	1.8	0.8			0			0	0		Prof. P. F. Denza.
Genoa	30.06	763.5	30.26	768.6	52.9	11.6	55	sw.	1.3	0.6			2	e.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.29	718.6	30.32	770.1	41.0	5.0	37	1 e.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.24	768.0	30.29	769.3	44.6	7.0	63	n.	6.3	2.8			4			0	0		Prof. Luigi Guidi.
Florence	30.00	762.1	30.27	768.9	42.8	6.0	56	n.			2		10			0	0		Prof. Costantino Pitter.
Leghorn	30.12	765 0	30.21	767.3	48.0	8.9	69	ne.	11.9	5.3			2			0	0		Prof. P. Monte.
Rome	30.07	763.8	30.25	768.4	48.6	9.2	37	nw.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	29.97	761.2	30.23	767.8	52.2	11.2	59	nw.	7.4	3.3			5	w.		0	0		Prof. C. de Giorgi.
Cosenza	29.33	744.9	30.26	768.5	51.1	10.6	75	se.	2.5	1.1			3	s.		0	0		Prof. D. Conti.
Cagliari	30.02	762.4	30.21	767.4	54.9	12.7	40	calm			0		3			0	0		Prof. A. Pacinotti.
Palermo	30.00	762.1	30.26	768.7	54.1	12.3	50	ne.	0.7	0.3			6			0	0		Prof. G. Ciacciatore.
Syracuse	30.18	766.6	30.23	767.8	52.9	11.6	64	e.	3.8	1.7			4	w.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.70	754.3	30.24	768.0	50.9	10.5	57	se.	0.7	0.3			1	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.20	564.0			23.9	— 4.5	26	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.26	565.4			27.7	— 2.4	13	se.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.07	763.8	30.11	764.8	35.0	1.7	90	e.	1.7	0.8			10 n			0.692	17.6	light rain	
Hakodate	30.09	764.3	30.10	764.5	40.0	4.4	92	se.	9.0	4.0			10			0.943	24.0	raining	
Hiroshima, I. M. Obs'y	30.19	766.8	30.20	767.1	40.1	4.5	67	ne.	4.0	1.8		ck	2 ks		n.	0	0	clear	K. Sasaki.
Kanazawa	30.06	763.5	30.17	766.3	41.2	5.1	96	n.	2.9	1.3			10 n			0.610	15.5	light rain	S. Endo.
Kioto	29.93	760.2	30.11	764.8	41.6	5.3	81	wnw.	8.9	4.0		ck	3 s; n		n.	0.060	1.5	fair	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.03	762.7	30.24	768.1	41.6	5.3	73	ne.	2.9	1.3		0	0			0	0	clear	S. Takehaya-hi.
Niigata	30.08	764.0	30.12	765.0	38.0	3.3	95	se.	4.0	1.8			10 n			0.660	16.8	raining	
Nobiru	30.04	763.0	30.05	763.3	41.9	5.5	97	nnw.	13.1	5.9			10 n			1.480	37.6	raining	H. Midzushina.
Sapporo					35.0	1.7	90	se.	16.8	7.5			10					snowing	
Tokei Obs'y, Yeddo	29.86	758.4	29.93	760.2	43.9	6.6	94	nnw.	14.6	6.5			10 n			1.560	39.6	raining	The Staff.
Wakayama	30.08	764.0	30.13	765.3	44.0	6.7	71	nnw.	11.7	5.2		ck	10 ks		n.	0.005	0.1	cloudy	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			
Mazatlan	24.46	621.1	30.33	770.4	45.1	7.3	82	nnw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mexico, Central Obs'y	29.82	757.5	30.09	764.2	65.0	18.3	81	ne.	0.9	0.4		0	0			0	0	clear	F. Quijano, C. E.
Morelia	23.14	587.7	30.31	769.9	46.0	7.8	76	calm	0	0		0	0			0	0	very fine	The Staff.
Pabellon, Aguascalientes	24.39	619.6	30.63	778.2	51.1	10.6	69	s.			5	1 c	2 k	s.	s.	0	0		M. Tena, M. D.
Puebla, Catholic Institute	23.99	609.3	30.10	764.5	46.8	8.2	73	calm			0	0	0			0	0	fine	M. Y de Leon, M. E.
San Luis Potosi	23.44	595.4	30.38	771.6	41.0	5.0	88	calm	0	0		0	0			0	0	fine	Prof. P. Spina.
Tlacotalpam	24.17	614.0	30.29	769.4	49.6	9.8	52	sw.			1	2	0	w.		0	0	clear	G. Barroeta, M. D.
Vera Cruz																			Prof. M. Cházaro.
Zacatecas																			Prof. J. Rossell.
	22.53	572.2	30.26	768.6	46.1	7.8	78	wsw.	5.4	2.4		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.74	755.4	29.93	760.2	77.8	25.4	82	e.	21.0	9.4			10 n;ks;		e.	0.79	20.1	overcast	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.52	775.3	30.52	775.3	39.0	3.9		nnw.			2					0	0		
Groningen	30.42	772.6	30.47	774.0	39.7	4.3		wnw.			1					0	0		
Helder	30.48	774.3	30.48	774.3	41.7	5.4		w.			1					0	0		
Hellevoetsluis	30.50	774.6	30.50	774.6	39.2	4.0	95	sw.			1					0	0		
Utrecht	30.47	774.0	30.52	775.2	37.2	2.9	97	ssw.			2		mist			0.008	0.2	misty	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.24	768.2	30.31	769.8	36.3	2.4	57	n.	25	11			8			0.142	3.6		
Brono	29.98	761.6	30.02	762.6	18.7	— 7.4	83	nnw.	36	16			10			0.047	1.2	snowing	
Christiania	29.89	739.3	30.04	763.1	39.7	4.3	54	ese.	2	1			4			0	0		
Gjæsvær	29.32	744.8	29.35	745.4	14.5	— 9.7		nw.			7		10						
Lodingen	29.80	756.9	29.85	758.1	9.7	—12.4	70	nnw.			2		10			0.154	3.9	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					54.7	12.6	83	nw.	9.4	4.2			3			0.220	5.6		Dr. J. A. Sampaio.
Campo Major	29.30	744.1	30.31	769.8	58.6	14.8	52	ese.	0.7	0.3			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.18	766.6	30.27	768.9	62.8	17.1	60	se.	3.8	1.7			1			0	0		Capt. D. A. de Oanha.
Lisbon, Observatory	29.98	761.4	30.35	770.8	51.3	10.7	71	ne.	6.9	3.1			1			0	0		The Staff.
Ponta Delgada, Azores	29.97	761.3	30.04	763.1	56.1	13.4	80	nw.	6.9	3.1			3			0.425	10.8		
Saint Paul de Loando	29.68	753.8	29.88	758.9	81.5	27.5	84	wsw.	1.3	0.6			2	s.		0	0		
Serra da Estrella	25.45	646.5	30.30	759.5	41.0	5.0	69	ese.	6.3	2.8			4			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.52	724.5	29.67	753.5	17.1	— 8.3		sw.	27	12			10 n			0.012	0.3		Major K. Lasarew.
Archangel	29.32	744.8	29.34	745.3	10.0	—12.2	89	ese.	9	4			10			0.087	2.2	snowing	Capt. Sseliwerstow.
Astrakhan	30.05	763.2	29.97	761.1	12.6	—10.8	79	sw	11	5			10 ks			blank	blank		Capt. Wisganow.
Barnaul	29.32	744.8	29.85	758.2	21.9	— 5.6	75	sw.	22	10			0			0	0		Meteorological Obs'y.
Dorpat	29.47	748.5	29.72	754.9	28.8	— 1.8	84	sw.	16	7		0	8 n			0.059	1.5		Observatory.
Ekaterinburg	28.44	722.4	29.46	748.2	15.6	— 9.1	88	wsw.	18	8			10					light snow	Meteorological Obs'y.
Kasan	29.58	751.2	29.86	758.4	24.8	— 4.0	56	calm	0	0			9			0	0		Observatory.
Kertch	30.11	764.9	30.13	765.4	25.0	— 3.9	75	wnw.	4	2		0	8 n			0	0		Lagorio & Sastyrez.
Kieff	29.34	745.3	30.02	762.4	27.3	— 2.6	85	wnw.	7	3			10ks;n			0.008	0.2		Observatory.
Lugan	29.80	756.9	30.02	762.5	21.2	— 6.0	79	w.	9	4			10			0	0		Meteorological Obs'y.
Moscow	29.41	747.0	29.91	759.8	28.0	— 2.2	69	ssw.	4	2		0	7 ks			0	0		Meteorological Obs'y.
Nikolajev	30.13	765.2	30.20	767.0	24.8	— 4.0	68	wsw.	9	4			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	30.21	767.3	30.35	770.9	30.6	— 0.8	70	calm	0	0		0	3 k			0	0		Physical Observatory.
St. Petersburg	29.54	750.3	29.56	750.7	28.4	— 2.0	66	sw.	20	9			10 n			0.012	0.3		Central Physical Obs'y.
Tashkend, Laboratory	28.35	720.0	29.97	761.2	39.0	3.9	97	calm	0	0			10			0.043	1.1	light clouds	Teich, A. M.
Tiflis	28.67	728.1	30.16	766.0	32.2	0.1	53	nw.	9	4		5 ck	0			0	0		Physical Observatory.
Vladivostok	30.49?	774.5?	30.56?	776.2?	11.1	—11.6	70	n.	4	2		0	0			0	0		
Warsaw	29.74	755.4	30.19	766.7	31.5	— 0.3	94	w.	11	5			10 ks						Astronomical Obs'y.
Wilna	29.60	751.8	30.04	762.9	33.6	0.9	90	w.	4	2			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.41	747.0	29.71	754.7	16.7	— 8.5	88	s.	9	4			10			0.028	0.7	snowing	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.46	773.7	49	9.4	93	s.			3		10			0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.17	766.3	30.28	769.0	53.2	11.8	73	se.	0.7	0.3			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.29	769.3	30.35	770.8	58.6	14.8	64	nw.	1.6	0.7		3	4	nw.		0	0	cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.30	693.5	30.37	771.4	45.5	7.3	59	sw.	3.6	1.6		1	1	ne.		0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.05	712.4	30.33	770.4	50.0	10.0	65	calm	2.2	1.0		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.17	766.3	30.32	770.2	56.5	13.6	67	sw.	1.3	0.6		0	1			0	0	almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.34	745.2	30.24	768.2	56.3	13.5	62	calm	0	0		0	1			0	0	almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.14	765.6	30.21	767.3	71.7	22.1	69	ene.	8.1	3.6			10ks;s		ene.	0	0	cloudy	Benito Vines, S. J.
Manilla, Philippine Islands	30.02	762.6	30.08	764.1	76.8	24.9	76	ese.	7.7	3.4			9 kn		ene.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.23	767.9	30.34	770.5	59.7	15.4	58	calm	0	0		0	5		e.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.06	763.6	30.15	765.9	69.8	21.0	98	calm	0	0		0	3 kn		se.	0.079	2.0	clear	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.03	762.7	30.16	766.1	71.2	21.8	83	n.	7.2	3.2		0	6 ks		nne.	inap.	inap.	cloudy	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.54	750.4	29.58	751.4	6.1	—14.4	92	nne.			6		0			0.248	6.3		
Umea	29.63	752.7	29.69	754.0	21.2	— 6.0	54	n.			7		6			0	0		
Hernosand	29.77	756.1	29.82	757.4	25.7	— 3.5	37	nw.			8		1			0	0		
Stockholm	29.73	755.2	29.91	759.7	34.5	1.4	74	nw.			6		10			0	0		
Wisby	29.89	759.1	29.95	760.6	36.7	2.6	82	w.			6		5			0	0		
Sub-Series.																			
Upsala	29.80	757.0	29.89	759.2	32.2	0.1	37	nnw.	19.5	8.7			5			0	0		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.92	734.6	30.43	772.9	27.9	— 2.3	85	ene.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.32	770.2	34.7	1.5	71	n.	3	1.5			10		n.	0	0		The Observatory.
Valona			30.23	767.8	56.3	13.5		sw.			1		2			0	0	slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.06	763.4	55.9	13.3	73	ese.			1		2 n		sw.	0.13	3.3		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.02	762.5	30.11	764.8	17	— 8.3	80	e.	1	0.4			10 n			0.36	9.1	light snow	
Alpena, Michigan	29.50	749.3	30.21	767.3	14	—10.0	80	w.	3	1.3		0	3 s			inap.	inap.	clear	
Atlanta, Georgia	29.16	740.7	30.38	771.6	44.5	6.9	72	w.	10	4.5		0	0			0	0	clear	
Atlantic City, New Jersey	30.19	766.8	30.20	767.1	27	— 2.8	74	calm	0	0		0	2 s			0	0	clear	
Augusta, Georgia	30.19	766.8	30.39	771.9	39.3	4.1	89	calm	0	0		0	sk.			0	0	clear	
Baltimore, Maryland	30.17	766.3	30.22	767.6	33	0.6	68	calm	0	0		0	fg.			0	0	clear	
Barnegat, New Jersey	30.18	766.6	30.20	767.1	30.0	— 1.1	88	w.	6	2.7			10 s		w.	0	0	cloudy	
Bismarck, Dakota	27.78	705.6	29.76	755.9	32	0.0	71	calm	0	0		10 cs	0	calm		0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.34	694.4	30.30	769.6	21	— 6.1	91	w.	12	5.4		0	0			0	0	clear	
Boston, Massachusetts	29.87	758.7	30.03	762.7	11.0	—11.7	80	w.	8	3.6		7 k	0	w.		0.06	1.5	fair	
Brownsville, Texas	30.07	763.8	30.12	765.0	60	15.6	93	se.	6	2.7		0	0			0	0	clear	
Buffalo, New York	29.42	747.3	30.22	767.6	28.2	— 2.1	80	w.	10	4.5			10 s		w.	inap.	inap.	cloudy	
Burlington, Vermont	29.77	756.1	30.08	764.0	13.5	—10.3	82	s.	1	0.4			10 n		w.	0.04	1.0	light snow	
Cairo, Illinois	29.78	756.4	30.20	767.1	48.0	8.9	66	s.	8	3.6		0	0			0	0	clear	
Campo, California	27.35	694.7	29.99	761.7	40	4.4	92	s.	2	0.9			10 s		s.	0	0	cloudy	
Camp Thomas, Arizona	27.16	689.9	29.98	761.5	36	2.2	64	nw.			1		10 ks			0	0	cloudy	
Cape Henry, Virginia	30.24	768.1	30.26	768.6	42	5.6	50	sw.	10	4.5		0	0			0	0	clear	
Cape May, New Jersey	30.16	766.1	30.20	767.1	36	2.2	69	w.	20	8.9		0	0			0	0	clear	
Castroville, Texas	29.32	744.7	30.16	766.1	44	6.7	93	calm	0	0		0	0			0	0	clear	
Cedar Keys, Florida	30.36	771.1	30.38	771.6	46	7.8	77	n.	8	3.6		0	0			0	0	clear	
Champaign, Illinois	29.20	741.7	30.07	763.8	38.8	3.8	70	s.	17	7.6		4 c	0	w.		0	0	fair	
Charleston, S. Carolina	30.28	769.1	30.34	770.6	46	7.8	68	w.	8	3.6		0	0			0	0	clear	
Charlotte, N. Carolina	29.43	747.5	30.32	770.1	35.0	1.7	79	sw.	2	0.9		0	fg.			0	0	clear	
Chattanooga, Tennessee	29.51	749.5	30.37	771.4	39.0	3.9	82	sw.	3	1.3		0	fg		calm	0	0	clear	
Cheyenne, Wyoming	23.76	603.5	30.01	762.2	28.1	— 2.2	41	nw.	4	1.8		7 c	0	w.		0	0	fair	
Chicago, Illinois	29.31	744.5	30.06	763.5	36.0	2.2	92	se.	8	3.6		0	1 s			0	0	clear	
Chincoteague, Virginia	30.24	768.1	30.26	768.6	34	1.1	78	w.	12	5.4		0	0			0	0	clear	
Cincinnati, Ohio	29.56	750.8	30.25	768.3	38	3.3	72	se.	3	1.3		0	0			0	0	clear	
Cleveland, Ohio	29.47	748.5	30.26	768.6	28.5	— 1.9	77	sw.	5	2.2		0	0			0	0	clear	
Coleman City, Texas	28.25	717.5	30.13	765.3	39	3.9	92	s.	3	1.3		0	0			inap.	inap.	clear	
Columbus, Ohio	29.35	745.5	30.25	768.3	34	1.1	71	sw.	5	2.2		0	0			0	0	fair	
Concho, Texas	28.09	713.5	30.11	764.8	45	7.2	93	s.	16	7.2		3 c	0	sw.		0	0	fair	
Davenport, Iowa	29.24	742.7	29.94	760.5	43	6.1	60	sw.	4	1.8		4 cs	hz.	sw.	calm	0	0	clear	
Dayton, Washington T'y	28.44	722.4	30.25	768.3	24.2	— 4.3	75	sw.	2	0.9		0	0			0.49	12.4	clear	
Deadwood, Dakota	25.02	635.5	29.94	760.5	30	— 1.1	70	sw.	1	0.4		0	0			0	0	clear	
Decatur, Texas					55	12.8	69	s.	14	6.3		0	0			0	0	clear	
Delaware Breakwater, Del.	30.17	766.3	30.19	766.8	35	1.7	79	w.	15	6.7		0	0			0	0	clear	
Denison, Texas	29.28	743.7	30.12	765.0	48.2	9.0	86	s.	12	5.4		0	0			0	0	clear	
Denver, Colorado	24.47	621.5	29.99	761.7	36.3	2.4	41	s.	5	2.2		1 k	0	calm		0	0	clear	
Des Moines, Iowa	28.87	733.3	29.84	757.9	41	5.0	73	sw.	6	2.7		6 cs	0	nw.		0	0	fair	
Detroit, Michigan	29.49	749.0	30.24	768.1	32.3	0.2	78	w.	4	1.8		0	0			0	0	clear	
Dodge City, Kansas	27.13	689.1	29.87	758.7	36.5	2.5	63	sw.	9	4.0			10 s			0	0	cloudy	
Dubuque, Iowa	29.15	740.4	29.91	759.7	35.5	1.9	64	s.	3	1.3		1 cs	0	calm		0	0	clear	
Duluth, Minnesota	29.21	741.9	29.97	761.2	31	— 0.6	88	ne.	18	8.0			10 s		ne.	0	0	cloudy	
Eagle Pass, Texas	29.32	744.7	30.16	766.1	46.0	7.8	93	calm	0	0		0	0			0	0	clear	
Eagle Rock, Idaho	25.11	637.8	30.01	762.2	15	— 9.4	87	s.	20	8.9			10 s			0	0	threatening	
Eastport, Maine	29.79	756.7	29.86	758.4	4.5	—15.3	74	nw.	13	5.8		3 c	2 s	nw.		0.91	23.1	fair	
El Paso, Texas	26.22	666.0	30.10	764.5	35.4	1.9	82	calm	0	0		2 k	0	w.		0	0	clear	
Erie, Pennsylvania	29.47	748.5	30.24	768.1	28	— 2.2	77	w.	4	1.8		0	0			0.05	1.3	clear	
Escanaba, Michigan	29.45	748.0	30.17	766.3	3	—16.1	47	n.	3	1.3		3 c	0	w.		0.14	3.6	clear	
Fort Apache, Arizona	24.92	633.0	30.02	762.5	30	— 1.1	71	ne.	2	0.9		3 c	4 s	calm	calm	0	0	fair	
Fort Assinnaboine, Montana	27.15	689.6	30.19	766.8	16	— 8.9	70	nw.	5	2.2		7 c	0	sw.		0.07	1.8	fair	
Fort Bennett, Dakota	28.06	712.7	29.79	756.7	27	— 2.8	77	nw.	1	0.4		0	7 s			0	0	fair	
Fort Benton, Montana	27.23	691.6	30.23	767.8	19	— 7.2	87	ne.	8	3.6			10 s		calm	0.10	2.5	cloudy	
Fort Buford, Dakota	27.78	705.6	29.96	761.0	24	— 4.4	76	n.	8	3.6			10 s		calm	0	0	cloudy	
Fort Custer, Montana	26.54	674.1	29.90	759.4	30	— 1.1	80	nw.	16	7.2			10 s		nw.	0	0	cloudy	
Fort Davis, Texas	25.10	637.5	30.06	763.5	38	3 3	82	calm	0	0		0	0			0	0	clear	
Fort Elliott, Texas	27.08	687.8	29.98	761.5	35	1.7	48	se.	8	3.6		6 c	0	se.		0	0	fair	
Fort Gibson, Indian T'y	29.46	748.3	30.06	763.5	52.0	11.1	66	s.	18	8.0		0	0			0	0	clear	
Fort Grant, Arizona	25.16	639.1	30.02	762.5	37	2.8	75	e.	2	0.9			10 s			0	0	cloudy	
Fort Griffin, Texas	28.73	729.7	30.10	764.5	45	7.2	74	s.	15	6.7		0	0			0	0	clear	
Fort Keogh, Montana	29.25	742.9	29.93	760.2	32	0.0	65	n.	13	5.8			10 s		n.	0	0	cloudy	
Fort Macon, North Carolina	30.30	769.6	30.31	769.9	40	4.4	73	nw.	5	2.2		hz.	0	calm		0	0	clear	
Fort McKavett, Texas	27.74	704.6	30.12	765.0	46.8	8.2	86	s.	6	2.7		0	0			0	0	clear	
Fort Missoula, Montana	26.67	677.4	30.10	764.5	28	— 2.2	88	sw.	3	1.3			10 ks			0	0	cloudy	
Fort St. Michaels, Alaska	30.09	764.3	30.13	765.3	—33	—36.1	100	sw.	3	1.3		0	0			0	0	clear	
Fort Shaw, Montana	26.35	669.2	30.20	767.1	16	— 8.9	70	w.	4	1.8		6 cs	0			0.02	0.5	fair	
Fort Sill, Indian Territory	28.75	730.2	30.06	763.5	38.5	3.6	83	calm	0	0		10 c	0	w.		0	0	cloudy	
Fort Stevenson, Dakota	27.79	705.9	29.81	757.2	29	— 1.7	80	nw.	4	1.8			10 s		w.	0	0	cloudy	
Fort Verde, Arizona					38.2	3.4	73	se.			2		10 s		se.	0	0	cloudy	
Fredericksburg, Texas	28.35	720.1	30.15	765.8	52	11.1	93	s.	10	4.5		10 k	0	s.		0	0	cloudy	
Galveston, Texas	30.18	766.6	30.22	767.6	61.5	16.4	71	s.	12	5.4		0	8 s		s.	0	0	cloudy	
Grand Haven, Michigan	29.43	747.5	30.14	765.5	28.0	— 2.2	82	e.	6	2.7		9 ck	0			0	0	cloudy	
Hatteras, North Carolina	30.24	768.1	30.26	768.6	46	7.8	68	nw.	5	2.2		0	hz.			0	0	clear	
Helena, Montana	25.75	654.0	30.15	765.8	18	— 7.8	70	sw.	4	1.8			10 s		sw.	0	0	cloudy	
Henrietta, Texas	29.03	737.3	30.08	764.0	45	7.2	93	s.	12	5.4		0	0			0	0	clear	
Huron, Dakota	28.17	715.5	29.69	754.1	28.7	— 1.8	80	se.	7	3.1		5 cs	0			0	0	fair	
Indianapolis, Indiana	29.31	744.5	30.16	766.1	38	3.3	73	s.	2	0.9		2 c;hz	0	calm		0	0	clear	
Indianola, Texas	30.16	766.1	30.19	766.8	62.0	16.7	78	s.	7	3.1		8 ck	0	s.		0	0	cloudy	
Jacksboro, Texas	28.96	735.6	30.20	767.1	46	7.8	76	s.	10	4.5		2 cs	0	w.		0	0	clear	
Jacksonville, Florida	30.35	770.9	30.40	772.1	45	7.2	76	w.	2	0.9		0	fg.			0	0	clear	
Keokuk, Iowa	29.25	742.9	29.95	760.7	44.0	6.7	60	sw.	2	0.9		0	0			0	0	clear	
Key West, Florida	30.24	768.1	30.27	768.8	65.6	18.7	74	ne.	18	8.0		0	4 k;s		ne.	0	0	fair	
Kittyhawk, North Carolina	30.26	768.6	30.28	769.1	41	5.0	73	w.	11	4.9		hz.	0			0	0	clear	
Knoxville, Tennessee	29.29	744.0	30.37	771.4	33	0.6	88	sw.	1	0.4		0	sk.			0	0	clear	
La Crosse, Wisconsin	29.04	737.6	29.88	758.9	33	0.6	68	calm	0	0			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.07	662.2	30.08	764.0	36.0	2.2	82	calm	0	0		7 ck	3 s			0	0	cloudy	
Leavenworth, Kansas	28.96	735.6	29.91	759.7	47	8.3	77	s.	10	4.5		4 cs	0	sw.		0	0	fair	
Lewiston, Idaho	29.36	745.7	30.23	767.8	31.2	— 0.4	54	sw.	4	1.8		0	0			inap.	inap.	clear	
Little Rock, Arkansas	29.85	758.2	30.18	766.6	45	7.2	82	sw.	2	0.9		0	0			0	0	clear	
Los Angeles, California	29.57	751.1	29.97	761.2	44.8	7.1	93	ne.	1	0.4		0	7 s		se.	inap.	inap.	fair	
Louisville, Kentucky	29.62	752.3	30.21	767.3	44.5	6.9	68	s.	4	1.8		hz.	0	calm		0	0	clear	
Lynchburg, Virginia	29.53	750.0	30.25	768.3	42.5	5.8	42	sw.	6	2.7		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	28.92	734.6	30.01	762.2	32	0.0	69	se.	9	4.0		2 c	0	w.		0	0	clear	
Marquette, Michigan	29.36	745.7	30.14	765.5	14	—10.0	64	sw.	1	0.4		0	2 s		sw.	0.02	0.5	clear	
Mason, Texas	28.41	721.6	30.14	765.5	50.4	10.2	54	sw.	3	1.3		0	4 s		s.	0	0	fair	
Memphis, Tennessee	29.88	758.9	30.23	767.8	50	10.0	72	s.	7	3.1		0	0			0	0	clear	
Milwaukee, Wisconsin	29.26	743.2	30.06	763.5	35	1.7	79	se.	7	3.1		5 ck	fg.			0	0	fair	
Mobile, Alabama	30.32	770.1	30.36	771.1	42.0	5.6	93	calm	0	0		0	0			0	0	clear	

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	30.12	765.0	30.36	771.1	41.5	5.3	82	calm	0	0		0	hz			0	0	clear	
Moorhead, Minnesota	28.68	728.5	29.78	756.4	30	— 1.1	88	se.	10	4.5			10 s			0	0	cloudy	
Morgantown, W. Virginia	29.26	743.2	30.33	770.4	26.5	— 3.1	64	calm	0	0		0	fg			0.04	1.0	clear	
Mt. Washington, N. H	23.15	588.0	29.77	756.1	—11.5	—24.2	84	nw.	70	31.2			fg		nw.	0.57	14.5	light fog	
Nashville, Tennessee	29.71	754.6	30.27	768.8	38.3	3.5	78	w.	1	0.4		0	0			0	0	clear	
New Haven, Connecticut	29.98	761.5	30.10	764.5	19	— 7.2	76	nw.	4	1.8		2 c	0	w.		inap.	inap.	clear	
New London, Connecticut	30.09	764.3	30.14	765.5	27	— 2.8	77	nw.	4	1.8			10 s		calm	0.10	2.5	cloudy	
New Orleans, Louisiana	30.27	768.8	30.33	770.4	48.0	8.9	77	e.	4	1.8		0	0			0	0	clear	
Newport, Rhode Island	30.01	762.2	30.06	763.5	26.6	— 3.0	72	w.	14	6.3			10 ks		w.	0.05	1.3	cloudy	
New River, N. Carolina					41	5.0	65	sw.			1	0	0			0	0	clear	
New Shoreham, Rhode I'd	30.04	763.0	30.07	763.8	29.0	— 1.7	77	w.	8	3.6		0	7 k		w.	0.05	1.3	fair	
New York, New York	29.96	761.0	30.14	765.5	23	— 5.0	80	sw.	3	1.3		0	3 s			0	0	clear	
Norfolk, Virginia	30.24	768.1	30.27	768.8	42	5.6	50	nw.	7	3.1		0	0			0	0	clear	
North Platte, Nebraska	26.77	679.9	29.87	758.7	31.6	— 0.2	82	w.	8	3.6			10 s			0	0	cloudy	
Olympia, Washington T'y	30.27	768.8	30.31	769.9	27.0	— 2.8	88	s.	2	0.9		0	0			0	0	clear	
Omaha, Nebraska	28.55	725.2	29.82	757.4	43.2	6.2	68	s.	10	4.5		2 c	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.52	749.8	29.54	750.3	— 4.2	—20.1	86	wsw.	22	9.8			10 s			0	0	cloudy	
Oswego, New York	29.81	757.2	30.16	766.1	23.0	— 5.0	73	n.	9	4.0			10 s		nw.	0.07	1.8	cloudy	
Palestine, Texas	29.64	752.8	30.22	767.6	52	11.1	80	s.	8	3.6		0	8 ks		s.	0	0	cloudy	
Pensacola, Florida	30.35	770.9	30.38	771.6	40.0	4.4	86	sw.	3	1.3		1 cs	0			0	0	clear	
Philadelphia, Pa	30.08	764 0	30.19	766.8	33	0.6	78	sw.	2	0.9		5 k	3 s	nw.	w.	0	0	cloudy	
Pike's Peak, Colorado	17.39	441.7	30.11	764.8	7	—13.9	61	sw.	18	8.0		0	0			0	0	clear	
Pioche, Nevada	23.75	603.2	29.91	759.7	29	— 1.7	61	s.	7	3.1		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.44	747.8	30.30	769.6	31.6	— 0.2	78	nw.	3	1.3			10 s			0.08	2.0	cloudy	
Port Eads, Louisiana	30.33	770.4	30.34	770.6	50.8	10.4	83	ne.	8	3.6		0	0			0	0	clear	
Port Huron, Michigan	29.51	749.5	30.24	768.1	22.5	— 5.3	72	sw.	1	0.4		0	sk			0.06	1.5	clear	
Portland, Maine	29.93	760.2	29.98	761.5	12	—11.1	80	nw.	2	0.9		0	2 s		calm	0.85	21.6	clear	
Portland, Oregon	30.27	768.8	30.34	770.6	30.0	— 1.1	88	calm	0	0		3 k	0	calm		0.13	3.3	clear	
Portsmouth, N. Carolina					46	7.8	60	nw.	9	4.0		0	0			0	0	clear	
Prescott, Arizona	24.57	624.1	29.93	760.2	41	5.0	70	sw.	12	5.4		0	6 s		sw.	0	0	fair	
Punta Rassa, Florida	30.32	770.1	30.32	770.1	52	11.1	49	ne.	10	4.5		0	0			0	0	clear	
Red Bluff, California	29.81	757.2	30.19	766.8	39.2	4.0	37	n.	21	9.4		0	0			0	0	clear	
Rio Grande City, Texas	29.97	761.2	30.22	767.6	45	7.2	83	se.	3	1.3		0	0			0	0	clear	
Rochester, New York	29.48	748.8	30.20	767.1	23	— 5.0	88	w.	1	0.4			10 n		w.	0.02	0.5	light snow	
Roseburg, Oregon	29.81	757 2	30.38	771.6	25.5	— 3.6	86	calm	0	0		0	0			0.15	3.8	clear	
Sacramento, California	29.97	761.2	30.05	763.3	42.4	5.8	58	n.	16	7.2		0	6 s		n.	0	0	fair	
St. Louis, Missouri	29.44	747.8	30.08	764.0	45.3	7.4	67	s.	12	5.4		1 c	0			0	0	clear	
St. Paul, Minnesota	28.88	733.5	29.82	757.4	32.0	0.0	78	se.	14	6.3			10 s		se.	0	0	cloudy	
St. Vincent, Minnesota	28.88	733.5	29.85	758.2	17	— 8.3	83	se.	3	1.3			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.32	643.1	29.88	758.9	27	— 2.8	47	calm	0	0			10 s			0	0	cloudy	
San Antonio, Texas	29.43	747.5	30.15	765.8	45.6	7.6	93	ne.	1	0.4		2 k	0			0	0	clear	
San Diego, California	29.91	759.7	29.98	761.5	52.0	11.1	83	sw.	8	3.6		6 k	4 s	s.		0	0	cloudy	
Sandusky, Ohio	29.51	749.5	30.23	767.8	32	0.0	78	w	8	3.6		0	0			0.02	0.5	clear	
Sandy Hook, New Jersey	30.11	764.8	30.15	765.8	28.5	— 1.9	88	nw.	10	4.5		0	0			0	0	clear	
San Francisco, California	30.03	762.7	30.10	764.5	43	6.1	60	nw.	9	4.0		0	0			0	0	clear	
Santa Fé, New Mexico	23.12	587.2	30.16	766.1	28	— 2.2	51	se.	3	1.3		10 c	0	w.		0	0	cloudy	
Savannah, Georgia	30.29	769.4	30.38	771.6	47	8.3	61	sw.	6	2.7		0	0			0	0	clear	
Shreveport, Louisiana	29.99	761.7	30.24	768.1	47	8.3	86	s.	3	1.3		2 k	3 s	s.		0	0	fair	
Silver City, New Mexico	24.17	613.9	30.02	762.5	37	2.8	75	calm	0	0		5 cs	5 s	sw.	sw.	0	0	cloudy	
Sitka, Alaska	28.96	735.6	29.03	737.3	37.6	3.1	87	se.	32	14.3			10 n		se.	0.55	14.0	sleeting	
Smithville, North Carolina	30.30	769.6	30.34	770.6	42	5.6	65	nw.	5	2.2		0	0			0	0	clear	
Spokane Falls, Wash. Ter.	28.09	713.5	30.22	767.6	8	—13.3	80	w.	3	1.3		0	0			0	0	clear	
Springfield, Illinois	29.33	745.0	30.06	763.5	41	5.0	65	s.	11	4.9		5 c	0	w.		0	0	fair	
Springfield, Massachusetts	29.94	760.5	30.08	764.0	20.2	— 6.6	83	s.	3	1.3		9 k	0	w.		0.03	0.8	cloudy	
Springfield, Mo	28.58	725.9	30.16	766.1	47	8.3	66	s.	13	5.8		3 c	0	sw.		0	0	clear	
Stockton, Texas	26.96	684.8	30.09	764.3	37.8	3.2	100	s.	4	1.8		0	8 s		s.	0	0	cloudy	
Thatcher's Island, Mass	29.98	761.5	30.04	763.0	14.0	—10.0	80	nw.	13	5.8		0	0			0.10	2.5	clear	
Toledo, Ohio	29.46	748.3	30.20	767.1	30.5	— 0.8	83	s.	4	1.8		0	0			inap.	inap.	clear	
Tucson, Arizona	27.46	697.5	29.94	760.5	54	12.2	64	se.	4	1.8			10 s			0	0	cloudy	
Umatilla, Oregon	29.96	761.0	30.34	770.6	26.0	— 3.3	88	w.	2	0.9		0	0			0	0	clear	
Uvalde, Texas																			
Vicksburg, Mississippi	30.04	763.0	30.31	769.9	48	8.9	71	se.	7	3.1		0	0			0	0	clear	
Visalia, California	29.61	752.1	29.99	761.7	42.5	5.8	58	nw.	10	4.5			10 ks		nw.	0	0	cloudy	
Washington, D. C	30.13	765.3	30.25	768.3	30	— 1.1	78	calm	0	0		0	0			0	0	clear	
West Los Animas, Colorado	25.76	654.3	29.90	759.4	27	— 2.8	56	nw.	6	2.7		0	9 s		sw.	0	0	cloudy	
Wickenburg, Arizona					42	5.6	89	calm			0	10 k	0	w.		0	0	cloudy	
Williamsport, Pa	29.54	750.3	30.17	766.3	30	— 1.1	77	w.	3	1.3			10 s		nw.	0.02	0.5	cloudy	
Wilmington, N. Carolina	30.28	769.1	30.34	770.6	43	6.1	60	w.	4	1.8		hz	hz	calm	calm	0	0	hazy	
Winnemucca, Nevada	25.50	647.7	30.02	762.5	22	— 5.6	76	n.	8	3.6			10 n		calm	0.05	1.3	light snow	
Wood's Holl, Mass																			
Yankton, Dakota	28.41	721.6	29.83	757.7	36	2.2	79	s.	4	1.8		8 cs	0	w.		0	0	cloudy	
Yuma, Arizona	29.69	754.1	29.84	757.9	50.2	10.1	68	sw.	2	0.9		10 k	0	sw.		0	0	cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.04	559.8			54.5	12.5	85	calm	0	0		4 k	5 s			0.04	1.0	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.06	763.5	30.07	763.8	79	26.1	73	e.				2 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C	30.02	762.5	30.04	763.0	76	24.4	86	calm	0	0			10 ks		n.	0	0	threatening	J. I. Plume.
Guadeloupe, W. I	30.02	762.5	30.04	763.0	75	23.9	87	e.				1 k	0			0	0	clear	B. Bigar.
Havana, Cuba, W. I	30.19	766.8	30.24	768.1	72	22.2	71	ne.	3.6	1.6			10 ks		ne.	inap.	inap.	cloudy	A. Van Caneghem.
Kingston, Jamaica, W. I	30.08	764.0	30.09	764.3	64.4	18.0	91	calm	0	0		0	0			0	0		Robert Johnstone
Navassa, W. I																			F. M. Everett.
Paramaribo, S. A	30.04	763.0	30.04	763.0	77	25.0	91	e.			3		10 n	e.		0.280	7.1	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.55	750.6	30.01	762.2	80	26.7	80	calm			0	4 ck	3 s	calm	calm	0	0	fair	Miss Flora A. Nichols.
Rivas, Nicaragua							92	ne.			2	c	0	ne.		0	0	clear	Earl Flint.
Santiago de Cuba, W. I	30.09	764.3	30.11	764.8	75	23.9	72	nw.	3.6	1.6		0	1 s		ne.	0	0	fair	Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	29.98	761.5	30.03	762.7	—31.0	—35.0		n.	6	2.7		3 c	0	n.		0	0	fair	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, N. 42° 54′, W. 9° 42′	30.30	769.6	55	12.8	83	calm			0		5	ene.				2	wnw.	d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 19° 30′, E. 113° 15′	30.29	769.4	67	19.4		nne.			4		8	ne.				5	n.	d. clouds	Capt. A. J. Errington.
H. M. S. Alert, N. 2° 45′, E. 101° 09′	29.93	760.2	78.8	26.0	83	nnw.			1-2		9							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.23	767.8	57	13.9	69	sse.			3		6	sse.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 7° 06′, E. 79° 00′	29.87	758.7	80	26.7	86	n.			4-6		2					4	n.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.97	761.2	71	21.7	57	calm			0		0							blue sky	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond																			Capt. A. T. Dale.
H. M. S. Dido, N. 13° 05′, W. 59° 36′	30.08	764.0	79	26.1		e.			2-3		3	ne.						d. clouds	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.12	765.0	61	16.1	63	wnw.			4-5		4	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf																			Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 36° 00′, W. 1° 35′	29.82	757.4	64	17.8	89	nnw.			2		10					4	wsw: wnw.	drizzling	Capt. C. A. G. Bridge.
H. M. S. Fawn, Mocha, Arabia	29.91	759.7	79.5	26.4	84	s.			2		1	s.				1	s.	blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.08	764.0	46	7.8	76	nnw.			2-3		8	nnw.				1	nw.	misty	Capt. R. F. Moskyn.
H. M. S. Gannet, S. 12° 04′, W. 77° 11′	29.93	760.2	69	20.6	90	calm			0		10							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.80	756.9	47	8.3	77	ene.			5		10							squally	Capt. L. F. Jones.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Off Zante, Ionian Ids	30.23	767.8	52	11.1	86	calm			0		8							showery	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.21	767.3	54	12.2	86	nw.			2-3		3	nw.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.94	760.5	65	18.3		calm			0		6								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, Sydney, Australia	30.01	762.2	68	20.0	84	se.			1		4	sw.						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, N. 13° 37′, W. 68° 45′	30.02	762.5	78	25.6	82	e.			5		3	e.				2	ene.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 14° 40′, E. 69° 06′	29.95	760.7	81.5	27.5	92	calm			0		0							blue sky	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 14° 50′, W. 35° 12′	30.07	763.8	75	23.9	95	ne.			4		7					3	ne.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, S. 0° 39′, W. 7° 22′	29.89	759.2	82	27.8	100	se.			3		3							d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.07	763.8	64	17.8		nw.			1		0							blue sky	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	30.22	767.6	32	0.0	89	calm			0		2								Lieut. V. B. Oriebar.
H. M. S. Sea Gull, S. 2° 13′, E. 40° 59′	29.29	744.0	84	28.9	91	ene.			2-3		2	nne.						d. clouds	Capt. E. T. Church.
H. M. S. Thalia																			
H. M. S. Triumph, Callao Bay, Peru	30.00	762.0	69	20.6	90	calm			0		10	calm						misty	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.04	763.0	74	23.3		n.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, N. 26° 36′ E. 56° 34′	29.97	761.2	73.5	23.1	95	e.			1-2		8	wsw.						d. clouds	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Brava, Cape Verd Ids	30.02	762.5	71.2	21.8	84	ne.			2		7	sw.				2	ne.	d. clouds	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder																			Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.35	770.9	45	7.2	84	nne.	4	1.8			2		ne.	0	0			fair	
N. Yard, Portsmouth, N. H.	29.98	761.5	13	—10.6		w.	17	7.6			2		nw.	0	0			fair	
Naval Hospital Yokohama, Japan	29.81	757.2	44.5	6.9	92	nnw.			4		10		n.	0.66	16.8			raining	
Adams, Callao, Peru	29.78	756.4	70	21.1	90	sse.			1		10			0	0	gr'd		cloudy	
Alaska, Valparaiso, Chili	29.99	761.7	62	16.7	88	calm			0		2			0	0	sm'h		fair	
Alert, N. 8° 13′, E. 102° 50′*	29.85	758.2	80	26.7	78	e.			3		8		e.			long	e.	fair	
Alliance, Boston, Mass.	29.96	761.0	19	— 7.2	84	wnw.					2			0	0			fair	
Ashuelot, Tientsin, China	30.29	769.4	32	0.0	68	s; e.			2		1		calm					clear	
Brooklyn, S. 36° 12′, W. 54° 30′	29.94	760.5	65	18.3	78	wsw.	13	5.8			0			0	0	mod.	wsw.	clear	
Colorado, New York, N. Y.	30.09	764.3	23	— 5.0	86	sw.	5	2.2			0			0	0			clear	
Enterprise, Norfolk, Va*	30.15	765.8	44	6.7	84	wsw.			2		0							clear	
Essex, Madeira I'd, Africa	30.27	768.8	65	18.3	58	se.			1		2		se.			sm'h	sw.	clear	
Franklin, Norfolk, Va.	30.24	768.1	42	5.6	58	wsw.	8	3.6			0			0	0			clear	
Galena, N. 35° 55′, W. 5° 29′	30.21	767.3	61	16.1	77	e.			3		2		e.			sm'h		clear	
Independence, N. Yard, Mare I'd, Cal	29.94	760.5	42	5.6	74	nw.	3.6	1.6			2		nw.	0	0			fair	
Kearsarge, New Orleans, La.	30.30	769.6	48	8.9	85	calm			0		0							hazy	
Lackawanna, Valparaiso, Chili*	29.95	760.7	62	16.7	88	calm			0		8							cloudy	
Lancaster, N. 40° 26′, E. 14° 22′	30.20	767.1	62	16.7	45	sse.			0-1		2							fair	
Marion, S. 30° 13′, E. 50° 51′	30.00	762.0	75	23.9	86	e.			4		5		e.			mod.	ene.	fair	
Michigan, Erie, Pa.	30.01	762.2	27	— 2.8	77	wnw.			2		0							clear	
Minnesota, Newport, R. I.	30.06	763.5	27	— 2.8		wnw.	8	3.6			10		nw.					overcast	
Monocacy, Yokohama, Japan	29.92	760.0	44	6.7	100	nnw.			4		10		nnw.					rainy	
Nipsic, N. 39° 19′, E. 0° 54′	30.33	770.4	59	15.0	65	nw.			1		2					sm'h		clear	
Onward, Callao, Peru†	30.07	763.8	68	20.0	100	sse.			2		10		nnw.			long	w.	cloudy	
Palos, Hong Kong, China	30.31	769.9	57	13.9	69	w.			3		0							clear	
Passaic, Washington, D. C.	30.20	767.1	28	— 2.2		calm			0		0							clear	
Pensacola, Valparaiso, Chili	30.00	762.0	63	17.2	72	calm	0	0			2			h'vy	h'vy	sm'h		clear	
Powhatan, Norfolk, Va.	30.24	768.1	39	3.9	91	w.			1		0							clear	
Quinnebaug, Tripoli, Tripoli	30.29	769.4	61	16.1	55	wnw.			3		5		calm			sm'h		fair	
Ranger, N. 20° 26′, W. 105° 41′*	29.99	761.7	66	18.9	84	se.			1		2		calm	0	0	long	wsw.	clear	
Richmond, N. 18° 32′, E. 162° 02′*	29.86	758.4	77	25.0	91	e.			1		8		ne.	0.40	10.2	sm'h	n.	fair	
Shenandoah, S. 34° 45′, W. 51° 00′*	30.03	762.7	68	20.0	60	wsw.			5		2		wsw.			mod.	wsw.	fair	
St. Louis, League Island, Pa.	30.37	771.4	27	— 2.8	88	calm	0	0			2			0	0			fair	
Swatara, Kobe, Japan*	29.97	761.2	46	7.8	69	nne.			4		2		ne.			mod.	ne.	fair	
Tennessee, New York, N. Y.	30.11	764.8	26	— 3.3		wsw.	2	0.9			1			0	0			clear	
Vandalia, N. 10° 55′, W. 75° 10′	29.75	755.6	76	24.4	86	ene.			4		0					mod.	ne.	clear	
Wabash, Boston, Mass.	30.04	763.0	11	—11.7		w.	2	0.9			5		w.	0	0			fair	
Wachusetts, San Francisco, Cal.	30.19	766.8	43	6.1	83	nw.			2		2		nw.					clear	
Wyoming, Port Royal, S. C.	30.34	770.6	44	6.7	76	w.	5	2.2			0			0	0			clear	
Yantic, Aspinwall, Panama*	29.91	759.7	77	25.0	86	nw.			3		5		n.					fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith, N. 51° 25′, W. 35° 28′	29.75	755.6	44	6.7	92	s.	6	.....	10	.....	ssw.; wsw.	1 h'r	1 h'r	con.	var.	raining	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, Halifax, N. S *	29.43	747.5	16	—8.9	.....	nnw.	4	.....	3	.....	nnw.	6 h'r	snow	.....	.....	clear	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, Greenock, Scotland*	30.55	776.0	46	7.8	.....	calm	0	.....	3	.....	.....	.....	.....	.....	.....	hazy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland *	30.48	774.2	45	7.2	.....	wsw.	2	.....	.....	.....	wsw.	0	0	.....	.....	cloudy	.....
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. British Crown, Capt. E. H. Freeth,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Liverpool, Eng.	30.37	771.4	47	8.3	92	ssw.	3	.....	8	.....	s.	.....	.....	.....	.....	fair	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 44° 46′, W. 45° 28′†	29.39	746.5	58	14.4	64	wsw.	5	.....	2?	.....	w.	h'vy	h'vy	mod.	sw.	raining?	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, Philadelphia, Penn*†	30.16	766.1	30	—1.1	100	nw.	1	.....	9	.....	nw.	.....	.....	.....	.....	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
S. S. Devonia, Capt. H. Young, N. 44° 20′, W. 54° 50′*†	28.90	734.0	37	2.8	.....	wsw.	6	.....	10	.....	wsw.	.....	.....	.....	wsw.	.....	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Dan, 3d officer.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 38° 05′, W. 74° 00′*	30.16	766.1	47	8.3	.....	wnw.	6	.....	2	.....	nw.	0	0	mod.	nw.	clear	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Kingston, Jamaica*†	29.98	761.5	75	23.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 11° 20′, W. 71° 30′	.....	.....	.....	.....	.....	ene.	2	.....	.....	.....	.....	.....	.....	mod.	ene.	fine	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 30° —′, W. 74° —	30.33	770.4	.....	.....	.....	n.	4	.....	2	.....	n.	0	0	r'gh	n.	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX. *E. W Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 59° 09′, W. 74° 51′	29.31	744.5	48	8.9	.....	e.	4	.....	6	.....	.....	.....	.....	.....	.....	blue sky	.....
Baroda, Capt. C. J. Russell, N. 2° 50′, W. 26° 07′	29.96	761.0	78.0	25.6	77	calm	0	.....	10	.....	.....	.....	.....	.....	.....	d. clouds	.....
Caldew, Capt. W. Peterson, S. 53° 55′, W. 58° 01′	29.90	759.4	43	6.1	.....	ne.	6	.....	10	.....	.....	.....	.....	.....	.....	misty	.....
S. S. Cipero, Capt. W. N. Lailey, Georgetown, Demerara, S. A.	30.01	762.2	79.5	26.4	86	nne.	2	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. City of Agra, Capt. Thos. Young, N. 31° 40′, W. 39° 30′	30.27	768.8	66.5	19.2	.....	calm	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
Coppename, Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. S. G. Jones, S. 54° 18′, W. 59° 34′	29.85	758.2	42.5	5.8	75	nne.	5	.....	10	.....	.....	.....	.....	.....	.....	misty	.....
Hope, Capt. James Campbell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 36° 52′, E. 21° 40′	30.03	762.7	73	22.8	76	wsw.	1	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, S. 52° 23′, W. 64° 36′	29.58	751.3	49.2	9.6	77	nne.	5	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	30.02	762.5	74.4	23.6	68	nw.	2	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. John Smith, N. 23° 18′, W. 48° 13′	30.23	767.8	71.3	21.8	95	ne.	1	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry, S. 32° 42′, E. 76° 08′	30.08	764.0	63.2	17.3	74	ssw.	6	.....	8	.....	.....	.....	.....	.....	.....	showery	.....
S. S. Strathleven, Capt. C. W. Pearson, N. 49° 38′, W. 19° 39′	29.98	761.5	52.5	11.4	93	sw.	6	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Superb, Capt. Berridge N. 35° 40′, W. 34° 53′	30.17	766.3	64.4	18.0	88	w.	1	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham, N. 49° 58′, W. 27° 27′*†	29.96	761.0	.....	.....	.....	w.	2	.....	8	.....	sw.	.....	.....	mod.	w.	rain & fog	Wm. Fitt.
CROMWELL LINE. *Clark & Seaman, Agents, New York*																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 35° 48′, W. 75° 00′*†	30.20	767.1	50	10.0	.....	nnw.	4	.....	0	.....	.....	.....	.....	mod.	nw.	clear	T. P. C. Halsey.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Bothnia, Capt. W. McMickan, N. 47° 54′, W. 35° 23′	29.30	744.2	.....	.....	.....	wnw	6	.....	.....	.....	w.	3 h'r	h'vy	h'vy	w.	threatening	E. F. Stembridge, 3d offi
S. S. Gallia, Capt. W. H. P. Hains, N. 51° 07′, W. 15° 53′*	30.26	768.6	50	10.0	100	se.	6	.....	8	.....	s.	0	0	sm'h	.....	fair	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, N. 49° 52′, W. 19° 37′	30.18	766.6	48.2	9.0	.....	sse.	5	.....	3	.....	s.	0	0	.....	se.	clear	.....
S. S. France, Capt. Périer d'Hauterive, N. 44° 11′, W. 51° 09′*†	29.25	743.0	39.2	4.0	.....	s.	6	ck	0	wsw.	.....	0	0	h'vy	sw.	covered	.....
S. S. St. Laurent, Capt. A. Sérvan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein, Dover, Eng*†	30.20	767.1	48	8.9	.....	ne.	3	.....	8	.....	ne.	0	0	.....	ne.	fair	.....
S. S. Silesia, Capt. A. Albers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, La Plata, S. A*†	30.18	766.6	68	20.0	.....	w.	1	.....	1?	.....	wsw.	0	0	.....	.....	overcast?	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 47° 30′, W. 43° 38′	.....	.....	.....	.....	.....	ssw.	3	.....	1	.....	nw.	6 h'r and	snow rain	high	sw.	clear	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, Nem York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 25° 43′, W. 80° 00′*†	30.31	769.9	66	18.9	.....	ne.	5	.....	1	.....	ene.	0	0	mod.	ne.	fine	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Punch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 49° 51′, W. 3° 28′*†	30.50	774.7	44	6.7	86	e.	5	.....	8	.....	e.	0	0	.....	e.	.....	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d off.
S. S. Santiago, Capt. S. F. Phillips, Santiago, Cuba, W. I.†	30.16	766.1	73	22.8	.....	n.	1	.....	0	.....	.....	0	0	.....	.....	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom Savanilla, U. S. C† [man	29.96	761.0	80	26.7	.....	e.	1–2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Elbe, Capt. W. Willigerod [nolds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Lessing, Capt. B. Voss, N. 49° 52′ W. 12° 18′*†	30.36	771.1	54	12.2	.....	s.	5	.....	.....	.....	.....	.....	.....	5	sw.	hazy	.....
S. S. Maas, Capt. T. H. Bonjer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke, N. 41° 47′, W. 50° 30′*†	29.45	748.0	44	6.7	.....	wsw.	8–10	.....	.....	.....	.....	.....	.....	high	sw.;	rainy	.....
S. S. P. Caland, Capt. E Deddes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	cross	wnw.	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 48° 20′, W. 37′ 00′	29.33	745.0	53	11.7	.....	s; sw.	10	.....	.....	.....	.....	.....	.....	high	sw.	raining	.....
S. S. Scythia, Capt. M. Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers, N. 40° 49′, W. 64° 50′	29.85	758.2	.....	.....	.....	nw.	6	.....	10	.....	.....	12 h'r and	rain snow	cross	wsw.	light snow	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d off.
S. S. Leipzig, Capt. F. Pfeiffer, N. 40° 29′, W. 63° 45′	29.79	756.7	35	1.7	80	nnw.	7	.....	5	.....	nw.	16 h'r	16h'r	cross	wnw.	snowing	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 50° 21′, W. 12° 37′..*	30.30	769.6	50.0	10.0	.....	se.	4–5	.....	9	.....	se.	.....	.....	mod.	sse.	showery	.....
S. S. Mosel, Capt. F. Hesse, N. 48° 58′, W. 39° 35′	29.23	742.4	51.1	10.6	.....	s.	6	.....	9	.....	ssw.	2 h'r	shr's	r'gh	s.*	showery	J. Hesse.
S. S. Neckar, Capt. R. Bussius	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, N. 3° 28′, W. 31° 05′*	29.96	761.0	80.6	27.0	?	se.	4	.....	4	.....	se.	1 h'r	h'vy	4	se.	fair	.....
S. S. Oder, Capt. Undeutsch, N. 40° 45′, W. 67° 00′*	29.96	761.0	29.8	−1.2	.....	w; wnw	5	.....	7	.....	w.	0	0	r'gh	wnw.	cloudy	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, N. 43° 41′, W. 17° 47′	29.97	761.2	.....	.....	.....	sw.	6	.....	3	.....	sw.	0	0	high	nnw.	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	long	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 20′, W. 178° 47′†	30.32	770.1	67	19.4	84	se.	3	.....	2	.....	sse.	0	0	light	se.	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 42° 24′, W. 136° 19′*†	30.62	777.7	51	10.6	64	sw.	4	.....	8	.....	sw.	.....	.....	mod.	w.	cloudy	.....
S. S. Oceanic, Capt. J. Metcalfe, Hong Kong, China*	30.32	770.1	57	13.9	57	nw.	3	.....	1	.....	.....	.....	.....	.....	.....	clear	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 34° 26′, W. 76° 10′*†	30.02	762.5	.....	.....	.....	nw.	5	.....	0	.....	.....	.....	.....	sm'h	.....	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, N. 40° 55′ W. 72° 00′†	30.12	765.0	31	−0.6	.....	w.	4	.....	1	.....	nw.	0	0	sm'h	sw.	clear	H. K. Hallett.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.36	771.1	34	1.1	79	calm	0	.....	0	.....	.....	.....	.....	.....	.....	clear	E W. Holmes.
S. S. Willametta, Capt. L. Meyer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *H. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d offi.
S. S. Columbia, Capt. F. Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.99	761.7	31	—0.6	89	calm	0	.....	0	.....	.....	.....	.....	.....	.....	clear	G. Boose.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 35° 24′, W. 121° 04′†	30.01	762.2	48	8.9	62	nw.	7	.....	5	.....	nw.	.....	.....	r'gh	wnw.	fair	.....
S. S. G. W. Elder, Capt. H. G. Morse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Idaho, Capt. H. M. Hayward, Utsalady, Wash. Ter†	29.82	757.4	36	2.2	80	ese.	3	.....	10	.....	.....	.....	.....	.....	.....	snowing	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.19	766.8	42	5.6	58	nw.	2	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.03	762.7	40	4.4	56	nnw.	4	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. Victoria, Capt. W. E. Plummer, N. 48° 23′, W. 123° 11′†	30.23	767.8	40	4.4	82	sw.	2	.....	5	.....	ne.	.....	.....	mod.	w.	showery	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of New York, Capt. W. B. Cobb, S. 9° 10′, W. 168° 40′†	29.92	760.0	83	28.3	87	ne.	3	.....	1	.....	ne.	0	0	mod	ne.	clear	W. H. Hawes, 2d offi.
S. S. City of Rio de Janeiro, Capt. Cavarly, San Francisco Cal†	30.40	772.1	53	11.7	79	nw.	3	.....	2	.....	nw.	0	0	.....	.....	fine	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, Aukland, New Zealand†	30.15	765.8	66	18.9	84	sw.	3	.....	5	.....	s.	0	0	sm'h	.....	fair	E. Le Saik.
S. S. City of Tokio, Com. J. Maury,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Grenada, Capt. M. Connolley, Panama, Panama†	29.94	760.5	71	21.7	100	nw.	3	.....	5?	.....	nw.	0	0	.....	.....	clear.?	.....
S. S. South Carolina, Capt. W. J. Russell, N. 15° 40′, W. 95° 38′†	30.07	763.8	83	28.3	74	nne.	2	.....	0	.....	.....	0	0	sm'h	.....	hazy	A. W. Hart, 2d offi.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.04	763.0	70	21.1	75	nw.	2	.....	8	.....	.....	.....	.....	.....	.....	fair	.....
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 40° 07′, W. 63° 22′*†	29.98	761.5	33	0.6	.....	n.	8	.....	10	.....	nw.	6 h'r	snow	r'gh	nw.	hailing	.....
S. S. Nederland, Capt J. Ueberweg, N. 45° 27′, W. 47° 18′*†	29.88	758.9	41	5.0	.....	s.	5	.....	10	.....	ssw.	6 h'r	sleet	mod.	s.	cloudy	Atbrecht & Bull.
S. S. Rhyniand, Capt. W. G. Randle, Jersey City, N. J*	30.18	766.6	21	—6.1	.....	wsw.	2	.....	3	.....	wnw.	0	0	.....	.....	clear	C. H. Grant, 2d offi.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon, N. 47° 13′, W. 41° 40′*†	29.13	739.9	46	7.8	92	sw.	6	.....	2	.....	sw.	3 h'r	3 h'r	high	sw.	clear	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, Flushing, Netherlands*	30.27	768.8	39	3.9	.....	e.	3	.....	8	.....	se.	0	0	.....	.....	foggy	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis. N. 41° 37′, W. 58° 47′*	29.38	746.2	45.2	7.3	84	nw.	9	.....	7	.....	nw.	4 h'r	4 h'r	very high	nw.	stormy	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Christiansand, Norway†	30.33	770.4	36.7	2.6	.....	wnw.	2	.....	4	.....	wnw.	c	o	sm'h	wnw.	clear	J. T. Eberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 51° 13′, W. 15° 56′*†	30.38	771.6	54	12.2	.....	se.	5	.....	2	.....	se.	5 h'r	light	light	se.	clear	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th offi.
S. S. Celtic, Capt. Benjamin Gleadell N. 46° 15′ W. 43° 22′*†	29.12	739.6	49	9.4	85	s.	5	.....	10	.....	s.	8 h'r	light	h'vy	w.	cloudy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 40° 30′ W. 63° 08′*†	29.80	756.9	33	0.6	.....	nw.	6	.....	10	.....	w.	snow	snow	long	nnw.	snowing	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. Pensacola, Florida †	30.45	773.4	47	8.3	77	n.		0	0			0	0			clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey,																	C. Bailey.
Bk. Alpha, Capt. O. Grönn N. 29° 30′, W. 19° 00′*†	30.22	767.6	69	20.6		e.	5		3		e.	0	0	mod.	e.	fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, Ponce, Porto Rico, W. I.*†	30.14	765.5	77	25.0		ne.	1		2		ene.	0	0			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 22° 15′, W. 32° 30′*†	30.12	765.0	73	22.8		ene.	4		3		ene.	0	0	mod.	nw.	fair	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 48° 26′, W. 28° 40′*†	29.72	754.9				nw.	1				wnw.	12 h'r	light	mod.	nnw.	clear	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill, S. 36° 48′ W. 51° 39′†	29.90	759.4				wsw.	6		5?		w.	0	0	r'gh.	sw.	clear.?	A. J. Pettengill.
S. Enoch Train, Capt. H. D. Chapman, Bremerhaven.*	30.41	772.4				wnw.	1		10		w.	0	0			foggy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.																	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C†	30.25	768.3	34	1.1		w.	1		0			0	0			clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison S. 30° 36′, W. 78° 46′†	30.14	765.5	71	21.7		w.	2		1		w.	0	0	l'ge	wsw.	clear	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 36° 15′, W. 19° 37′			63	17.2		ssw.	5		5		ssw.	0	0	mod.	ssw.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 0° 25′, W. 38° 56′*†	29.04	737.6				se.			5		se.	light	light	con.	se. ne.	hazy	
Bk. Geo. Booth, Capt. D. Williams, N. 32° 05′, W. 46° 00′*†	30.00	762.0	67	19.4		sw.	4		0			0	0		nw.	clear	D. Williams.
Bk. Granville, Capt. R. Bonney																	
Schr. Henry Denison, Capt Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 41° 21′. E. 15° 50′*	29.60	751.8				w.	6		7		w.	18 h'r	light	long cross	nw' ssw.	rainy	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo T. L. Compte																	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen, N. 36° 21′, W. 3° 41′*†	30.48	774.2				se.	1				e.	2 h'r	light	sm'h		fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 43° 21′, W. 20° 57′*†	30.05	763.3	55	12.8	93	calm	0		5		sse.			hv'y	sw.		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.15	765.8	57	13.9	45	calm	0		0							clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 6° 41′, W. 33° 30′*†.	29.90	759.4				se.					se.	0	0			clear	J. Connolly.
Schr. S. B. Hubbard, New London, Conn.†*	30.07	763.8	45	7.2		w.	1		0			0	0			fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 2° 20′, W. 29° 20′*	29.84	757.9	78.8	26.0	93	s.	3		4		s.			mod	se.	d. clouds	H. N. T. Sumner.
Bk. Sunbeam, Capt. Joseph Hand, N. 37° 08′, W. 16° 06′*†	30.22	767.6	64	17.8	89	ssw.	6		5		sw.	0	0	mod.	sw.	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 35° 00′, E. 3° 10′*†	30.30	769.6				nnw.	7		7		nnw.	rain	rain	light	nw.		
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 38° 31′, W. 52° 25′*†	29.47	748.5	59	15.0	64	w.	9				wnw.			h'vy	wsw	covered	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton,																	N. P. Dutton.

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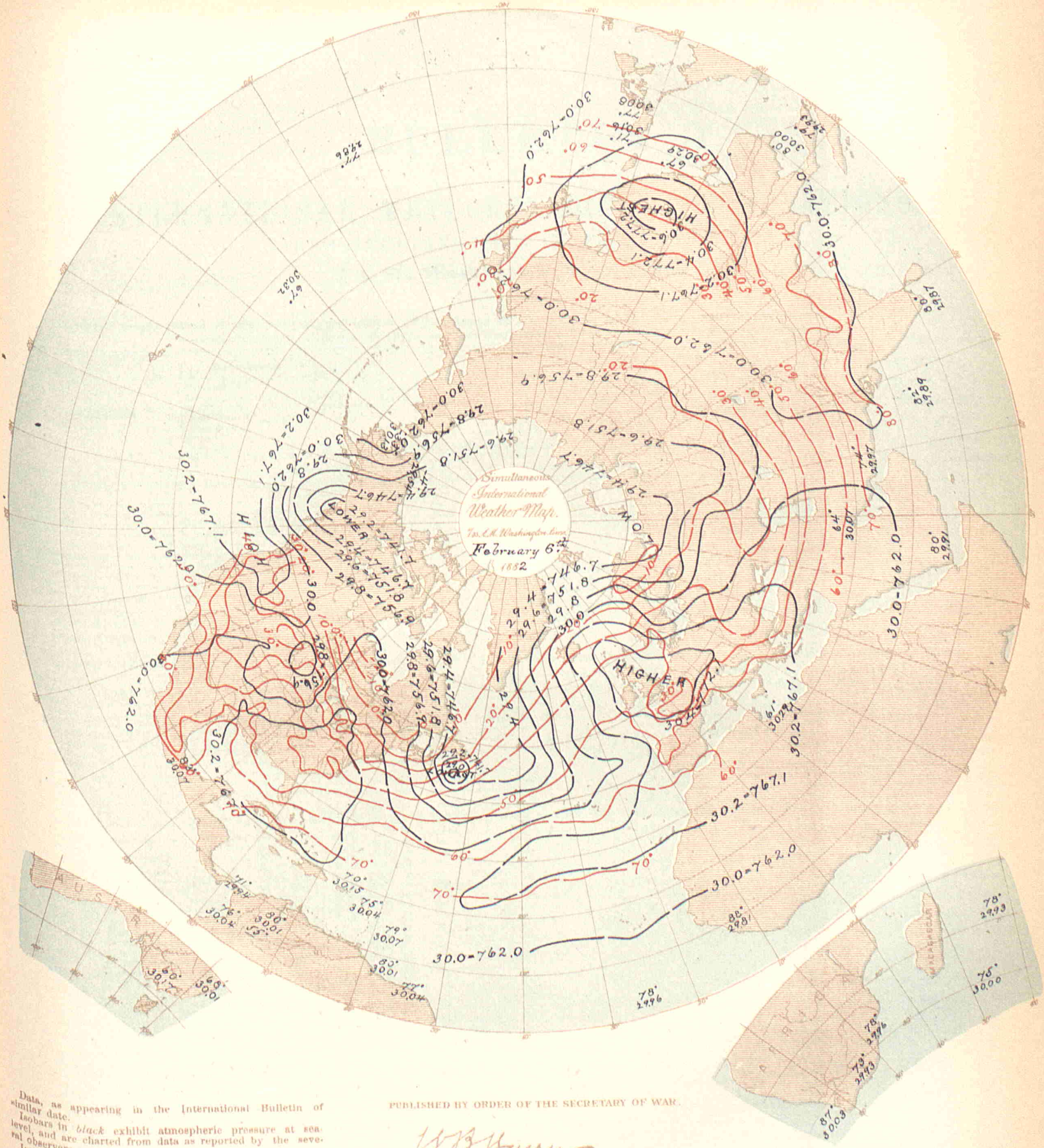
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

Heliotype Printing Co Boston

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 7, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Barometer. Corrected for instru-m'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.39	771.8	69.4	20.8	77	w.			3		0			0	0	clear	Moiroud.
Algiers			30.40	772.2	55.4	13.0	88	nw.			1		0			0.118	3.0	clear	Nicolas.
La Calle			30.36	771.1	53.2	11.8	69	wsw.			3		4			0	0	cloudy	Fonfrède.
Tunis			30.34	770.5															Jacques.
Sfax																			Gau.
Saida			30.39	771.9	52.5	11.4	64	wnw.			1		1			0	0	very fair	Dumas.
Tebessa			30.35	770.8	52.2	11.2	32	nw.			2		5			0	0	cloudy	Derché.
Geriville					49.3	9.6	48	w.			1		2			0	0	fair	Louchamp.
Laghouat			30.46	773.7	52.2	11.2	75	s.			2		1			0	0	very fair	Herbin.
Biskra			30.38	771.7	61.5	16.4	35	se.			1		4			0	0	cloudy	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.12	765.0	30.21	767.3	58.0	14.4	76	s.	4	1.8			3			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.87	758.7	30.45	773.3	41.0	5.0	55	sw.			3		7			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.58	751.4	30.39	771.9	36.0	2.2	65	n.	9.4	4.2			3			0.028	0.7		Dr. Wierzbiski.
Eperies	29.37	746.1	30.29	769.4	38.1	3.4	57	n.			2	7 cks	0	s.		0	0		Julius Mikolik.
Gratz	29.13	740.0	30.44	773.2	38.3	3.5	43	sw.			1		0			0	0		Andreas Rospini.
Hermannstadt	28.80	731.6	30.31	769.8	33.1	0.6	75	nw.			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.06	738.2	30.48	774.1	35.1	1.7	73	ne.			1		0			0	0	clear	The Staff.
Lemberg	29.19	741.3	30.23	767.8	30.4	— 0.9	54	ne.			3		4			0.079	2.0		Dr. T. Stanecki.
Pola	30.28	769.1	30.40	772.1	40.6	8.1	48	e.			4		3			0	0		I. R. Hydrographic Office.
Szathmar	29.79	756.6	30.26	768.6	39.2	4.0	55	w.			2		5			0	0		Joseph Midlinszky, S. J.
Szegedin	29.95	760.7						n.			1		5			0	0		Karl Stancel.
Trieste	30.32	770.0	30.42	772.6	48.9	9.4	37	calm			0		0			0	0		Rieder.
Vienna	29.72	755.0	30.47	774.0	39.6	4.2	55	nw.			3		9			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.42	772.7	30.52	775.2	40.7	4.8	87	ssw.	1	0.4			9			0	0	misty	W. Boswell.
Armagh, Observatory	30.30	769.6	30.55	776.0	43.3	6.3	85	se.	1	0.4			9					overcast	S. Gall.
Bidston, Liverpool Obs'y			30.56	776.2	42.5	5.8	87	se.	9	4.0			10					misty	John Hartnup.
Bolton, Sharples	30.00	762.0	30.55	776.0	41.9	5.5	92	n.					10					foggy	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.12	765.0	30.52	775.2	44.7	7.1	89	s.			1		10			0	0	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	82.0	27.8	62	ne.			3		2					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			30.55	776.0	39.4	4.1	100	ne.			0.1		10					foggy	John McLaren.
Chatham, School M. E.	30.43	772.9	30.56	776.2	43.9	6.6	84	ne.			1		8					d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.24	768.1	30.48	774.2	43.0	6.1	65	ese.			3		1					foggy	The Staff.
Fort Napier, Natal	27.67	702.8	29.89	759.2	79.1	26.2	63	e.			2		2					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.60	751.8	29.84	757.9	88.0	31.1	69	nw.			1		3						Sergt. John Robinson.
Galway, Queen's College			30.42	772.7	42	5.6	83	se.			2		10					overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.27	768.8	30.32	770.1	59.5	15.3	87	ne.			2		6					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.33	770.4	30.53	775.4	40.7	4.8	89	n.			1		10					foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.37	771.4	30.55	776.0	43.0	6.1	90	ese.			1		10					overcast	The Staff.
Guernsey	30.15	765.8	30.46	773.7	41.0	5.0	69	ese.			1		0					blue sky	A. Collenette, F. M. S.
Kew, Observatory	30.52	775.2	30.56	776.2	43.7	6.5	89	e.	8	3.6			10					foggy	The Staff.
Leicester, Museum	30.29	769.4	30.56	776.2	41.6	5.3	97	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.19	766.8	30.27	768.8	56.0	13.3	74	ne.			2		6					d. clouds	Corpl. A. King, A. H. C
Nassau, Bahamas	30.30	769.6	30.34	770.6	71.0	21.7	82	ne.			2		8					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.02	762.5	30.57	776.5	40.4	4.7	98	nne.			1		10					foggy	John Mac Email.
Oxford, Radcliffe Obs'y	30.32	770.1	30.54	775.7	41.2	5.1	96	ne.			1		10					foggy	The Staff.
Plymouth	30.40	772.1	30.48	774.2	45.2	7.3	67	se.			3		5					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.47	773.9	44.6	7.0	92	sw.	9	4.0			9					d. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.18	766.6	30.25	768.3	40.0	4.4	65	sw.			2		2			blank	blank	d. clouds	W. H. Lyne.
Sheffield	30.28	769.1	30.56	776.2	43.2	6.2	94	se.			1		10			0	0	foggy	W. F. Cooper.
Stilloth Rectory	30.52	775.2	30.55	776.0	40.4	4.7	95	ne.			1		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.57	776.5	41.9	5.5	87	n.	3	1.3			10					foggy	I. New.
Stratfield Turgiss	30.33	770.4	30.56	776.2	41.9	5.5	94	se.			1.2		10					foggy	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.40	772.1	30.47	773.9	48	8.9	71	e.			6		5					d. clouds	W. Newcombe.
Valencia, Observatory	30.40	772.1	30.43	772.9	44.6	7.0	66	ese.	19	8.5			10					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.90	759.4	29.93	760.2	73.0	22.8	94	e.	10.6	4.7		0	0			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.84	757.9	29.88	758.9	93.8	34.3	34	nw.	13	5.8		0	0			0	0		The Staff, for D. Gill.
Worcester*																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.02	762.5	30.07	763.8	1	—17.2	91	w.	9	4.0		0	0			0	0	clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.10	764.5	30.17	766.3	— 1	—18 3	100	w.	4	1.8		0	0			0	0	clear	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.32	770.1	30.34	770.6	— 2	—18.9	87	w.	10	4.5		0	0			0	0	clear	J. McWilliams.
Fort Garry, Manitoba*	29.26	743.2	30.21	767.3	—10	—23.3	100	calm	0	0		0	0			0.390	9.9	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.03	762.7	30.17	766.3	5	—15.0	91	w.	8	3.6		0	0			0	0	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.82	757.4	30.18	766.6	16	— 8.9	91	ne.	15	6.7			10 ks		sw.	0.08	2.0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.20	767.1	30.43	772.9	3	—16.1	66	e.	12	5.4			10 s			0	0	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.27	743.4	30.01	762.2	21	— 6.1	84	e.	21	9.4		2 k	8 kr	sw.	sw.	0.10	2.5	cloudy	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.29	744.0	30.02	762.5	26	— 3.3	94	ne.	3	1.3		0	0			0	0	clear	H. Morgan.
Port Stanley, Ontario	29.30	744.2	29.96	761.0	37	2.8	82	s.	10	4.5			10 n		sw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	30.05	763.3	30.42	772.7	— 7	—21.7	86	sw.			3	0	2 s		sw.	0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.71	754.6	30.21	767.3	6	—14.4	96	e.	10	4.5			10 n			0.09	2.3	heavy snow	W. H. McIntyre.
Saugeen, Ontario*	29.13	739.9	29.86	758 4	32	0.0	88	se.	15	6.7			10 ks			0	0	cloudy	
St. Andrews, N .B.	30.27	768.8	30.32	770.1	5	—15.0	90	nw.	2	0.9		0	0			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	29.87	758.7	29.94	760.5	2	—16.7	87	w.	16	7.2		10 cs	0			0	0	fair	T. C. Hill, C. E.
Toronto, Ontario*	29.66	753.4	30.06	763.5	29	— 1.7	92	e.	20	8.9			10 n			0	0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	30.23	767.8	30.31	769.9	15	— 9.4	73	n.	10	4.5		5ck	5 k	w.	n.	0.07	1.8	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.41	747.0	29.68	753.9	3	—16.1		ne.	4	1.8		0	0			0.60	15.2	fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.35	770.9	30.64	778.2	42.6	5.9	77	sw.			2		2			0	0		N. Titoushkin.
Sung-shu-chwang†	24.72	627.9			25.9	— 3.4		calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.36	771.2	30.39	771.8	39.4	4.1	83	ne.	0.4	0.2			10			0	0	covered	M. Marc Dechevrens, S.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.42	772.6	30.47	773.8	33.6	0.9	60	s.	12.3	5.5			7						Oversergent Fischer.
Fanöe	30.48	774.3	30.50	774.8	37.2	2.9	82	nw.			4		5						Overloerer Lauridsen.
Godthaab, Greenland	29.07	738.3	29.11	739.4	19.6	— 6.9	97	nne.			3		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.60	751.7	29.64	752.8	43.9	6.6		s.			7		10					raining	A. O. Thorlacius.
Thorshavn	30.26	768.6	30.30	769.5	46.4	8.0	94	sw.	20	9			8						Overloerer Bergh.
Vestervig	30.35	770.9	30.44	773.2	39.9	4.4	74	nw.			4		8						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.78	756.4	30.46	773.6	37.8	3.2	93	wnw.			1	ck	0			0	0		M. Labroue, Director.
Alençon, Normal School	29.92	760.0	30.47	774.0	32.0	0	93	ne.			2		8	se.	se.	0	0		M. Nicot, Director.
Arras, Engineer School	30.23	767.8	30.51	775.0	34.2	1.2	93	e.			3		10 n			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.32	770.2	30.40	772.2	41.4	5.2	39	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.88	758.9	30.47	773.9	34.9	1.6	73	se.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.25	768 3	30.53	775.5	38.3	3.5	63	e.			1		0			0	0	clear	M. Frère Eugène Marié.
Besançon, Normal School			30.44	773.2	29.8	—1.2	93	ne.			1		10		ne.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.17	766.2	30.44	773.2	30.4	—0.9	92	e.			1		10			0	0	light fog	M. Rayet, Director.
Bourges, Normal School	29.86	758.4	30.48	774.2	37.4	3	92	nne.			1		1		nne.	0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.24	768.2	30.49	774.4	33.8	1.0	81	sse.			1		10		sse.	0	0	misty	M. de Kennaree, Dir.
Caen, Normal School	30.43	772.8	30.50	774.8	36.0	2.2	61	e.			1		0			0	0	clear	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.06	763.4	30.39	772.0	44.2	6.8	74	se.			1		0			0	0	clear	M. Jadot, Director.
Charleville, Normal School	29.97	761.2	30.50	774.8	43.5	6.4	88	ene.			1		8			0	0	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.00	736.7	30.46	773.6	28.4	—2.0	92	nw.			1	0	0			0	0	foggy	M. Allnard, Director.
Cluny, Normal School	29.62	752.4	30.52	775.1	24.3	—4.3	91	n.			1		fg			0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.58	751.2	30.49	774.4	41.5	5.3	66	ene.			1	1	1	ene.	ene.	0	0	clear	Dr. Coulet, Director.
Gap, Normal School	27.77	705.3	30.35	771.0	48.6	9.2	12	s.			2	1 c	0	sw.		0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.22	742.1	30.37	771.3	52.2	11.2	43	n.			1		5		n.	0	0	½ covered	M. Kint, Director.
Grenoble, Normal School	29.65	753.0	30.47	773.8	33.8	1	69	ssw.			2	0	2 s			0	0	slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.76	730.6	30.44	773.1	35.8	2.1	64	se.			1		hz			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.17	766.2	30.46	773.6	34.7	1.5	96	e.			1		8		e.	0	0	very cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.81	757.2	30.39	771.9	47.1	8.4	55	wnw.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.39	772.0	30.50	774.6	35.6	2.0	82	ne.			2		mist			0	0	misty	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.39	746.4	30.51	775.0	28.4	—2.0	92	s.			1	c	5 n	s.	s.	0	0	fair	M. André, Director.
Mans, Normal School	30.15	765.7	30.48	774.1	30.0	—1.1	90	se.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.10	764.4	30.37	771.4	55.2	12.9	62	wsw.			1		5		ese.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.99	634.8	29.84	757.8	37.0	2.8	33	e.	5.6	2.5			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.27	768.9	30.39	771.8	44.6	7	35	ne.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.67	753.7	30.49	774.4	39.6	4.2	77	ne.			2	0	0			0	0	clear	M. Hasse, Director
Nantes, Observatory	30.34	770.5	30.50	774.6	33.4	0.8	72	e.			0—1		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.28	769.2	30.39	772.0	48.2	9.0	76	se.	3.8	1.7			6	se.		0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.30	541.0			24.8	—4.0		sse.			1		1		sse.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.30	744 2	30.43	773.0	36.7	2.6	55	s.			1		0			0	0	clear	M. Taillen.
Puy de Dôme Obs'y, Summit	25.35	643.8			37.6	3.1	52	s.			1		0			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.42	772.6	30.45	773.4	29.7	—1.3	80	ene.			1		10			0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.21	767.3	30.44	773.2	31.6	—0.2	97	ne.			1		10			0	0	covered	M. Moullot, Director.
Rodez, Normal School	28.19	716.0	30.41	772.4	41.0	5	54	w.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.47	773.9	30.52	775.1	37.0	2.8	89	e.			1		0			0	0	clear	M. Platrier, Director.
Saint Lô, Normal School	30.34	770.7	30.49	774.4	36.0	2.2	75	e.			3		1		e.	0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.32	770.2	30.49	774.4	37.6	3.1	69	e.			1		0			0	0	clear	M. Renou, Director.
Toulouse, Observatory	29.72	755.0	30.46	773.6	44.6	7.0	70	nnw.			1		5		nw.	0	0	cloudy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.98	761.4	30.47	773.8	34.5	1.4	73	e.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.21	767.3	30.50	774.7	36.1	2.3	7.2	e.			1		0			0	0	clear	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.65	753.0	30.52	775.1	37.4	3.0	70	nnw.			3	0	4 s			0	0		Prof. Dr. Hoh.
Berlin	30.27	768.8	30.45	773.5	39.9	4.4	62	nw.			1		8			0	0		Prof. Dr. Arndt.
Breslau	29.92	759.9	30.46	773.6	35.2	1.8	69	nw.			2		3			0.024	0.6		Royal University Obs'y.
Carlsruhe	30.04	763.0	30.51	774.9	37.6	3.1	68	ne.			3		9	e.		0	0		Albert Senz.
Cassel	29.76	755.8	30.47	774.0	37.0	2.8	70	nw.			1		6	n.		0	0		Dr. H. Möhl.
Frankfort on the Main	30.15	765.8	30.54	775.6	38.7	3.7	80	nne.			2		2			0	0		Physical Society.
Friedrichshafen	28.97	735.7	30.50	774.6	29.8	— 1.2	73	sw.			2		0			0	0		Wilhelm, Chief Tel.
Hamburg	30.44	773.1	30.53	775.5	31.3	— 0.4	100	wnw.			2		10			0	0	foggy	E. Preller.
Kiel	30.48	774.1	30.49	774.5	34.5	1.4	93	w.			2		10			0.024	0.6		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.10	764.5	30.54	775.8	34.9	1.6	82	nw.			1		10	wnw.		0	0		H. Leppig, Asst.
Magdeburg	30.33	770.4	30.54	775.6	35.1	1.7	88	w.			1		10 ks		w.	0.004	0.1		Dr. Assmann.
Memel	30.19	766.9	30.24	768.1	27.5	— 2.5	62	nnw.			7		10 ks					snow & sleet	Issermann.
Munich	28.57	725.7	30.46	773.7	32.5	0.3	72	e.			2		1			0	0		Central Station.
Neufahrwasser	30.36	771.2	30.38	771.6	31.3	— 0.4	55	nw.			3		2			0	0		A. Lothes.
Neustadt, Palatinate	29.97	761.2	30.50	774.8	37.8	3.2		e.			2		10	e.		0	0		Dicknether.
Stuttgart	29.52	749.8	30.47	773.8	34.7	1.5	72	e.			1		10			0	0		Prof. Dr. Schoder.
Wustrow	30.48	774.3	30.51	774.9	36.9	2.7	85	se.			1		10			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.89	759.2	30.29	769.4	50.4	10.2		e.			0.5		1			0	0	clear	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.93	760.2	29.98	761.5	75.9	24.4	86	sw.	19	8.5			2			0	0	d. clouds	
Deesa	29.46	748.2	29.93	760.1	86.6	30.3	25	sse.	8.3	3.7			5	n.		0	0	d. clouds	
Bombay	29.87	758.7	29.91	759.6	81.9	27.7	74	wnw.	7	3.1			0			0	0	blue sky	
Poona, Yarrowda	28.03	712.0	29.86	758.4	88.3	31.3	20	nne.	7	3.1			2	wnw.		0	0	d. clouds	
Belgaum	27.36	695.0	29.86	758.5	85.0	29.4	24	ene.	6	2.7			0			0	0	blue sky	
Lahore	29.31	744.5	30.09	764.2	61.6	16.4	72	nw.	0.4	0.2			10					drizzling	
Roorkee	29.09	739.0	30.02	762.5	68.2	20.1	59	w.	1.0	0.4			7			0	0		
Agra	29.46	748.2	30.03	762.8	73.2	22.9	36	calm	2.2	1.0						0	0		
Nagpur	28.89	733.9	29.93	760.2	84.7	29.3	20	ne.	2.9	1.3			0			0	0	blue sky	
Jubbulpore	28.64	727.5	30.02	762.6	72.8	22.7	37	calm	1.6	0.7			0			0	0	blue sky	
Lucknow	29.63	752.7	30.03	762.6	65.3	18.5	41	calm	0.8	0.4			0			0	0	blue sky	
Allahabad	29.69	754.1	30.01	762.3	70.4	21.8	42	calm	0.8	0.4			0			0	0	blue sky	
Patna	29.83	757.6	30.02	762.5	69.1	20.6	52	calm	1.8	0.8			0			0	0	blue sky	
Hazaribagh	27.95	709.9	30.00	762.0	69.8	21.0	24	n.	3.9	1.7			0			0	0	blue sky	
Cuttack	29.89	759.2	29.98	761.4	80.0	26.7	58	wsw.	0.8	0.4			0			0	0	blue sky	
Calcutta, Alipore	29.95	760.8	29.98	761.4	75.5	24.2	57	w.	3.0	1.3			1		w.	0	0	d. clouds	
Dhubri	29.87	758.6	29.99	761.7	69.9	21.1	66	calm	2.4	1.1			0			0	0	blue sky	
Chittagong	29.91	759.7	30.00	762.1	74.6	23.7	57	wnw.	2.4	1.1			0			0	0	blue sky	
Sibsagar	29.67	753.7	30.02	762.5	65.1	18.4	78	ne.	2.2	1.0			10	w.	w.	0	0	d. clouds	
Jeypore	28.55	725.0	30.02	762.6	69.9	21.1	45	sw.	3.1	1.4			9		sw.	0	0	d. clouds	
Zanzibar, Africa	29.82	757.4			86.6	30.3	71	nne.	5.5	2.5		cs	8k;fk		nne.	0	0	d. clouds	
Trichinopoly	29.70	754.4			84.3	29.1	44	ese.	2	0.9			0			0	0	blue sky	
Bellary	28.44	722.4			87.2	30.7	28	e.	3.6	1.6			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	30.00	761.9	30.42	772.7	45.9	7.7	30	n.	0.7	0.3			0			0	0		Prof. Giovanni Clodig.
Milan	29.90	759.4	30.41	772.4	42.8	6.0	56	ssw.	3.1	0.6			4			0	0		Prof. Schiaparelli.
Padua	30.32	770.1	30.43	773.0	43.9	6.6	51	ene.	3.8	1.7			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.51	749.5	30.46	773.7	39.2	4.1	72	ne.	0.7	0.3			4	e.		0	0		Prof. P. F. Denza.
Genoa	30.17	766.4	30.37	771.5	48.2	9.0	41	n.	6.3	2.8			4	n.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.46	722.9	30.49	774.4	36.5	3.6	55	w.			4		1			0	0		Prof. D. C. Bruno.
Pesaro	30.34	770.6	30.39	771.9	41.7	5.4	73	n.	5.6	2.5			8			0	0		Prof. Luigi Guidi.
Florence	30.09	764.3	30.36	771.1	49.1	9.5	34	n.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.23	767.9	30.32	770.2	51.4	10.8	25	ne.	2.5	1.1			7			0	0		Prof. P. Monte.
Rome	30.13	765.4	30.32	770.0	50.7	10.4	47	wnw.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	30.04	762.9	30.30	769.5	52.5	11.4	55	nnw.	7.4	3.3			5	nw.		0	0		Prof. C. de Giorgi.
Cosenza	29.39	746.6	30.32	770.2	50.7	10.4	75	se.	1.8	0.8			4	e.		0	0		Prof. D. Conti.
Cagliari	30.08	764.0	30.28	769.0	54.0	12.2	43	calm			0		5	e.		0	0		Prof. A. Pacinotti.
Palermo	30.05	763.2	30.31	769.8	53.6	12.0	63	e.	4.3	1.9			9	wnw.		0.118	3.0		Prof. G. Ciacciatore.
Syracuse	30.21	767.2	30.25	768.4	52.0	11.1	75	e.	3.8	1.7			10	sw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.74	755.3	30.27	768.9	52.9	11.6	53	ne.	0	0			1			0	0		Prof. T. Brioschi.
Stelvio	22.29	566.2			21.7	— 5.7	38	e.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.33	567.1			26.8	— 2.9	32	n.			2		8			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.99	761.7	30.03	762.7	27.8	— 2.3	73	se.	4.1	1.8		0	3 s			0.104	2.6	fair	
Hakodate	30.01	762.2	30.02	762.5	31.0	— 0.6	69	n.	4.8	2.1			0			0	0	clear	
Hiroshima, I. M. Obs'y	30.08	764.0	30.09	764.3	37.2	2.9	84	ne.	2.0	0.9		ck	3 ks		n.	0	0	fair	K. Sasaki.
Kanazawa	29.94	760.5	30.05	763.3	37.8	3.2	78	ene.	1.5	0.7		ck	10 ks		ne.	0.080	2.0	overcast	S. Endo.
Kioto	29.82	757.4	30.00	762.0	40.8	4.9	68	nw.	4.3	1.9			10 s;ks			0.025	0.6	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.95	760.7	30.16	766.0	42.7	5.9	81	n.	3.9	1.7		0	3 s			0.010	0.3	clear	S. Takehayashi.
Niigata	29.95	760.7	29.99	761.7	39.6	4.2	66	nne.	3.2	1.4		10 ck	0			0.210	5.3	cloudy	
Nobiru	29.87	758.7	29.89	759.2	36.5	2.5	94	n.	10.6	7.4			10 n			0.720	18.3	raining	H. Midzushina.
Sapporo					27.5	— 2.5	90	nw.	3.0	1.3			0			0.470	11.9	clear	
Tokei Obs'y, Yeddo	29.75	755.6	29.82	757.4	43.4	6.3	64	nnw.	10.7	4.8			10 n			0.010	0.3	light rain	The Staff.
Wakayama	29.97	761.2	30.03	762.7	42.0	5.6	64	nw.	8.2	3.7		ck	10 s			0	0	cloudy	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guantijuato																			Vicente Fernandez.
Leon	24.49	621.8	30.30	769.6	50.0	10.0	83	nnw.			1	2	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.86	758.4	30.12	765.1	66.8	19.3	67	nnw.	0.9	0.4		0	2 n			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.51	588.1	30.35	771.0	47.3	8.5	69	calm	0	0		0	0			0	0		The Staff.
Morelia	24.38	619.4	30.62	777.9	51.8	11.0	60	se.			4	1c	0	s.		0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.96	608.5	30.06	763.5	47.3	8.5	70									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.44	595.3	30.38	771.5	41.0	5.0	73	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.22	615.2	30.21	767.4	54.6	12.6	67	sse.			1	0	0			0	0	hazy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Chávaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.60	574.1	30.37	771.5	44.4	6.9	74	wsw.	9.6	4.3		3 cs	0	sw.		0	0	clear	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.64	752.8	29.83	757.7	72.8	22.7	85	ese.	21.0	9.4			10 n;ks		se.	1.72	43.7	overcast	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.59	777.0	30.59	777.0	34.5	1.4		ne.			2					0.008	0.2		
Groningen	30.51	774.9	30.56	776.3	39.0	3.9		nnw.			1					0.028	0.7		
Helder	30.58	776.7	30.58	776.7	40.3	4.6		nne.			1					0	0		
Hellevoetsluis	30.58	776.6	30.58	776.6	35.1	1.7	94	e.			1					0	0		
Utrecht	30.54	775.8	30.59	777.0	37.6	3.1	91	ssw.			1		10			0.012	0.3	dull	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.35	770.8	30.41	772.4	32.7	0.4	89	sse.	18	8			10			0	0		
Brono	30.20	768.6	30.30	769.6	18.7	— 7.4	78	n.	18	8			9			0.008	0.2		
Christiania	30.20	767.1	30.36	771.1	25.5	— 3.6	76	ese.	0	0			9			0	0		
Gjæsvær	29.73	755.1	29.75	755.7	10.9	—11.7		n.			6		10						
Lodingen	30.15	765.8	30.20	767.0	8.4	—13.1	92	calm			0		5			0	0		
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.7	15.4	83	w.	8.7	3.9			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.32	744.7	30.33	770.4	58.1	14.5	52	e.	2.5	1.1			5			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.04	763.0	30.13	765.3	61.2	16.2	80	w.	1.3	0.6			10			0.059	1.5		Capt. D. A. de Gunha.
Lisbon, Observatory	29.98	761.5	30.35	771.0	49.5	9.7	82	nne.	9.4	4.2			2			0	0		The Staff.
Ponta Delgada, Azores	30.11	764.7	30.18	766.5	60.8	16.0	75	wsw.	3.1	1.4			4			0.020	0.5		
Saint Paul de Loando	29.73	755.1	29.93	760.1	78.8	26.0	96	n.	0.7	0.3			9			0	0		
Serra da Estrella	25.49	647.5	30.34	770 7	41.0	5.0	86	se.	13.6	6.1			3			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.80	731.6	29.98	761.6	3.4	—15.9		se.	7	3		0	9 ks			0	0		Major K. Lasarew.
Archangel	29.26	743.3	29.28	743.8	8.2	—13.2	80	nw.	9	4			10			0	0	light clouds	Capt. Sselliwerstow.
Astrakhan	29.76	756.0	29.68	753.9	21.4	— 5.9	74	wsw.	16	7			10 s			0.039	1.0		Capt. Wisganow.
Barnaul	29.60	751.8	30.14	765.6	13.5	—10.3	85	sw.	13	6			0			0.051	1.3		Meteorological Obs'y.
Dorpat	29.62	752.3	29.89	759.1	9.7	—12.4	51	n.	16	7			10 ks			0	0		Observatory.
Ekaterinburg	28.57	725.6	29.60	751.7	9.1	—12.7	52	se.	18	8		10 c	0			0	0	light clouds.	Meteorological Obs'y.
Kasan	28.77	730 7	29.05	737.9	11.3	—11.5	88	sse.	22	10			10			0.016	0.4		Observatory.
Kertch	29.76	755.8	29.78	756.3	32.9	0.5	87	w.	13	6			10 n			0.047	1.2		Lagorio & Sastyrez.
Kieff	29.21	741.8	29.88	759.0	21.4	— 5.9	44	nw.	31	14		c	8 ks;n			0.028	0.7		Observatory.
Lugan	29.22	742.1	29.43	747.5	23.7	— 4.6	86	nw.	34	15			10			0.024	0.6		Meteorological Obs'y.
Moscow	28.68	728.4	29.19	741.5	8.2	—13.2	64	n.	27	12		0	7 ks			0	0	snow drift	Meteorological Obs'y.
Nikolaiev	29.89	759.2	29.96	761.0	35.6	2.0	51	nw.	45	20		0	2 s			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.79	756.7	29.88	758.9	10.4	—12.0	88	calm	0	0			10			0	0		Lieut. Iwanow.
Pekin, China	30.08	764.1	30.22	767.7	37.8	3.2	44	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	29.60	751.9	29.62	752.3	5.0	—15.0	50	n.	31	14		0	7 ks			0	0	light clouds.	Central Physical Obs'y.
Tashkend, Laboratory	28.28	718.4	29.89	759.1	42.8	6.0	82	calm	0	0			8			0.110	2.8		Teich, A. M.
Tiflis	28.54	724.8	30.02	762.4	33.3	0.7	54	nw.	22	10		4 cs	0			0	0	snow-drift	Physical Observatory.
Vladivostok	30.03	762.7	30.10	764.4	13.5	—10.3	88	calm	0	0		0	0			0	0		
Warsaw	29.87	758.8	30.32	770.2	30.7	— 0.7	55	wnw.	18	8		0	8 k;ks						Astronomical Obs'y.
Wilna	29.60	751.7	30.04	763.1	20.5	— 6.4	88	nw.	13	6			8			0.020	0.5	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.29	743.9	29.59	751.6	17.2	— 8.2	80	wnw.	16	7			8			0.024	0.6	snowing	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restairig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.45	773.4	47	8.3	85	ssw.			4		10			0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.23	767.8	30.34	770.5	52.9	11.6	72	se.	1.3	0.6			2 k			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.35	771.0	30.41	772.5	54.7	12.6	62	sw	1.8	0.8		2	0	e.		0	0	almost clear	Prof. Manuel de Navoran.
Burgos, Met. Obs'y	27.35	694.6	30.39	771.9	47.7	8.7	51	ne.	1.8	0.8		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.09	713.6	30.37	771.5	52.5	11.4	53	calm	1.8	0.8		0	1			0	0	almost clear	The Staff.
Murcia, Met. Obs'y	30.23	767.9	30.39	771.9	56.7	13.7	69	nne.	2.7	1.2		0	3			0	0	clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.37	746.1	30.28	769.0	58.3	14.6	54	calm	0	0		0	7			0	0	cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.16	766.0	30.22	767.7	70.7	21.5	84	ese.	6.3	2.8		2 ck	1 s	nw.		0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	30.01	762.2	30.06	763.6	73.7	23.2	82	sse.	4.6	2.1		0	1 ks		ene.	0.354	9.0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.24	768.0	30.34	770.6	60.3	15.7	53	ese.	15.5	6.9		0	1		se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.09	764.2	30.18	766.5	75.6	24.2	80	se.	15.0	6.7		1 k	3 kn	se.	se.	0.118	3.0	d. clouds	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.00	762.0	30.13	765.3	70.2	21.2	80	nnw.	4.5	2.0		0	7 ks		nnw.	inap.	inap.	cloudy	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.98	761.4	30.02	762.4	3.2	—16.0	81	n.			6		0			0	0		
Umea	30.14	765.6	30.19	766.9	6.4	—14.2	42	ne.			7		0			0	0		
Hernosand	30.18	766.6	30.23	767.9	14.5	— 9.7	58	nne.			6		8			0	0		
Stockholm	30.05	763.2	30.22	767.7	25.9	— 3.4	39	nnw			8		10			0	0		
Wisby	30.17	766.2	30.22	767.7	29.1	— 1.6	92	nnw.			7		5			0	0		
Sub Series.																			
Upsala	30.12	765.1	30.21	767.3	25.3	— 3.7	49	nw.	23.7	10.6			7		nnw.	0.012	0.3		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.99	736.4	30.49	774.5	30.0	— 1.1	78	ene.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.30	769.5	37.6	3.1	68	n.	7	3.0			1		sw.	0	0		The Observatory.
Valona			30.27	768.9	54.7	12.6		nw.			1		2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.18	766.5	49.1	9.5	59	n.			2	0	5 k			0.10	2.5		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES (by authority of the Secretary of War).—Furnished by co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.30	769.6	30.39	771.9	25	— 3.9	73	n.	1	0.4			10 s			inap.	inap.	cloudy	
Alpena, Michigan	29.09	738.9	29.80	756.9	32	0.0	71	se.	9	4.0		7 k	3 s	sw.		0.04	1.0	cloudy	
Atlanta, Georgia	29.16	740.7	30.38	771.6	49.5	9.7	60	s.	10	4.5		2 c	0	calm		0	0	clear	
Atlantic City, New Jersey	30.34	770.6	30.35	770.9	39	3.9	89	se.	7	3.1		7 c	0			0	0	fair	
Augusta, Georgia	30.24	768.1	30.44	773.2	41.0	5.0	82	calm	0	0		0	sk.			0	0	clear	
Baltimore, Maryland	30.28	769.1	30.33	770.4	32	0.0	68	calm	0	0			fg.			0	0	dense fog	
Barnegat, New Jersey	30.29	769.4	30.31	769.9	38.5	3.6	88	s.	16	7.2		5 cs	0	w.		0	0	fair	
Bismarck, Dakota	28.39	721.1	30.37	771.4	4	—15.6	76	nw.	2	0.9		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.55	699.8	30.51	774.9	12	—11.1	83	nw.	2	0.9		0	0			0	0	clear	
Boston, Massachusetts	30.24	768.1	30.40	772.1	19.5	— 6.9	76	w.	3	1.3			10s;hz			0	0	cloudy	
Brownsville, Texas	29.93	760.2	29.98	761.5	66	18.9	93	s.	12	5.4		9 k	0	s.		0	0	cloudy	
Buffalo, New York	29.25	742.9	30.05	763.3	29.9	— 1.2	80	ne.	7	3.1		3 cs	sk.			0	0	clear	
Burlington, Vermont	30.06	763.5	30.38	771.6	10.0	—12.2	83	e.	1	0.4			10 s		e.	inap.	inap.	cloudy	
Cairo, Illinois	29.73	755.1	30.15	765.8	55.5	13.1	68	s.	16	7.2			10 s		s.	0	0	cloudy	
Campo, California	27.39	695.7	30.03	762.7	24.2	— 4.3	88	w.	3	1.3		0	3 k		w.	0.06	1.5	fair	
Camp Thomas, Arizona	27.23	691.6	30.06	763.5	31.5	— 0.3	87	nw.			1	3 cs	0			0.13	3.3	clear	
Cape Henry, Virginia	30.38	771.6	30.40	772.1	43	6.1	60	sw.	12	5.4		0	0			0	0	clear	
Cape May, New Jersey																			
Castroville, Texas	29.18	741.2	30.02	762.5	63	17.2	93	se.	12	5.4			10 s		se.	0	0	cloudy	
Cedar Keys, Florida	30.34	770.6	30.36	771.1	54	12.2	86	ne.	8	3.6		0	0			0	0	clear	
Champaign, Illinois	29.09	738.9	29.96	761.0	48.0	8.9	71	sw.	14	6.3			10 s		sw.	0	0	cloudy	
Charleston, S. Carolina	30.34	770.6	30.40	772.1	48	8.9	93	ne.	2	0.9		0	fg.			0	0	clear	
Charlotte, N. Carolina	29.48	748.8	30.37	771.4	38.0	3.3	82	s.	2	0.9		4 c	fg.			0	0	fair	
Chattanooga, Tennessee	29.50	749.3	30.36	771.1	42.0	5.6	82	sw.	2	0.9		4 cs	fg.	calm	calm	0	0	fair	
Cheyenne, Wyoming	24.06	611.1	30.31	769.9	7.8	—13.4	80	nw.	6	2.7		0	0			0.01	0.3	clear	
Chicago, Illinois	29.12	739.6	29.86	758.4	48.6	9.2	75	sw.	12	5.4		0	5 s			0	0	fair	
Chincoteague, Virginia	30.34	770.6	30.36	771.1	40.8	4.9	82	sw.	8	3.6		1 c	3 s	nw.		0	0	fair	
Cincinnati, Ohio	29.44	747.8	30.13	765.3	53.2	11.8	61	s.	8	3.6		0	8 s			0	0	cloudy	
Cleveland, Ohio	29.26	743.2	30.05	763.3	47.5	8.6	53	s.	14	6.3		5 c	0	w.		0	0	fair	
Coleman City, Texas	28.17	715.5	30.05	763.3	57	13.9	93	e.	2	0.9			10 s		s.	0	0	cloudy	
Columbus, Ohio	29.22	742.2	30.12	765.0	46	7.8	60	s.	10	4.5		0	8 ks		w.	0	0	cloudy	
Concho, Texas	28.04	712.2	30.06	763.5	59	15.0	87	w.	6	2.7			10 s		w.	0	0	threatening.	
Davenport, Iowa	29.22	742.2	29.92	760.0	45	7.2	76	nw.	5	2.2			10 s		calm	0	0	cloudy	
Dayton, Washington T'y	28.46	722.9	30.27	768.8	33	0.6	65	s.	8	3.6		4 c	0			0	0	fair	
Deadwood, Dakota	25.44	646.2	30.36	771.1	2.5	—16.4	100	s.	2	0.9		0	0			0.02	0.5	clear	
Decatur, Texas					54	12.2	67	s.	14	6.3			10 s		s.	0	0	cloudy	
Delaware Breakwater, Del.	30.31	769.9	30.33	770.4	38	3.3	100	s.	11	4.9		7c;cs	0	w.		0	0	fair	
Denison, Texas	29.20	741.7	30.04	763.0	58.3	14.6	86	s.	8	3.6			10 s			0	0	cloudy	
Denver, Colorado	24.85	631.2	30.37	771.4	25.5	— 3.6	73	ne.	4	1.8			10 s		calm	0	0	cloudy	
Des Moines, Iowa	29.10	739.1	30.08	764.0	33	0.6	68	nw.	12	5.4			10 s		nw.	0	0	cloudy	
Detroit, Michigan	29.20	741.7	29.95	760.7	46.0	7.8	76	s.	10	4.5		0	0			0	0	clear	
Dodge City, Kansas	27.44	697.0	30.18	766.6	31	— 0.6	81	n.	32	14.3			10 s		n.	0	0	cloudy	
Dubuque, Iowa	29.13	739.9	29.89	759.2	41.5	5.3	65	nw.	3	1.3		8 cs	0	nw.		0	0	cloudy	
Duluth, Minnesota	29.19	741.4	29.95	760.7	30	— 1.1	88	w.	12	5.4			10 s		w.	0	0	cloudy	
Eagle Pass, Texas	29.18	741.2	30.02	762.5	60.1	15.6	93	se.	1	0.4			10 s		se.	0	0	cloudy	
Eagle Rock, Idaho	25.52	648.2	30.42	772.7	—14	—25.6	56	calm	0	0		0	0			0.05	1.3	clear	
Eastport, Maine	30.26	768.6	30.34	770.6	6	—14.4	76	nw.	9	4.0		0	0			0	0	clear	
El Paso, Texas	26.15	664.2	30.03	762.7	38.3	3.5	100	calm	0	0		3 cs	0	s.		inap.	inap.	fair	
Erie, Pennsylvania	29.25	742.9	30.02	762.5	47	8.3	63	sw.	20	8.9		10 cs	0			0	0	cloudy	
Escanaba, Michigan	29.08	738.6	29.80	756.9	29	— 1.7	88	nw.	8	3.6			10 s		sw.	0	0	cloudy	
Fort Apache, Arizona	25.02	635.5	30.12	765.0	30	— 1.1	70	sw.	3	1.3			10 n		calm	0.19	4.8	light snow	
Fort Assinnaboine, Montana	27.12	688.8	30.16	766.1	20	— 6.7	58	sw.	31	13.9		5 c	0	sw.		0	0	fair	
Fort Bennett, Dakota	28.68	728.5	30.41	772.4	13	—10.6	64	nw.	8	3.6		0	0			0	0	clear	
Fort Benton, Montana	27.29	693.2	30.29	769.4	23	— 5.0	73	sw.	24	10.7			10 s		sw.	0	0	cloudy	
Fort Buford, Dakota	28.17	715.5	30.35	770.9	5	—15.0	76	s.	7	3.1		0	0			0	0	clear	
Fort Custer, Montana	26.95	684.5	30.31	769.9	1	—17.2	72	se.	7	3.1		0	0			inap.	inap.	clear	
Fort Davis, Texas	25.06	636.5	30.02	762.5	37	2.8	82	calm	0	0		0	0			0	0	clear	
Fort Elliott, Texas	27.33	694.2	30.23	767.8	32	0.0	43	n.	16	7.2		7 k	0	n.		0	0	fair	
Fort Gibson, Indian T'y	29.42	747.3	30.02	762.5	61.0	16.1	78	s.	14	6.3			10 s		s.	0	0	cloudy	
Fort Grant, Arizona	25.22	640.6	30.08	764.0	35	1.7	72	sw.	12	5.4		0	5 s		e.	inap.	inap.	fair	
Fort Griffin, Texas	28.69	728.7	30.06	763.5	55	12.8	93	calm	0	0		10 k	0	sw.		0	0	cloudy	
Fort Keogh, Montana	27.64	702.0	30.32	770.1	3	—16.1	75	w.	1	0.4		0	0			0.03	0.8	clear	
Fort Macon, North Carolina	30.41	772.4	30.42	772.7	45	7.2	100	sw.	1	0.4		hz	hz.	calm	calm	0.03	0.8	light haze	
Fort McKavett, Texas	27.69	703.3	30.07	763.8	58	14.4	87	sw.	6	2.7			10 s			0	0	cloudy	
Fort Missoula, Montana	26.93	684.0	30.36	771.1	9	—12.8	80	se.	1	0.4			10 ks			0	0	cloudy	
Fort St. Michaels, Alaska	29.98	761.5	30.02	762.5	—19	—28.3	100	s.	4	1.8		0	5 s			0	0	fair	
Fort Shaw, Montana	26.38	670.0	30.24	768.1	21	— 6.1	61	sw.	31	13.9		9 cs	0	nw.		0	0	cloudy	
Fort Sill, Indian Territory	28.75	730.2	30.06	763.5	54	12.2	90	s.	6	2.7			10 s		s.	0	0	cloudy	
Fort Stevenson, Dakota	28.31	719.1	30.33	770.4	— 1	—18.3	72	calm	0	0		0	0			0.02	0.5	clear	
Fort Verde, Arizona					39.6	4.2	82	s.			1		10 n		sw.	0.04	1.0	light rain	
Fredericksburg, Texas	28.21	716.5	30.01	762.2	61	16.1	90	sw.	14	6.3			10 ks		sw.	0	0	cloudy	
Galveston, Texas	30.07	763.8	30.11	764.8	63	17.2	89	s.	8	3.6		10 c	0	s.		0	0	cloudy	
Grand Haven, Michigan	29.13	739.9	29.84	757.9	42.0	5.6	82	s.	20	8.9		0	0			0	0	clear	
Hatteras, North Carolina	30.41	772.4	30.43	772.9	46	7.8	77	sw.	4	1.8		2 c	0			0	0	clear	
Helena, Montana	25.88	657.3	30.28	769.1	15	— 9.4	67	w.	3	1.3		0	0			0	0	clear	
Henrietta, Texas	28.99	736.3	30.04	763.0	57	13.9	83	s.	5	2.2			10 s			0	0	cloudy	
Huron, Dakota	28.84	732.5	30.36	771.1	16	— 8.9	67	nw.	14	6.3		1 k	0	nw.		0	0	clear	
Indianapolis, Indiana	29.19	741.4	30.04	763.0	52	11.1	66	sw.	7	3.1		hz.	5 ks	calm	sw.	0	0	fair	
Indianola, Texas	30.02	762.5	30.04	763.0	66.2	19.0	90	s.	15	6.7		5 ck	5 k	s.	s.	0	0	threatening.	
Jacksboro, Texas	28.81	731.8	30.05	763.3	56	13.3	86	s.	5	2.2			10 ks		s.	0	0	cloudy	
Jacksonville, Florida	30.35	770.9	30.40	772.1	47	8.3	86	ne.	1	0.4		0	fg.			0	0	clear	
Keokuk, Iowa	29.19	741.4	29.89	759.2	50.0	10.0	74	sw.	5	2.2			10 s		sw.	0	0	cloudy	
Key West, Florida	30.22	767.6	30.25	768.3	68.8	20.4	87	e.	9	4.0		0	5 s		e.	0.05	1.3	fair	
Kittyhawk, North Carolina	30.42	772.7	30.44	773.2	46	7.8	68	sw.	8	3.6		ics;hz	0			0	0	clear	
Knoxville, Tennessee	29.28	743.7	30.36	771.1	40	4.4	82	ne.	1	0.4		8 cs	sk.	w.		0	0	cloudy	
La Crosse, Wisconsin	29.06	738.1	29.90	759.4	38	3.3	72	nw.	1	0.4		0	6 s		w.	0	0	fair	
La Mesilla, New Mexico	26.00	660.4	30.01	762.2	35.8	2.1	96	calm	0	0		1 k	0			inap.	inap.	clear	
Leavenworth, Kansas	29.16	740.7	30.10	764.5	37	2.8	72	nw.	12	5.4			10 s		nw.	0	0	cloudy	
Lewiston, Idaho	29.51	749.5	30.38	771.6	25.3	— 3.7	44	e.	8	3.6		0	3 s		e.	0	0	clear	
Little Rock, Arkansas	29.79	756.7	30.12	765.0	56	13.3	86	se.	4	1.8			10 s		se.	0	0	threatening.	
Los Angeles, California	29.86	758.4	30.26	768.6	44.6	7.0	45	nw.	8	3.6		0	0			inap.	inap.	clear	
Louisville, Kentucky	29.52	749.8	30.11	764.8	57.0	13.9	51	s.	12	5.4		0	6 s		calm	0	0	fair	
Lynchburg, Virginia	29.62	752.3	30.34	770.6	30.0	— 1.1	72	calm	0	0		0	fg.			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	28.79	731.3	29.88	758.9	40	4.4	89	w.	7	3.1			10 s		w.	0	0	cloudy	
Marquette, Michigan	29.01	736.8	29.79	756.7	31	— 0.6	88	calm	0	0			10 s		calm	inap.	inap.	cloudy	
Mason, Texas	28.29	718.6	30.02	762.5	62	16.7	84	sw.	10	4.5			10 s		sw.	0	0	cloudy	
Memphis, Tennessee	29.84	757.9	30.19	766.8	53	11.7	72	se.	4	1.8		10 cs	0	sw.		0	0	cloudy	
Milwaukee, Wisconsin	29.04	737.6	29.84	757.9	44	6.7	76	sw.	9	4.0		0	9 s		sw.	0	0	cloudy	
Mobile, Alabama	30.25	768.3	30.29	769.4	47.0	8.3	93	e.	2	0.9		0	0			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	30.11	764.8	30.35	770.9	42	5.6	86	calm	0	0		1 cs	0			0	0	clear	
Moorhead, Minnesota	29.20	741.7	30.30	769.6	1	—17.2	72	nw.	12	5.4		0	0			0	0	clear	
Morgantown, W. Virginia	29.17	740.9	30.24	768.1	43.5	6.4	70	sw.	4	1.8		0	fg.			0	0	clear	
Mt. Washington, N. H.	23.65	600.7	30.27	768.8	5.0	—15.0	66	nw.	55	24.5			10 s			0.23	5.8	cloudy	
Nashville, Tennessee	29.67	753.6	30.23	767.8	54.0	12.2	49	s.	6	2.7		7 cs	0	sw.		0	0	fair	
New Haven, Connecticut	30.27	768.8	30.39	771.9	23	— 5.0	73	calm	0	0		1 c	9 k	w.	w.	0	0	cloudy	
New London, Connecticut	30.38	771.6	30.43	772.9	28	— 2.2	77	calm	0	0			10 s		calm	0	0	cloudy	
New Orleans, Louisiana	30.18	766.6	30.24	768.1	55.0	12.8	80	ne.	4	1.8		3 c	0	w.		0	0	clear	
Newport, Rhode Island	30.37	771.4	30.42	772.7	28.0	— 2.2	77	w.	6	2.7			10 s		nw.	0	0	cloudy	
New River, N. Carolina					46	7.8	100	calm	0	0		0	fg			0	0	dense fog	
New Shoreham, Rhode I'd.	30.39	771.9	30.42	772.7	30.3	— 0.9	67	calm	0	0		0	6 ks		sw.	0	0	fair	
New York, New York	30.18	766.6	30.37	771.4	29.5	— 1.4	79	e.	10	4.5			10 s		w.	0	0	cloudy	
Norfolk, Virginia	30.36	771.1	30.39	771.9	41	5.0	82	sw.	5	2.2		0	0			0	0	clear	
North Platte, Nebraska	27.26	692.4	30.30	771.1	21.6	— 5.8	82	n.	14	6.3		5 cs	0			0	0	fair	
Olympia, Washington T'y	30.03	762.7	30.07	763.8	38.0	3.3	89	s.	21	9 4			10 n		calm	0.04	1.0	light rain	
Omaha, Nebraska	28.95	735.3	30.22	767.6	30.0	— 1.1	77	nw.	16	7.2			10 s			0	0	cloudy	
Ooglaamie, Pt. Barrow, Alas.	29.59	751.6	29.61	752.1	—13.2	—25.1	83	wsw.	8	3.6			10 s			0	0	cloudy	
Oswego, New York	29.78	756.4	30.13	765.3	29.6	— 1.3	76	se.	12	5.4		3 cs	5 s			inap.	inap.	cloudy	
Palestine, Texas	29.54	750.3	30.12	765.0	61	16.1	87	s.	12	5.4			10 s			c	0	cloudy	
Pensacola, Florida	30.28	769.1	30.31	769 9	49.3	9.6	93	ne.	6	2.7		0	1 s		se.	0	0	clear	
Philadelphia, Pa.	30.23	767.8	30.34	770.6	32	0.0	78	e.	2	0.9		0	0			0	0	clear	
Pike's Peak, Colorado	17.52	445.0	30.24	768.1	2	—16.7	89	calm	0	0		0	1 s			0.12	3.0	clear	
Pioche, Nevada	24.19	614.4	30.35	770.9	13	—10.6	83	nw.	12	5.4		0	0			0.03	0.8	clear	
Pittsburg, Pennsylvania	29.31	744.5	30.17	766.3	46.0	7.8	58	s.	5	2.2		3 k	0	w.		0	0	clear	
Port Eads, Louisiana	30.22	767.6	30.23	767.8	57.4	14.1	90	se.	8	3.6		0	hz			0	0	clear	
Port Huron, Michigan	29.19	741.4	29.92	760.0	40.2	4.6	77	s.	13	5.8		8 cs	0	w.		0	0	cloudy	
Portland, Maine	30.33	770.4	30.38	771.6	14.5	— 9.7	83	nw.	1	0.4		3 cs	6 s	nw.	calm	0	0	cloudy	
Portland, Oregon	30.18	766.6	30.25	768.3	40.1	4.5	65	s.	15	6.7			10 s		s.	0	0	cloudy	
Portsmouth, N. Carolina					47	8.3	63	w.	4	1.8		0	0			0	0	clear	
Prescott, Arizona	24.67	726.6	30.03	762.7	29	— 1.7	80	calm	0	0			10 n		calm	0.29	7.4	light snow	
Punta Rassa, Florida	30.29	769.4	30.30	769.6	62	16.7	68	ne.	12	5.4		8 ck	0	s.		0	0	cloudy	
Red Bluff, California	29.98	761.5	30.36	771.1	35.2	1.8	53	n.	7	3.1		0	0			0	0	clear	
Rio Grande City, Texas	29.74	755.4	29.99	761.7	64	17.8	90	se.	4	1.8		0	0			0	0	clear	
Rochester, New York	29.36	745.7	30.07	763.8	28	— 2.2	77	se.	3	1.3		3 cs	0	w.		inap.	inap.	clear	
Roseburg, Oregon	29.90	759.4	30.47	773.9	29	— 1.7	88	n.	1	0.4		2 ck	0	sw.		0	0	clear	
Sacramento, California	30.28	769.1	30.36	771.1	36.4	2.4	61	n.	2	0.9		0	0			0	0	clear	
St. Louis, Missouri	29.37	746 0	30.01	762.2	54.9	12.7	74	s.	20	8.9			10 s		s.	0	0	cloudy	
St. Paul, Minnesota	29.06	738.1	30.00	762.0	29.0	— 1.7	77	nw.	14	6.3			10 s		nw.	0	0	cloudy	
St. Vincent, Minnesota	29.36	745.7	30.33	770.4	— 4	—20.0	100	nw.	12	5.4		0	0			0.03	0.8	clear	
Salt Lake City, Utah	25.88	657.3	30.44	773.2	20	— 6.7	46	sw.	2	0.9		6 k	0	sw.		inap.	inap.	fair	
San Antonio, Texas	29.29	744.0	30.01	762.2	62.6	17.0	93	se.	6	2.7			10 k		se.	0	0	cloudy	
San Diego, California	30.16	766.1	30.23	767.8	41.8	5.4	82	ne.	4	1.8		0	0			0	0	clear	
Sandusky, Ohio	29.29	744.0	30.01	762.2	45	7.2	83	sw.	17	7.6		0	5 s			0	0	fair	
Sandy Hook, New Jersey	30.32	770.1	30.36	771.1	36.0	2.2	89	se.	8	3.6		9 k	0	nw.		0	0	cloudy	
San Francisco, California	30.28	769.1	30.35	770.9	42	5.6	57	w.	4	1.8		0	0			0	0	clear	
Santa Fé, New Mexico	23.09	586.5	30.13	765.3	27.4	— 2.6	94	sw.	4	1.8			10 n			0.01	0.3	light snow	
Savannah, Georgia	30.32	770.1	30.41	772.4	44	6.7	80	s.	1	0.4		0	fg			0	0	clear	
Shreveport, Louisiana	29.89	759.2	30.14	765.5	57	13.9	80	s.	8	3.6			10 s		s.	0	0	cloudy	
Silver City, New Mexico	24.11	612.4	29.96	761.0	31	— 0.6	92	w.	8	3.6			10 n		w.	0.30	7.6	heavy snow	
Sitka, Alaska	29.10	739.1	29.17	740.9	31	— 0.6	78	w.	8	3.6		5 k	2 s	w.	calm	1.04	26.4	fair	
Smithville, North Carolina	30.38	771.6	30.42	772.7	44	6.7	39	sw.	2	0.9		0	0			0	0	clear	
Spokane Falls, Wash. Ter.	28.13	714 5	30.26	768.6	26.5	— 3.1	82	s.	12	5.4			10 s		sw.	0	0	cloudy	
Springfield, Illinois	29.23	742.4	29.96	761.0	50	10.0	77	s.	11	4.9			10 s		s.	0	0	cloudy	
Springfield, Massachusetts	30.27	768.8	30.41	772.4	22.1	— 5.5	87	e.	2	0.9			10 s			0	0	cloudy	
Springfield, Mo.	28.54	724.9	30.11	764.8	56	13.3	74	sw.	12	5.4			10 ks			0	0	cloudy	
Stockton, Texas	26.89	683.0	30.02	762.5	43.0	6.1	100	calm	0	0		0	0			0	0	clear	
Thatcher's Island, Mass.	30.35	770.9	30.41	772.4	22.2	— 5.4	85	nw.	8	3.6			10 s			0	0	cloudy	
Toledo, Ohio	29.24	742 7	29.98	761.5	46	7.8	68	sw.	14	6.3		6 ck	hz	sw.		0	0	fair	
Tucson, Arizona	27.60	701.0	30.08	764.0	43	6.1	76	e.	3	1.3			9 s			0	0	cloudy	
Umatilla, Oregon	29.94	760.5	30.32	770.1	32.0	0.0	78	e.	3	1.3		9 cs	0	w.		0	0	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.96	761.0	30.23	767.8	52	11.1	80	e.	6	2.7		8 cs	fg	calm	calm	0	0	cloudy	
Visalia, California	29.95	760.7	30.33	770.4	33	0.6	98	se.	4	1.8		0	0			0	0	clear	
Washington, D. C.	30.21	767.3	30.33	770.4	28	— 2.2	100	calm	0	0		1 c	fg			0	0	clear	
West Los Animas, Colorado	26.16	664.5	30.29	769.4	28	— 2.2	64	ne.	22	9.8		0	9 s		ne.	0	0	cloudy	
Wickenburg, Arizona					36	2.2	81	calm			0	0	0			0.10	2.5	clear	
Williamsport, Pa.	29.62	752.3	30.24	768.1	29.8	— 1.2	80	n.			1	hz.	1 s		nw.	0	0	densehaze	
Wilmington, N. Carolina	30.36	771.1	30.42	772.7	43	6.1	83	calm	0	0		0	5 s; sk		calm	0	0	fair	
Winnemucca, Nevada	25.94	658.9	30.46	773.7	— 6	—21.1	65	n.	6	2.7		0	0			0.12	3.0	clear	
Wood's Holl, Mass.																			
Yankton, Dakota	28.94	735.1	30.36	771.1	21	— 6.1	70	nw.	8	3.6		0	0			0	0	clear	
Yuma, Arizona	30.01	762.2	30.16	766.1	50.0	10.0	46	nw.	11	4.9		0	0			0	0	clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.06	560.3			54.5	12.5	79	calm	0	0		3 k	4 s			0.42	10.7	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.05	763.3	30.06	763.5	79	26.1	70	e.				5 k	4 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	30.01	762.2	30.03	762.7	77	25.0	90	calm	0	0			10 ks		sw.	0.85	21.6	threatening.	J. I. Plume.
Guadeloupe, W. I.	30.05	763.3	30.07	763.8	75	23.9	87	e.				7 c	0			0.079	2.0		B. Bigar.
Havana, Cuba, W. I.	30.11	764.8	30.16	766.1	72	22.2	79	e.	10	4.5		2 cs	0			inap.	inap.	fair	A. Van Oaneghem.
Kingston, Jamaica, W. I.	30.12	765.0	30.13	765.3	71.0	21.7	82	n.	1	0.4		2 cs	6 s		e.	0	0	fair	Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.06	763.5	30.07	763 8	75	23.9	95	e.			3		10 n	e.		1.300	33.0	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.54	750.3	30.00	762.0	82	27.8	80	calm			0	5 ck	4 s	calm	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua							90	ne.			3	0	ks		ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.13	765.3	30.15	765.8	75	23.9	72	n.	4.8	2.1		0	1 s			0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.93	760.2	29.98	761.5	—28.0	—33.3		ne.	7	3.1		3 k	3 s	ne.	ne.	0	0	cloudy	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, N. 42° 15′, W. 8° 42′	30.35	770.9	53	11.7	86	ene.			1		3	ene.				3	w.	d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 20° 40′, E. 112° 10′	30.28	769.1	61	16.1		nne.			1		10					3	n.	overcast	Capt. A. J. Errington.
H. M. S. Alert, N. 4° 22′, E. 99° 25′	29.92	760.0	81.8	27.7	74	wnw.			2		2							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.31	769.9	59	15.0	64	calm			0		6	ssw.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 7° 06′, E. 75° 20′	29.89	759.2	83	28.3	64	nne.			1–2		9					4	w.	misty	Capt. Lord Chas. Scott.
H. M. S Boadicea, S. 34° 11′, E. 18° 26′	29.84	757.9	77	25.0	67	ese.			1		0							blue sky	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	29.91	759.7	72	22.2	80	ese.			1		0							blue sky	Capt. A. T. Dale.
H. M. S. Dido, N. 13° 05′, W. 59° 36′	30.12	765.0	78	25.6		ene.			1–2		5	ne.						showery	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.39	771.9	61	16.1	66	wnw.			1–2		3	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf																			Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 35° 54′, E. 0° 37′	29.84	757.9	65	18.3	94	wnw.			4		8	wnw.				9	wsw; nnw.	d. clouds	Capt. C. A. G. Bridge.
H. M. S. Fawn, Mocha, Arabia	29.87	758.7	78.5	25.8	86	n.			1		2						n.	d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.01	762.2	44	6.7	67	w.			1		9	w.						misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 12° 04′, W. 77° 11′	29.93	760.2	68	20.0	92	sse.			2		8							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.47	748.5	51	10.6	93	w.			2		7							showery	Capt. L. F. Jones.
H. M. S. Inconstant																			
H. M. S. Iris, N. 37° 15′, E. 19° 08′	30.27	768.8	57	13.9	69	calm			0		8							d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.29	769.4	57	13.9	75	ne.			1–2		4	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey, Coquimbo, Chili	29.93	760.2	65	18.3		nw.			1		0							blue sky	Capt. J. T. R. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, Sydney, Australia	30.10	764.5	67	19.4	94	se.			3–5		7	w.						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, N. 13° 25′, W. 69° 57′	30.03	762.7	77.5	25.3	86	ene.			5		6	ene.				3	ene.	d. clouds	Capt. E. Drummond.
H. M S. Orontes, N. 11° 40′, E. 66° 26′	29.92	760.0	81.5	27.5	92	nnw.			2		6							d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 17° 15′, W. 36° 12′	30.15	765.8	75	23.9	97	ne.			4		6					2	ne.	squally	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, N. 0° 34′, W. 6° 20′	29.89	759.2	83	28.3	95	ssw.			3		5	s.						d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.02	762.5	64	17.8		nw.			1		5							d. clouds	Capt. W. H Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id.	29.85	758.2	43	6.1	?	ssw.			4		10							squally	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 2° 49′, E 40° 57′	29.23	742.4	86	30.0	88	ese.			3		3	ene.				1	ene.	d. clouds	Capt. M. Byles.
H. M. S. Thalia																			
H. M. S. Triumph, Callao, Peru	29.99	761.7	69	20.6	90	calm			0		10	calm						misty	Capt. A. H. Markham.
H. M. S. Tyne, N. 1° 57′, E. 104° 50′	29.91	759.7	80	26.7	95	nne.			4		9					4	nne.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica W I.	30.10	764.5	73	22.8		n.			1		3							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, N. 26° 50′, E. 56° 42′	29.93	760.2	69.5	20.8	79	e.			3–4		7	sw.				3	nw.	showery	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon																			
Quanza, Brava, Cape Verd Ids.	30.06	763.5	71.4	21.9	83	ne.			2		5		sw.			2	ne.	d clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder																			Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.30	769.6	54	12.2	87	ne.	10	4.5			2		ne.	0	0			fair	
N. Yard, Portsmouth, N. H.	30.41	772.4	14	—10.0		nw.	6	2.7			10		nw.	0	0			cloudy	
Naval Hospital																			
Yokohama, Japan	29.69	754.1	45	7.2	53	nne.	4	1.8			5		w.	0.29	7.4			fair	
Adams,																			
Callao, Peru	29.78	756.4	69	20.6	95	sse.			0-1		5			0	0	gr'd		fair	
Alaska,																			
Valparaiso, Chili	29.97	761.2	63	17.2	89	nw.			1		0			0	0	sm'h		clear	
Alert.																			
N. 5° 44′, E. 104° 04′*	29.81	757.2	80	26.7	82	ene.			5		5?		ene.	0	0	mod.	ene.	clear?	
Alliance.																			
Boston, Mass.	30.33	770.4	24	—4.4	86	nw.			1		10			0	0			overcast	
Ashuelot,																			
Tientsin, China	30.23	767.8	34	1.1	69	w.			2		0							clear	
Brooklyn,																			
S. 38° 26′, W. 56° 02′	29.81	757.2	67	19.4	89	w.	22	9.8			0			0	0	mod.	w.	clear	
Colorado,																			
New York, N. Y.	30.35	770.9	30	— 1.1	89	e.	3	1.3			10		w.	0	0			cloudy	
Enterprise,																			
Norfolk, Va*	30.38	771.6	45	7.2	92	s.			1		0							clear	
Essex,																			
Madeira I'd, Africa	30.14	765.5	63	17.2	83	wnw.			2		10		nw.			sm'h		cloudy	
Franklin,																			
Norfolk, Va	30.43	772.9	47	8.3	70	ssw.	12	5.4			2		calm	0	0			clear	
Galena.																			
Gibraltar, Mediterranean.	30.36	771.1	58	14.4	82	nw.			2		8		e.			sm'h		fair	
Independence,																			
N. Yard, Mare I'd, Cal	30.18	766.6	35	1.7	80	calm	0	0			0			0	0			clear	
Kearsarge.																			
New Orleans, La	30.24	768.1	55	12.8	87	calm			0		8		s.					hazy	
Lackawanna.																			
Valparaiso, Chili*	29.93	760.2	62	16.7	94	nw.			0-1		0							clear	
Lancaster,																			
Messina, Italy	30.26	768.6	59	15.0	59	s.			1		5		s.					fair	
Marion,																			
S. 30° 13,′ E. 48° 04′	29.95	760.7	77	25.0	82	ene.			4		5		ene.			long	ene.	fair	
Michigan.																			
Erie, Pa	29.92	760.0	47	8.3	77	sw.			4		10		sw.					cloudy	
Minnesota,																			
Newport, R. I.	30.40	772.1	29	— 1.7		w.	3	1.3			10		e.					overcast	
Monocacy,																			
Yokohama, Japan	29.88	758.9	47	8.3	70	n.			2		8		n.					fair	
Nipsic.																			
N. 38° 24′, E. 0° 32′	30.41	772.4	59	15.0	70	nw.			1		2					sm'h		clear	
Onward,																			
Callao, Peru†	30.08	764.0	68	20.0	95	se.			2		10		nnw.			long	w.	cloudy	
Palos,																			
Hong Kong, China	30.30	769.6	58	14.4	76	nw.			1		0							clear	
Passaic,																			
Washington, D. C.	30.36	771.1	23	— 5.0		ne.			1		2		calm					fair	
Pensacola.																			
Valparaiso, Chili	30.02	762.5	69	20.6	61	nw.			2		0			0	0	sm'h		clear	
Powhatan.																			
N. 35° 36′, W. 74° 14′	30.44	773.2	61	16.1	61	sse.			3		5?					mod.	s.	clear?	
Quinnebaug.																			
N. 33° 35′, E. 14° 32′	30.31	769.9	57	13.9	58	nnw.			3		8		calm			sm'h		rainy	
Ranger.																			
N. 20° 14′, W. 105° 35′*	29.97	761.2	70	21.1	95	ne.			1		2		calm	0	0	long	nw.	clear	
Richmond,																			
N. 18° 55′, E. 161° 46′*	29.81	757.2	78	25.6	82	ssw.			1		2		ssw.	0.09	2.3	sm'h		fair	
Shenandoah,																			
S. 34° 06′, W. 48° 36′*	30.10	764.5	71	21.7	75	w.			2		0					mod.	ssw.	clear	
St. Louis,																			
League Island, Pa	30.37	771.4	26	— 3.3	100	calm	0	0			0			0	0			clear	
Swatara.																			
Kobe, Japan*	29.87	758.7	46	7.8	62	w.			1		10		calm			sm'h		cloudy	
Tennessee,																			
New York, N. Y	30.33	770.4	32	0.0	90	e.	1	0.4			8		w.	0	0			cloudy	
Vandalia,																			
Cartagena, U. S. Col	29.75	755.6	75	23.9	95	se.			1		2		ne.					fair	
Wabash,																			
Boston, Mass.	30.38	771.6	20	— 6.7		w.	1	0.4			10		w.	0	0			foggy	
Wachusetts.																			
N. 38° 17′, W. 123° 18′	30.34	770.6	47	8.3	92	nw.			4		0					mod.	nw.	clear	
Wyoming.																			
Port Royal, S. C.	30.40	772.1	44	6.7	100	nne.	2	0.9			0			0	0			clear	
Yantic,																			
Aspinwall, Panama*	29.97	761.2	77	25.0	86	n.			3		5		n.					fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith, N. 50° 45′, W. 41° 15′	29.40	746.7	35	1.7	80	wsw.	6	.....	9	.....	wsw.	3 h'r	3 h'r	con.	w.	snow & hail.	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, Glasgow, Scotland*	30.54	775.7	46	7.8	.....	w.	1	.....	9	.....	.....	.....	.....	.....	.....	foggy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.54	775.7	44	6.7	.....	sw.	1	.....	.....	.....	sw.	0	0	.....	.....	hazy	.....
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. British Crown, Capt. E. H. Freeth,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Liverpool, England	30.30	769.6	48	8.9	92	se.	4	.....	10	.....	se.	.....	.....	.....	.....	overcast	Caulfman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 47° 13′, W. 38° 48′†	29.35	745.5	46	7.8	76	wsw.	4	.....	2?	.....	w.	h'vy	h'vy	mod.	sw.	raining ?	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, Philadelphia, Penn.†*	30.29	769.4	28	—2.2	89	n.	1	.....	2	.....	.....	.....	.....	.....	.....	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
S. S. Devonia, Capt. H. Young, N. 43° 00′ W. 57° 35′*†	29.84	757.9	28	—2.2	.....	nw.	6	.....	7	.....	nw.	.....	.....	mod.	nw.	light snow	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Daw, 3d officer.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 15° 41′, W. 75° 57′*†	29.98	761.5	75	23.9	.....	e.	5	.....	.....	.....	ne.	½ h'r	light	r'gh	e.	cloudy	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Maracaibo, Venezula, S. A	.....	.....	.....	.....	.....	ne.	2	.....	.....	.....	.....	.....	.....	.....	.....	fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 26° —′, W. 74° —′	30.22	767.6	.....	.....	.....	e.	4	.....	3?	.....	e.	0	0	r'gh	e.	cloudy?	J. Frasher, 3d officer.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 60° 00′, W. 68° 36′	29.43	747.5	45	7.2	.....	nne.	4	.....	10	.....	.....	.....	.....	.....	.....	drizzling	.....
Baroda, Capt. O. J. Russell, N. 2° 11′, W. 26° 09′	30.01	762.2	79.2	26.2	86	calm	0	.....	10	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Caldew, Capt. W. Peterson S. 53° 01′, W. 58° 00′	29.47	748.5	47	8.3	.....	nne.	3	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
S. S. Cipero, Capt. W. N. Lailey Georgetown, British Guiana, S. A	30.05	763.3	79.6	26.4	82	ne.	2	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. City of Agra, Capt. Thos. Young. N. 33° 34′, W. 38° 40′	30.03	762.7	66.0	18.9	.....	sw.	5	.....	7	.....	.....	.....	.....	.....	.....	showery	.....
Coppename, Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, S. 20° 05′, E. 89° 04′	29.98	761.5	80	26.7	82	ene.	3	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
Hermine, Capt. S. G. Jones, S. 53° 36′, W. 59° 24′	29.41	747.0	46.8	8.2	100	ne.	2	.....	10	.....	.....	.....	.....	.....	.....	drizzling	.....
Hope, Capt. James Campbell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 36° 56′, E. 20° 00′	29.91	759.7	74.9	23.8	85	var.	1	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 54° 44′, W. 63° 03′	29.31	744.5	48.7	9.3	93	e.	4	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
Bk. Morfola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	30.02	762.5	80.5	26.9	74	nw.	3	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
Naiad, Capt. J. Smith. N. 23° 45′, W. 48° 53′	30.28	769.1	71.3	21.8	90	nne.	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry. S. 30° 40′, E. 78° 33′	30.13	765.3	72.8	22.7	63	ssw.	4	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. G. W. Pearson, N. 50° 33′, W. 14° 52′	30.20	767.1	50.5	10.3	93	sw.	5	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Superb, Capt. Berridge. N. 37° 48′, W. 33° 13′	.....	.....	.....	.....	.....	ssw.	4	.....	10	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham, N. 49° 15′, W. 31° 50*†	29.70	754.4	.....	.....	.....	sw.	3	.....	7	.....	w.	0	0	long	w.	fine	Wm. Fitt.
CROMWELL LINE. *Clark & Seaman, Agents, New York.*																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. P. C. Halsey.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Bothnia, Capt. W. McMickan, N. 49° 30′, W. 27° 23′	29.58	751.3	.....	.....	.....	sw.	4	.....	.....	.....	s.	2 h'r	light	cross	sw.	threatening.	E. F. Stembridge, 3d off.
S. S. Gallia, Capt. W. H. P. Hains, N. 50° 14′, W. 25° 07′*	29.71	754.6	52	11.1	100	s.	7	.....	10	.....	s.	light	light	sm'h	.....	hazy	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, N. 49° 52′, W. 27° 48′	29.68	753.9	48.2	9.0	.....	s.	5	.....	10	.....	s.	3 h'r	3 h'r	hv'y	s.	hazy	.....
S. S. France, Capt. Périer d'Hauterive, N. 43° 21′, W. 54° 40′*†	29.84	758.0	23.0	—5.0	.....	wnw.	6	.....	k	.....	nw.	snow	snow	h'vy	nw.	covered	.....
S. S. St. Laurent, Capt. A. Sérvan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Silesia, Capt. A. Albers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, Argentine Rep. S. A†*.	30.21	767.3	73	22.8	.....	wnw.	2	.....	1	.....	wsw.	0	0	.....	.....	clear	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 49° 22′, W. 37° 40′	.....	.....	.....	.....	.....	ssw.	6	.....	.....	.....	w.	1 h'r	1 h'r	high	wsw.	cloudy	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 31° 14′, W. 79° 08′*†	30.47	773.9	65	18.3	.....	e.	2	.....	1	.....	e.	0	0	mod.	e.	fine	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, Santiago, Cuba, W. I†	30.18	766.6	73	22.8	.....	nne.	1	.....	1	.....	ne.	0	0	.....	.....	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, Cartagena, U. S. C.† [man	29.92	760.0	77	25.0	.....	ene.	2	.....	.....	.....	.....	.....	.....	.....	nne.	fine	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Elbe, Capt. W. Willigerod [nolds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Lessing, Capt. B. Voss, N. 50° 07, W. 20° 23′*†	29.97	761.2	55	12.8	.....	s.	6	.....	.....	.....	.....	.....	.....	7	sw.	.....	.....
S. S. Maas, Capt. T. H. Bonjer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke N. 41° 23′, W. 50° 00′*†	29.85	758.2	41	5.0	.....	nw.	4–5	.....	.....	.....	.....	.....	.....	.....	wnw.	fine	.....
S. S. P. Caland, Capt. E. Deddes, N. 49° 57′, W. 12° 11′	30.36	771.1	50.9	10.5	.....	se.	5	.....	.....	.....	.....	.....	.....	4	se.	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 47° 36′, W. 40° 04′	29.28	743.7	41	5.0	.....	sw.	10	.....	.....	.....	.....	.....	.....	high	sw.	stormy	.....
S. S. Scythia, Capt. M. Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers, N. 40° 21′, W. 69° 50′	30.44	773.2	.....	.....	.....	wsw.	2	.....	.....	.....	.....	2 h'r	snow	sm'h	.....	clear	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz Pfeiffer, N. 39° 53′, W. 67° 35′	30.42	772.7	32.5	0.3	69	nw.	5	.....	2	.....	nw.	6 h'r	6 h'r	mod.	wnw.	clear	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 49° 55′, W. 4° 40′*	29.98	761.5	42.8	6.0	.....	sse.	2–3	.....	10	.....	s.	0	0	mod.	s.	covered	.....
S. S. Mosel, Capt. F. Hesse, N. 47° 37′, W. 43° 31′	29.38	746.2	28.6	—1.9	.....	wsw.	8	.....	9	.....	wsw.	3 h'r	rain,	r'gh	wsw.	squally	J. Hesse.
S. S. Neckar, Capt. R. Bussius	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	snow	&hail	.....	.....	.....	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, S. 7° 27′, W. 32° 07′*	30.02	762.5	82.4	28.0	83	se.	3	.....	4	.....	se.	0	0	3	se.	fair	.....
S. S. Oder, Capt. O. Undeutsch, N. 41° 59′, W. 59° 36′*	30.07	763.8	25.2	—3.8	.....	wnw.	6	.....	8	.....	nnw.	4 h'r	snow	r'gh	nw.	snowing	Montz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, N. 41° 32′, W. 22° 26′	30.10	764.5	.....	.....	.....	nw.	4	.....	2	.....	nw.	0	0	mod.	wnw.	clear	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 06′, E. 175° 51′†	30.12	765.0	70	21.1	84	se.	5	.....	2	.....	ssw.	0	0	mod.	se.	clear	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 40° 31′, W. 129° 59′*†	30.60	777.2	57	13.9	100	ssw.	4	.....	8	.....	sew.	.....	.....	mod.	ssw.	cloudy	.....
S. S. Oceanic, Capt. J. Metcalfe, N. 22° 48′, E. 117° 54*′	30.31	769.9	54	12.2	68	ne.	5	.....	0	.....	.....	.....	.....	4	ne.	fine	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 40° 23′, W. 73° 56′*†	30.10	764.5	.....	.....	.....	ese.	2	.....	2	.....	.....	.....	.....	sm'h	.....	hazy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Boston, Mass†	30.37	771.4	30	—1.1	.....	ne.	1	.....	8	.....	nw.	0	0	.....	.....	threatening.	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	29.98	761.5	42	5.6	83	sse.	5	.....	10	.....	s.	.....	.....	.....	.....	heavy rain..	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *R. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann N. 38° 46′, W. 123° 49′†	30.35	770.9	36	2.2	90	nnw.	7	.....	.....	.....	.....	0	0	high	nw.	fair	A. C. James, 2d off.
S. S. Columbia, Capt. Fred. Bolles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	30.21	767.3	40	4.4	56	s.	4	.....	8	.....	sw.	.....	.....	.....	.....	squally	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 34° 02′, W. 119° 03′†	30.19	766.8	47	8.3	54	ene.	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear	.....
S. S. Geo. W. Elder, Capt. H. G. Morse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Idaho, Capt. H. M. Hayward, Seattle, Wash. Ter †	30.23	767.8	42	5.6	75	se.	6	.....	10	.....	se.	.....	.....	.....	.....	rainy	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.45	773.4	40	4.4	63	calm	0	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.31	769.9	41	5.0	33	ese.	3	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. Victoria, Capt. W. E. Plummer, Nanaimo, Vancouver I'd†	29.86	758.5	38	3.3	100	sw.	1	.....	10	.....	.....	.....	.....	.....	.....	rainy	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of New York, Capt. W. B. Cobb, S. 5° 20′, W. 167° —′†	29.93	760.2	82	27.8	87	ne.	3	.....	1	.....	ne.	0	0	light	ne.	clear	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, S. 34° 17′, E. 171° 52′†	30.04	763.0	74	23.3	72	nw.	2	.....	2	.....	w.	0	0	mod.	se.	clear	E. Le Saik.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	30.26	768.6	57	13.9	75	ese.	2	.....	10	.....	ese.	0	0	.....	.....	cloudy	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Grenada, Capt. M. Connolley, Panama, Panama†	29.95	760.7	74	23.3	95	nw.	3	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. South Carolina, Capt. W. J. Russell, N. 14° 48′, W. 94° 30′†	30.10	764.5	80	26.7	78	se.	2	.....	0	.....	.....	0	0	light	se.	.....	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.14	765.5	69	20.6	75	nw.	5	.....	8	.....	nw.	.....	.....	.....	.....	drizzling	.....
QUEBEC S. S. CO. *B. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M. Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes, N. 41° 23′, W. 56° 41′*†	30.08	764.0	34	1.1	.....	nw.	8	.....	10	.....	nw.	20 h'r	snow	h'vy	nw.	snowing	.....
S. S. Nederland, Capt. J. Uberweg, N. 47° 32′, W. 41° 27′*†	30.10	764.5	33	0.6	.....	w.	5	.....	10	.....	w.	snow	snow	long	wsw.	light snow	Athrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Jersey City, N. J *	30.37	771.4	33	0.6	79	ese.	1	.....	8	.....	wnw.	0	0	.....	.....	cloudy	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon N. 46° 27′, W. 44° 21′*†	29.25	742.9	29	—1.7	100	wsw.	8	.....	10	.....	wsw.	snow	&hail	very high	wsw.	overcast	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, Antwerp, Belgium*	30.24	768.1	38	3.3	.....	e.	2	.....	10	.....	ese.	0	0	.....	.....	hazy	Olsen & Assfeld.
ROTTERDAM LINE. *Fundh, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, N 41° 09′, W. 61° 00′*	29.97	761.2	46.6	8.1	85	nw.	7	.....	5	.....	w.	1 h'r	snow	high	wnw.	rainy	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 59° 10′, E. 0° 22′†	30.53	775.4	48.2	9.0	.....	w.	2	.....	8	.....	w.	.....	.....	sm'h	w.	covered	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters, N. 51° 32′, W. 8° 48′*†	30.54	775.7	48	8.9	.....	sse.	3	.....	10	.....	sse.	1 h'r	light	.....	.....	hazy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell, N. 45° 05′, W. 47° 25′*†	29.36	745.7	29	—1.7	78	w.	6	.....	8	.....	w.	4 h'r	light	high	w.	cloudy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy, N. 41° 14′, W. 54° 38′*†	29.97	761.2	38	3.3	.....	nnw.	5	.....	5	.....	wnw.	snow	snow	mod.	wnw.	d. clouds	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.39	771.9	49.5	9.7	97	ne.	2	0	0			0	0			clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey,																	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N 28° 45′, W. 19° 50′.*†	30.24	768.1	68	20.0		wnw.	1		2		e.	0	0	sm'h	e.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. Ponce, Porto Rico, W. I †*	30.16	766.1	76	24.4		n.	1		2		ne.	0	0			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 19° 40′ W. 31° 10′*†	30.20	767.1	73	22.8		ene.	6		3		ene.	0	0	mod.	e.	fair	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk Celestina, Capt. G. Carniglia.																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 48° 22′. W. 30° 40′*†.	29.52	749.8				ssw.	3				wsw.	10 h'r	light	mod	nw.	cloudy	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill. S. 38° 29′, W. 52° 18′†	29.90	759.4				w.	4		0			0	0	r'gh	sw.	clear	A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	30.46	773.7				nnw.	1		2		n.	0	0			clear	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.,																	J. C. Andersen, Jr.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.32	770.1	26	—3.3		nne.	2		4		nne.	0	0			fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison, S. 29° —, W. 79° 18′†	30.15	765.8	71	21.7		wsw.	2		1		wsw.	0	0	mod.	wsw.	clear	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 34° 15′. W. 20° 33′			61	16.1		wnw.	5		2		wnw.	6 h'r	h'vy	long	wnw.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 1° 41′, W. 40° 24′*†	29.03	737.3				ene.	6		10		ene.	0	0	con.	ne. se.	hazy	
Bk. Geo. Booth, Capt. D. Williams, N. 30° 08′, W. 43° 17′*†	30.10	764.5	70	21.1		sw. nnw.	3					0	0		nnw.	fine	D. Williams.
Bk. Granville, Capt. R. Bonney,																	
Schr Henry Denison, Capt. Jno. Fehring,																	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt, S. 41° 50′, E. 18° 48′*†	29.78	756.7				n.	5		3		nnw.	8 h'r	light	long	sw.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte.																	G. T. Lecompte.
Bk. New York, Capt. J. E. Sorensen, N 36° 20′ W. 3° 39′*†	30.50	774.7				ese.	1				ese.	0	0	sm'h		fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 43° 16′ W. 21° 05′*†	30.25	768.3	56	13.3	87		1		5		nw.			mod.	wnw.		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.28	769.1	54	12.2	48	ne.	3		0							clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 8° 45′, W. 33° 45′*†	30.00	762.0				se.					se.	0	0			clear	J. Connolly.
Schr. S. B. Hubbard, N. 40° 30′, W. 72° 45′*†	30.37	771.4	40	4.4		se.	1		5		se.	0	0	long	ssw.	fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 3° 44′, W. 30° 30′*	29.89	759.2	79.7	26.5	92	sse.	3		3		se.			mod.	se.	d. clouds	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 36° 53′. W. 18° 06′*†	30.06	763.5	59	15.0	81	nw.	5		8		nw.	6 h'r	h'vy	r'gh	sw.	cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 34° 49′, E. 6° 10′*†	30.20	767.1				nw.	7		8		nw.	rain	rain	light	nw.		
S. Wm. Woodbury Capt. H. T. Schmidt, N. 39° 34′, W. 49° 10′*†	29.63	752.6	47	8.3	85	nnw.	7				nw.			cross	wnw.	covered	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, N. 2° 28′, W. 28° 10′*†	30.10	764.5				n to e					n to e			light	nne.	thund'r st'm	N. P. Dutton.

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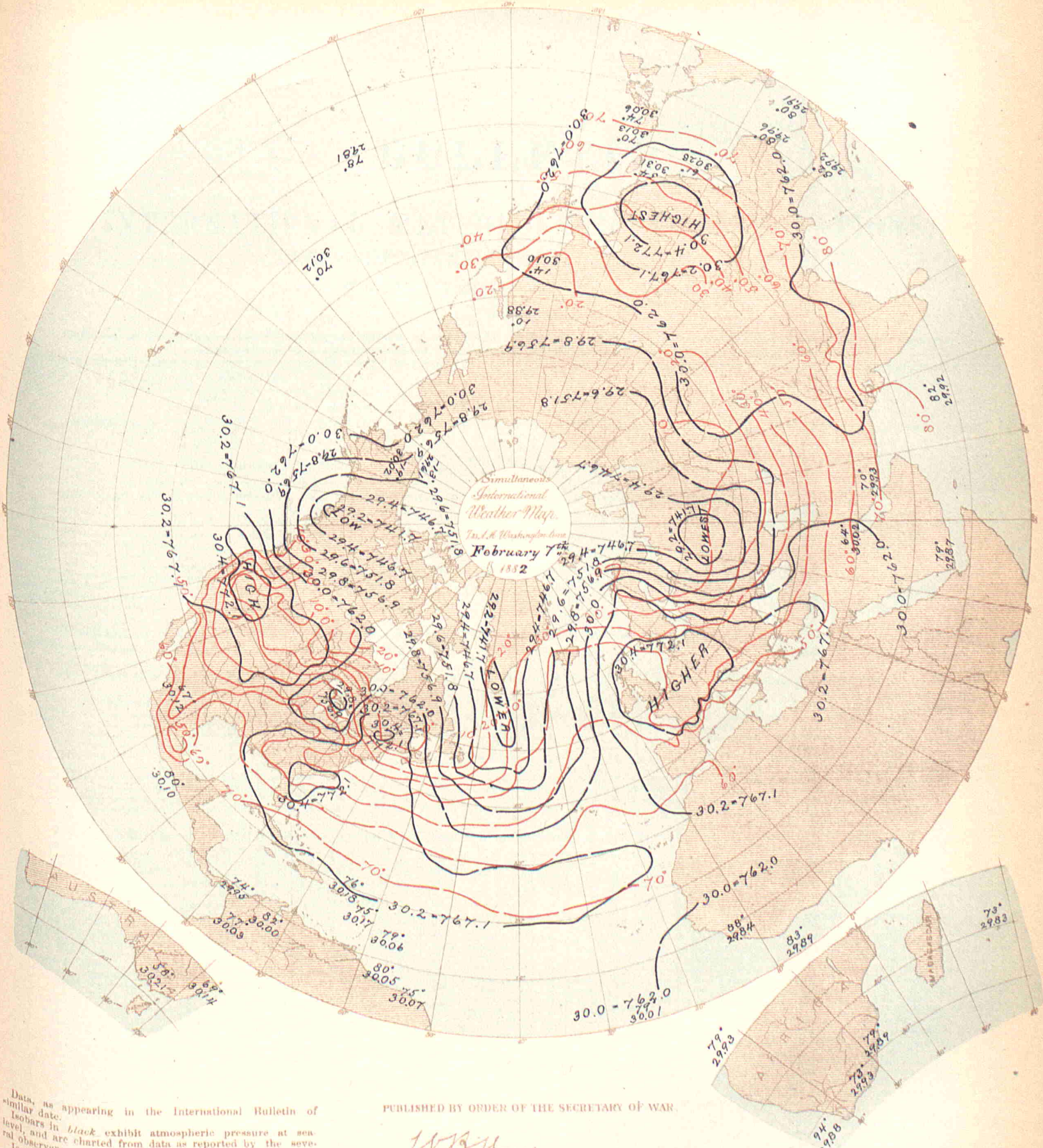
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 8, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.41	772.3	69.4	20.8	87	w.			2		0			0	0	clear	Moiroud.
Algiers			30.46	773.7	55.0	12.8	93	nw.			1		5			0.110	2.8	cloudy	Nicolas.
La Calle			30.46	773.7	54.7	12.6	89	nw.			2		4			0	0	cloudy	Fonfrède.
Tunis			30.43	772.8															Jacques.
Sfax																			Gau.
Saida			30.43	772.9	50.4	10.2	74	nne.			1		2			0	0	fair	Dumas.
Tebessa			30.43	773.0	43.9	6.6	62	n.			2		7			0.039	1.0	very cloudy	Derché.
Geriville					51.1	10.6	42	nw.			2		0			0	0	clear	Louchamp.
Laghouat			30.56	776.2	50.7	10.4	85	n.			2		1			0	0	very fair	Herbin.
Biskra			30.46	773.7	61.2	16.2	35	sw.			1		0			0	0	clear	Mahu.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.11	764.8	30.20	767.1	62.0	16.7	67	se.	5	2.2			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.78	756.5	30.36	771.1	39.9	4.4	58	se.			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.54	750.2	30.35	770.9	28.8	— 1.8	92	nne.	9.4	4.2			10			0.020	0.5		Dr. Wierzbiski.
Eperies	29.29	744.0	30.23	767.8	28.4	— 2.0	88	n.			5		10 s			0.031	0.8		Julius Mikolik.
Gratz	29.06	738.0	30.37	771.3	37.0	2.8	50	e.			2		0			0	0		Andreas Rospini.
Hermannstadt	28.68	728.5	30.19	766.9	30.4	— 0.9	100	nnw.			3		10			0.024	0.6	snowing	Prof. A. Gottschling.
Kremsmunster, Obs'y	29.00	736.7	30.42	772.6	34.7	1.5	72	calm			0		0			0	0	clear	The Staff.
Lemberg	29.21	742.0	30.29	769.3	18.7	— 7.4	56	ne.			3		4			0.024	0.6		Dr. T. Stanecki.
Pola	30.18	766.6	30.30	769.6	45.5	7.5	60	wnw.			2		3			0	0		I. R. Hydrographic Office.
Szathmar	29.69	754.0	30.16	766.0	30.4	— 0.9	90	nw.			1		10			0.059	1.5		Joseph Midlinszky, S. J.
Szegedin	29.95	760.8	30.25	768.3	34.9	1.6	73	nw.			2		4			0	0		Karl Stancel.
Trieste	30.22	767.7	30.33	770.3	46.4	8.0	57	calm			0		0			0	0		Rieder.
Vienna	29.04	752.9	30.39	771.9	38.8	3.8	51	nw.			2		4			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.28	769.1	30.38	771.6	44.2	6.8	77	ssw.	6	2.7			9			0	0	misty	W. Boswell.
Armagh, Observatory	30.06	763.5	30.31	769.9	44.3	6.8	69	sse.	25	11.2			0					squally	S. Call.
Bidston, Liverpool Obs'y			30.41	772.4	43.2	6.2	74	se.	11	4.9			2					blue sky	John Hartnup.
Bolton, Sharples	29.86	758.4	30.41	772.4	42.1	5.6	75	sse.	12	5.4			8					d. clouds	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.99	761.7	30.38	771.6	43.5	6.4	81	s.			1		5			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.04	763.0	30.07	763.8	80.0	26.7	70	ne.			2		3					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			30.44	773.2	41.6	5.3	87	se.			0.4		10					overcast	John McLaren.
Chatham, School M. E.	30.34	770.6	30.48	774.2	40.1	4.5	87	e.			1		10					misty	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.14	765.5	30.37	771.4	42.1	5.6	72	sse.			4		8					foggy	The Staff.
Fort Napier, Natal	27.54	699.5	29.76	755.9	86.1	30.1	29	calm			0		0					blue sky	Pvt. E. K. Annis, A. H. C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	89.0	31.7	59	w.			1		3						Sergt. John Robinson.
Galway, Queen's College			30.06	763.5	46	7.8	76	s.			3		8					overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.34	770.6	30.40	772.1	59.8	15.4	85	ne.			3		4					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	30.15	765.8	30.36	771.1	43.7	6.5	67	sse.			3		10 k					gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.28	769.1	30.46	773.7	40.2	4.6	87	ese.			1		10					overcast	The Staff.
Guernsey	30.09	764.3	30.40	772.1	37.0	2.8	80	se.			1		8					overcast	A. Collenette, F. M. S.
Kew, Observatory	30.42	772.7	30.46	773.7	41.0	5.0	77	e.	6	2.7			10					misty	The Staff.
Leicester, Museum	30.16	766.1	30.42	772.7	41.3	5.2	81	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.14	765.5	30.22	767.6	54.8	12.7	70	ne.			2		7					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.24	768.1	30.28	769.1	72.5	22.5	88	e.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.90	759.4	30.45	773.4	38.9	3.8	85	se.			2		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.21	767.3	30.44	773.2	39.0	3.9	83	e.			1		10					misty	The Staff.
Plymouth	30.30	769.6	30.38	771.6	43.0	6.1	75	s.			3		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.29	769.4	42.9	6.1	92	s.	10	4.5			10					misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.04	763.0	30.10	764.5	42.6	5.9	71	sw.			1		3					d. clouds	W. H. Lyne.
Sheffield	30.14	765.5	30.43	772.9	43.0	6.1	79	se.			1		6			0	0	d. clouds	W. F. Cooper.
Silloth Rectory	30.35	770.9	30.38	771.6	40.5	4.7	90	n.			1		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.42	772.7	39.9	4.4	90	nw.	1	0.4			10					foggy	I. New.
Stratfield Turgiss	30.22	767.6	30.44	773.2	40.4	4.7	82	se.			1—0		9					d. clouds	Rev. O. H. Griffiths, F.M.S.
Truro, Royal Institution	30.28	769.1	30.35	770.9	46	7.8	69	se.			7		10					gloomy	W. Newcombe.
Valencia, Observatory	30.07	763.8	30.09	764.3	45.2	7.3	88	ese.	39	17.4			10					raining	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.90	759.4	29.93	760.2	74.0	23.3	89	wsw.	38.2	17.0		0	2 s			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.94	760.5	29.98	761.5	87.8	31.0	41	nw.	20	8.9		0	0			0	0		The Staff, for D. Gill.
Worcester																			O. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.96	761.0	30.01	762.2	10	—12.2	90	e.	8	3.6			10 n			0	0	threatening.	H. J. Cundall, C. E.
Chatham, N. B*	29.88	758.9	29.95	760.7	7	—13.9	91	n.	3	1.3			10 n		n.	0.04	1.0	light snow	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.70	754.4	29.73	755.1	13	—10.6	91	s.	5	2.2			10 n			0.05	1.3	light snow	J. McWilliams.
Fort Garry, Manitoba*	28.81	731.8	29.69	754.1	17	— 8.3	87	s.	14	6.3		0	hz			0	0	hazy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	29.84	757.9	29.97	761.2	25	— 3.9	100	e.	13	5.8			10 n			0.02	0.5	light snow	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.64	752.8	29.99	761.7	28	— 2.2	70	w.	14	6.3			10 k		nw.	0.24	6.1	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.60	751.8	29.82	757.4	20	— 8.9	91	w.	21	9.4		0	0			0.53	13.5	clear	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.34	745.2	30.08	764.0	22	— 5.6	87	w.	12	5.4		2 k	0	nw.		0.02	0.5	fair	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.42	747.3	30.15	765.8	30	— 1.1	89	nw.	9	4.0		0	0			0.29	7.4	clear	H. Morgan.
Port Stanley, Ontario	29.47	748.5	30.15	765.8	29	— 1.7	77	nw.	6	2.7		0	0			0.06	1.5	clear	M. Payne.
Quebec, Quebec*	29.29	744.0	29.63	752.6	18	— 7.8	80	e.			1		10 n		e.	0.35	8.9	heavy snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.47	748.5	29.96	761.0	20	— 6.7	84	nw.	5	2.2			10 s		nw.	0.61	15.5	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.38	746.2	30.13	765.3	29	— 1.7	92	nw.	30	13.4			8 ks			0.05	1.3	cloudy	
St. Andrews, N. B.	29.68	753.9	29.73	755.1	25	— 3.9	97	se.	8	3.6			10 n			0.25	6.3	heavy snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.09	764.3	30.16	766.1	— 2	—18.9	100	calm	0	0		10 k	8 s	w.		0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.75	755.6	30.15	765.8	29	— 1.7	67	w.	12	5.4			8 ks		nw.	0.10	2.5	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.68	753.9	29.76	755.9	31	— 0.6	92	se.	18	8.0			10 s		se.	0.24	6.1	light rain	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.90	759.4	30.18	766.6	6	—14.4		ne.	1	0.4		0	0			0	0	fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.22	767.6	30.51	774.9	44.4	6.9	78	calm			0		0			0	0		N. Titoushkin.
Sung-shu-chwangf	24.68	626.9			28.8	— 1.8		calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.33	770.4	30.36	771.1	41.0	5.0	88	e.	3.1	1.4			0			0	0	clear	M. Marc Dechevrens, S. J.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.39	771.9	30.44	773.1	34.9	1.6	87	sse.	11	5			10						Oversergent Fischer.
Fanöe	30.45	773.4	30.47	773.9	40.5	4.7	97	wnw.			4		10						Overloerer Lauridsen
Godthaab, Greenland	28.95	735.4	29.00	736.5	14.7	— 9.6	81	nne.			2		8						S. Kleinschmidt.
Stykkisholm, Iceland	29.05	737.9	29.10	739.0	48.2	9.0		s.			8		10					raining.	A. O. Thorlacius.
Thorshavn	30.04	763.1	30.08	764.0	45.0	7.2	70	s.	18	8			10						Overloerer Bergh.
Vestervig	30.32	770.2	30.41	772.5	43.5	6.4	91	wnw.			2		9						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.77	756.2	30.45	773.4	44.6	7	83	calm			0		10 kn		e.	0	0	covered	M. Labroue, Director.
Alençon, Normal School	29.95	760.6	30.50	774.6	29.8	—1.2	92	se.			3		fg			0	0	foggy	M. Nicot, Director.
Arras, Engineer School	30.19	766.9	30.47	774.0	30.6	—0.8	89	sw.			2		kn			0	0		M. Klein, Commandant.
Avignon, Normal School	30.28	769.0	30.35	771.0	45.3	7.4	53	n.			1					0	0		M. Giraud, Director.
Bar-sur-Seine	29.89	759.2	30.49	774.4	28.0	—2.2	70	se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.21	767.2	30.49	774.4	31.5	—0.3	97	e.			2		10			0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.62	777.7	28.4	—2	96	ne.			1		10		ne.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.16	766.1	30.44	773.2	33.1	0.6	94	n.			1		10			0	0	covered	M. Rayet, Director.
Bourges, Normal School	29.86	758.5	30.47	773.8	25.7	—3.5	87	ne.			1		n		ne.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.16	766.0	30.40	772.2	36.7	2.6	58	calm			0		10			0	0	hazy	M. de Kennaree, Dir.
Caen, Normal School	30.35	770.8	30.43	772.8	31.6	—0.2	92	s.			1		5		n.	0	0	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.07	763.8	30.41	772.4	34.0	1.1	81	se.			1		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.94	760.5	30.48	774.3	31.6	—0.2	77	e.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.00	736.6	30.42	772.7	37.4	3.0	59	nw.			1	0	0			0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.55	750.6	30.45	773.3	28.4	—2	100	n.			1		fg			0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.56	750.8	30.48	774.1	34.3	1.3	96	e.			1		10 n	e.	e.	0	0	covered	Dr. Coulet, Director.
Gap, Normal School	27.75	704.8	30.33	770.3	50.0	10	24	se.			2	c	0			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.18	741.1	30.33	770.3	50.2	10.1	48	nw.			1		2		nw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.61	752.1	30.42	772.7	35.6	2	71	ese.			1	0	2 s			0	0	slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.76	730.6	30.37	771.3	37.8	3.2	89	sw.			1		5 n		sw.	0	0	cloudy	M. Rivoire, Director.
Lamballe, Normal School	30.13	765.4	30.43	772.9	31.1	—0.5	98	ese.			1		8		ese.	0	0	very cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.82	757.4	30.39	772.0	50.4	10.2	56	wnw.			1	c	0	ese.		0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.35	770.8	30.45	773.4	35.6	2.0	93	se.			2		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.35	745.4	30.48	774.1	26.8	—2.9	94	e.			1		fg			0	0	light fog	M. André, Director.
Mans, Normal School	30.13	765.4	30.47	773.8	30.7	—0.7	85	ne.			1		10			0	0	covered	M. Pihoen, Director.
Marseille, Observatory	30.05	763.2	30.32	770.2	53.2	11.8	43	wsw.			1		1		sse.	0	0		M. Stephan, Director.
Montlouis Finstituteur	24.98	634.6	29.83	757.6	38.8	3.8	32	e.	5.6	2.5			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.21	767.2	30.32	770.1	49.3	9.6	66	sw.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.63	752.6	30.46	773.7	33.4	0.8	78	n.			1		10 kn			0	0	covered	M. Hasse, Director
Nantes, Observatory	30.32	770.2	30.48	774.3	31.5	—0.3	84	s.			1		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.26	768.7	30.37	771.5	51.4	10.8	51	n.	7.4	3.3			1	se.		0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.31	541.2			21.6	—5.8		nw.			1		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.28	743.7	30.41	772.4	35.6	2		s.			1		0			0	0	clear	M. Tailleu.
Puy de Dôme Obs'y, Summit	25.33	643.4			36.1	2.3	40	n.			1		0			0	0	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.42	772.6	30.45	773.4	33.1	0.6	100	ne.			1		10		e.	0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.23	767.9	30.47	773.8	30.6	—0.8	92	ne.			1		10			0	0	covered	M. Mouilliot, Director.
Rodez, Normal School	28.17	715.5	30.42	772.7	36.3	2.4	53	e.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.42	772.6	30.47	773.8	32.7	0.4	89	e.			3		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.28	769.1	30.44	773.1	35.6	2	81	e.			1		0			0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.30	769.7	30.47	773.9	29.5	—1.4	96	s.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.70	754.3	30.43	772.9	47.5	8.6	72	se.			1		5		sw.	0	0	cloudy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.95	760.7	30.44	773.2	30.2	—1.0	92	e.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.18	766.6	30.47	774.0	31.3	—0.4	99	ese.			1		10			0	0	misty	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.59	751.6	30.46	773.6	35.6	2.0	64	ne.			2	0	1 s			0	0		Prof. Dr. Hoh.
Berlin	30.25	768.4	30.44	773.1	34.9	1.6	100	nw.			1		10			0.059	1.5	rain & snow	Prof. Dr. Arndt.
Breslau	29.87	758.6	30.41	772.3	31.3	— 0.4	92	nw.			2		10			inap.	inap.		Royal University Obs'y.
Carlsruhe	30.00	761.9	30.47	773.8	34.9	1.6	86	ne.			5		0			0	0		Albert Senz.
Cassel	29.72	754.9	30.44	773.1	36.7	2.6	65	n.			1		5			0	0		Dr. H. Möhl.
Frankfort on the Main	30.09	764.3	30.48	774.2	34.2	1.2	75	nne.			1		1			0	0		Physical Society.
Friedrichshafen	28.95	735.2	30.48	774.2	27.5	— 2.5	92	ne.			4		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.42	772.6	30.51	775.0	35.8	2.1	98	wnw.			2		10			0	0	foggy	E. Preller.
Kiel	30.44	773.1	30.45	773.5	38.5	3.6	95	wnw.			2		10			0.035	0.9		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.04	763.1	30.49	774.4	34.7	1.5	71	w.			3		9			0.012	0.3		H. Leppig, Asst.
Magdeburg	30.28	769.0	30.48	774.2	36.3	2.4	93	w.			2		10 ks		nw.	inap.	inap.		Dr. Assmann.
Memel	30.35	770.8	30.39	772.0	18.9	— 7.3	72	n.			1		10 s						Issermann.
Munich	28.54	725.0	30.43	773.0	23.9	— 4.5	95	calm			0		10			0	0	foggy	Central Station.
Neufahrwasser	30.40	772.2	30.42	772.6	28.9	— 1.7	50	nnw.			4		9	n.		0.004	0.1		A. Lothes.
Neustadt, Palatinate	29.91	759.7	30.45	773.3	34.2	1.2		ne.			2		10	ne.		0	0		Dickuether.
Stuttgart	29.47	748.6	30.42	772.7	32.9	0.5	90	n.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.41	772.5	30.44	773.1	37.4	3.0	100	nnw.			2		10 s			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.74	755.4	30.14	765.6	52.3	11.3		se			1.5		5 k			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.91	759.8	29.96	761.1	78.1	25.6	59	wsw.	19	8.5			2			0	0	d. clouds	
Deesa	29.42	747.3	29.89	759.2	89.3	31.8	37	se.	8.1	3.6			0			0	0	blue sky	
Bombay	29.84	758.0	29.88	759.0	83.1	28.4	73	wnw.	8	3.6			0			0	0	blue sky	
Poona, Yarrowda.	28.03	711.9	29.85	758.3	91.1	32.8	22	ese.	5	2.2			1	wnw.		0	0	d. clouds	
Belgaum	27.35	694.7	29.84	758.0	85.8	29.9	21	ene.	5	2.2			0			0	0	blue sky	
Lahore	29.27	743.4	30.04	763.0	63.6	17.6	68	n.	1.4	0.6			10					drizzling	
Roorkee	29.08	738.6	30.00	762.0	69.6	20.9	56	w.	1.0	0.4			8			0	0		
Agra	29.44	747.7	30.01	762.3	75.7	24.3	40	w.	1.2	0.6						0	0		
Nagpur	28.89	733.9	29.93	760.2	85.9	29.9	24	e.	2.4	1.1			0			0	0	blue sky	
Jubbulpore	28.64	727.6	30.02	762.6	74.0	23.3	17	calm	1.2	0.5			0			0	0	blue sky	
Lucknow	29.60	751.7	29.98	761.4	78.2	25.7	31	wsw.	0.9	0.4			3			0	0	d. clouds	
Allahabad	29.67	753.6	29.99	761.7	73.0	22.8	51	ne.	7	3.1			0			0	0	blue sky	
Patna	29.80	756.9	29.99	761.8	70.7	21.5	51	nw.	1.5	0.7			2	nw.	nw.	0	0		
Hazaribagh	27.97	710.5	30.02	762.6	70.3	21.3	28	n.	4.2	1.9			0			0	0	blue sky	
Cuttack	29.87	758.6	29.95	760.7	81.0	27.2	48	wsw.	0.8	0.4			1			0	0	blue sky	
Calcutta, Alipore	29.93	760.1	29.95	760.7	76.5	24.7	44	wnw.	3.0	1.3			0			0	0	blue sky	
Dhubri	29.85	758.1	29.97	761.2	70.4	21.3	51	nw.	1.1	0.5			0			0	0	blue sky	
Chittagong	29.88	759.0	29.98	761.4	72.5	22.5	68	w.	1.8	0.8			2			0	0	blue sky	
Sibsagar	29.65	753.2	30.00	762.0	64.9	18.3	80	ne.	3.1	0.4			0			0	0	blue sky	
Jeypore	28.54	724.8	29.99	761.7	79.4	26.3	34	sw.	4.0	1.8			2		sw.	0	0	d. clouds	
Zanzibar, Africa	29.76	755.9			86.7	30.4	69	ne.	8.6	3.8			5			0	0	d. clouds	
Trichinopoly	29.68	753.9			84.5	29.2	49	ene.	2	0.9			3			0	0	d. clouds	
Bellary	28.44	722.4			88.0	31.1	20	e.	4.7	2.1			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.90	759.5	30.33	770.3	46.4	8.0	31	w.	0.7	0.3			0			0	0		Prof. Giovanni Clodig.
Milan	29.82	757.4	30.33	770.4	40.8	4.9	64	w.	2.5	1.1			1			0	0		Prof. Schiaparelli.
Padua	30.22	767.7	30.34	770.6	42.4	5.8	54	nw.	0.7	0.3			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.40	746.8	30.35	771.0	41.0	5.0	64	e.	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	30.12	765.0	30.32	770.1	52.2	11.2	49	sw.	1.8	0.8			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.37	720.6	30.40	772.1	37.4	3.0	51	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.29	769.3	30.34	770.6	43.2	6.2	79	n.	11.9	5.3			0			0	0		Prof. Luigi Guidi.
Florence	30.03	762.8	30.30	769.6	45.3	7.4	40	w.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.15	765.9	30.24	768.2	49.8	9.9	38	ne.	4.3	1.9			0			0	0		Prof. P. Monte.
Rome	30.08	763.9	30.26	768.5	50.4	10.2	38	n.	1.3	0.6			0			0	0		Prof. P. S. Ferrari.
Lecce	29.95	760.7	30.21	767.3	50.4	10.2	65	nw.	12.5	5.6			7	nw.		0	0		Prof. C. de Giorgi.
Cosenza	29.33	744.9	30.26	768.5	49.3	9.6	74	ese.	2.5	1.1			9	se.		0	0		Prof. D. Conti.
Cagliari	30.04	762.9	30.23	767.9	55.0	12.8	40	w.			2		2			0	0		Prof. A. Pacinotti.
Palermo	29.99	761.8	30.25	768.4	53.8	12.1	64	ne.	1.8	0.8			9	nw.		0	0		Prof. G. Ciacciatore.
Syracuse	30.16	766.1	30.21	767.3	52.5	11.4	66	ne.	4.3	1.9			7	ne.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.69	754.1	30.23	767.8	51.3	10.7	49	ne.	0.7	0.3			1	nne.		0	0		Prof. T. Brioschi.
Stelvio	22.24	564.9			22.6	— 5.2	30	e.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.29	566.1			26.2	— 3.2	33	e.			2		1			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.76	755.9	29.79	756.6	36.9	2.6	89	nne.	8.5	3.8			10 n			0.493	12.5	raining	
Hakodate	29.77	756.1	29.78	756.4	36.5	2.5	92	nne.	3.0	1.3			10		nne.	0	0	overcast	
Hiroshima, I. M. Obs'y	30.00	762.0	30.02	762.5	41.3	5.2	82	nne.	2.6	1.2		ck	10 n			0.034	0.9	light rain	K. Susaki.
Kanazawa	29.87	758.7	29.97	761.2	32.1	0.1	86	ese.	5.8	2.6		2 ck	0			0.350	8.9	fair	S. Endo.
Kioto	29.77	756.1	29.95	760.7	33.0	0.6	91	nw.	0.7	0.3			10 s			0.280	7.1	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.95	760.7	30.16	766.0	46.2	7.9	66	n.	4.7	2.1		0	0			0	0	clear	S. Takehayashi.
Niigata	29.84	757.9	29.87	758.7	38.0	3.3	71	wnw.	14.1	6.3		ck	10 ks		w.	0.140	3.6	overcast	
Nobiru	29.56	750.8	29.58	751.3	38.5	3.6	81	nw.	32.1	14.3			10 n			1.005	25.5	stormy	H. Midzushina.
Supporo					33.5	0.8	85	w.	2.4	1.1			10			0	0	covered	
Tokei Obs'y, Yeddo	29.58	751.3	29.65	753.1	39.4	4.1	51	nw.	19.6	8.5		0	1 s			0	0	fair	The Staff.
Wakayama	29.92	759.9	29.97	761.2	40.0	4.4	84	nw.	4.2	1.9		ck	10 n		nw.			light rain	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.47	621.4	30.34	770.7	47.8	8.8	81	s.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.82	757.3	30.08	764.0	61.5	16.4	86	nw.	1.6	0.8		2 cs	0	wsw.		0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.13	587.6	30.29	769.4	47.3	8.5	72	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.35	618.5	30.58	776.7	51.3	11.3	71	se.			3	1 c	2 k	s.	se.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.04	610.6	30.16	766.1	45.3	7.4	50									0	0		M. Y de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.31	769.9	44.6	7.0	82	calm	0	0		0	0			0	0	very fine	Prof. P. Spina.
San Luis Potosi	24.18	614.3	30.31	769.8	52.2	11.2	69	ese.			1		10 n		e.	0.004	0.1	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.57	573.3	30.33	770.4	44.6	7.0	52	w.	9.3	4.1		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.47	748.5	29.66	753.4	79.8	26.6	69	s.	15.0	6.7	.....	2ck;cs	2 ks;k	.....	wsw.	2.49	63.2	fair	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.51	774.9	30.51	774.9	34.9	1.6	.....	ese.	.....	.....	2	.....	.....	.....	.....	0.008	0.2	.....	
Groningen	30.48	774.1	30.53	775.5	35.4	1.9	.....	se.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Helder	30.51	774.9	30.51	774.9	34.2	1.2	.....	ese.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.50	774.6	30.50	774.6	34.2	1.2	85	ese.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Utrecht	30.47	773.9	30.52	775.1	33.1	0.6	80	e.	.....	.....	2	.....	8	.....	.....	0	0	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.32	770.0	30.38	771.6	40.3	4.6	97	sse.	7	3	.....	.....	10	.....	.....	0.567	14.4	.....	
Brono	30.03	762.7	30.07	763.7	35.2	1.8	58	sw.	18	8	.....	.....	10	.....	.....	0.087	2.2	.....	
Christiania	30.22	767.5	30.37	771.5	27.3	— 2.6	74	wsw.	4	2	.....	.....	1	.....	.....	0	0	.....	
Gjæsvær	29.78	756.4	29.80	757.0	16.2	— 8.8	.....	calm	.....	.....	0	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.87	758.7	29.92	759.9	21.2	— 6.0	98	s.	.....	.....	6	.....	10	.....	.....	0.441	11.2	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	61.2	16.2	87	ssw.	15.0	6.7	.....	.....	6	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.37	746.0	30.39	771.9	57.2	14.0	45	ene.	1.8	0.8	.....	.....	4	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.18	766.6	30.27	768.8	62.8	17.1	59	sw.	1.8	0.8	.....	.....	2	.....	.....	0.409	10.4	.....	Capt. D. A. de Oanha.
Lisbon, Observatory	30.06	763.6	30.43	773.0	54.1	12.3	67	e.	3.8	1.7	.....	.....	1	n.	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.05	763.2	30.12	765.0	61.2	16.2	85	ssw.	15.0	6.7	.....	.....	10	.....	.....	0	0	.....	
Saint Paul de Loando	29.70	754.4	29.90	759.4	84.2	29.0	70	nw.	0.7	0.3	.....	.....	5	s.	.....	0	0	.....	
Serra da Estrella	25.54	648.7	30.41	772.3	40.3	4.6	59	nw.	4.9	2.2	.....	.....	5	.....	.....	0	0	.....	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.45	722.7	29.60	751.7	16.3	— 8.7	.....	sw.	20	9	.....	4 cs	0	.....	.....	0.008	0.2	.....	Major K. Lasarew.
Archangel	29.69	754.0	29.71	754.5	5.7	—14.6	87	nw.	4	2	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	29.69	754.0	29.60	751.9	19.6	— 6.9	65	sw.	22	10	.....	.....	9 s	.....	.....	0.008	0.2	.....	Capt. Wisganow.
Barnaul	29.32	744.7	29.86	758.4	10.9	—11.7	71	ne.	4	2	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	29.93	760.1	30.19	766.9	12.7	—10.7	66	nnw.	13	6	.....	0	0	.....	.....	0	0	.....	Observatory.
Ekaterinburg	28.06	712.6	29.08	738.5	7.7	—13.5	85	se.	18	8	.....	.....	10	.....	.....	.....	.....	light snow	Meteorological Obs'y.
Kasan	28.54	725.0	28.83	732.3	1.9	—16.7	82	w.	7	3	.....	.....	10	.....	.....	0.122	3.1	snowing	Observatory.
Kertch	30.26?	768.6?	30.28?	769.1?	19.2	— 7.1	64	nw.	13	6	.....	4 c	0	.....	.....	0.059	1.5	.....	Lagorio & Sastyrez.
Kieff	29.22	742.3	29.92	759.9	11.5	—11.4	36	nw.	27	12	.....	0	0	.....	.....	0	0	.....	Observatory.
Lugan	29.37	745.9	29.59	751.5	9.7	—12.4	66	wnw.	45	20	.....	.....	10	.....	.....	blank	blank	.....	Meteorological Obs'y.
Moscow	28.78	730.9	29.29	744.0	7.5	—13.6	75	n.	13	6	.....	.....	10 s	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	29.97	761.3	30.04	763.1	22.8	— 5.1	50	n.	13	6	.....	0	0	.....	.....	0	0	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.19	766.7	30.27	768.9	6.4	—14.2	85	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	30.14	765.5	30.28	769.1	32.9	0.5	47	se.	4	2	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	30.02	762.5	30.04	762.9	9.0	—12.8	56	nw.	16	7	.....	0	2 ks	.....	.....	0	0	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.33	719.6	29.96	761.0	35.8	2.1	91	calm	0	0	.....	.....	10	.....	.....	0.098	2.5	snowing	Teich, A. M.
Tiflis	28.43	722.2	29.91	759.8	31.6	— 0.2	52	nw.	22	10	.....	0	1 k	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	30.22	767.6	30.29	769.3	9.5	—12.5	64	n.	9	4	.....	6 cs	0	.....	.....	0	0	.....	
Warsaw	29.94	760.4	30.38	771.7	21.7	— 5.7	52	nnw.	7	3	.....	.....	10ks;n	.....	.....	.....	.....	light snow	Astronomical Obs'y.
Wilna	29.78	756.5	30.24	768.2	12.6	—10.8	51	nnw.	13	6	.....	.....	0	.....	.....	0	0	.....	Berg, Assistant.
Yeniseisk	30.13?	765.4?	30.46?	773.6?	1.8	—16.8	64	sw.	4	2	.....	.....	0	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.13	765.3	46	7.8	92	s.	.....	.....	6	.....	10	.....	.....	0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.21	767.3	30.32	770.0	53.6	12.	68	s.	0.9	0.4	.....	.....	1 k	.....	.....	0	0	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.37	771.3	30.43	772.8	57.9	14.4	64	se.	5.4	2.4	.....	0	0	.....	.....	0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.38	695.4	30.44	773.1	46.9	8.3	47	sw.	2.5	1.1	.....	0	0	.....	.....	0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.12	714.3	30.40	772.1	53.1	11.7	44	e.	2.7	1.2	.....	0	0	.....	.....	0	0	clear	The Staff.
Murcia, Met. Obs'y	30.24	768.0	30.39	771.9	56.8	13.8	69	nnw.	2.5	1.1	.....	0	0	.....	.....	0	0	clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.41	747.0	30.32	770.0	57.6	14.2	60	calm	0	0	.....	.....	9	.....	.....	0	0	almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.11	764.8	30.18	766.6	68.2	20.1	91	e.	4.7	2.1	.....	0	0	.....	.....	0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.98	761.6	30.04	763.1	74.1	23.4	71	e.	4.8	2.1	.....	0	1 ks	.....	ene.	0.039	1.0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.29	769.4	30.39	772.0	60.3	15.7	54	se.	12.4	5.6	.....	2	1	s.	e.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.09	764.3	30.18	766.6	75.2	24.0	98	e.	13.2	5.9	.....	1 k	3 kn	e.	e.	0.118	3.0	d. clouds	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.98	761.5	30.11	764.8	69.8	21.0	83	nw.	4.5	2.0	.....	.....	9 ks	.....	ne.	0.01	0.3	covered	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.17	766.2	30.21	767.2	4.3	—15.4	81	w.	.....	.....	2	.....	2	.....	.....	0	0	.....	
Umeå	30.25	768.3	30.30	769.6	9.7	—12.4	85	nw.	.....	.....	2	.....	10	.....	.....	0.008	0.2	.....	
Hernosand	30.25	768.3	30.30	769.6	16.0	— 8.9	48	wsw.	.....	.....	2	.....	5	.....	.....	0	0	.....	
Stockholm	30.25	768.3	30.43	772.8	18.9	— 7.3	53	wnw.	.....	.....	2	.....	10	.....	.....	0	0	.....	
Wisby	30.32	770.0	30.37	771.5	23.0	— 5.0	76	nne.	.....	.....	4	.....	5	.....	.....	0	0	.....	
Sub Series.																			
Upsala	30.31	769.8	30.39	772.0	18.7	— 7.4	61	w.	5.1	2.3	.....	.....	10	.....	nw.	0	0	.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.96	735.5	30.46	773.6	30.6	— 0.8	80	n.	.....	.....	1	.....	.....	.....	.....	.....	0	foggy	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.13	765.3	40.1	4.5	74	wsw.	8	3.5	.....	.....	6	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	30.17	766.2	53.1	11.7	.....	nw.	.....	.....	1	.....	2	.....	.....	0	0	slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.06	763.5	55.0	12.8	75	sw.	.....	.....	2	0	8 n	.....	sw.	0.09	2.3	.....	Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Albany, New York	29.89	759.2	29.98	761.5	42	5.6	65	w.	12	5.4		0	4 s		nw.	0.07	1.8	fair	
Alpena, Michigan	29.48	748.8	30.19	766.8	21	— 6.1	70	w.	8	3.6		7 cs	0	w.		0.01	0.3	fair	
Atlanta, Georgia	28.96	735.6	30.18	766.6	53.5	11.9	73	se.	7	3.1			10 s		calm	0	0	cloudy	
Atlantic City, New Jersey	30.03	762.7	30.04	763.0	44	6.7	83	w.	10	4.5		5 cs	5 s	sw.		0	0	cloudy	
Augusta, Georgia	30.06	763.5	30.26	768.6	48.0	8.9	77	calm	0	0		5 c	sk.			0	0	fair	
Baltimore, Maryland	30.04	763.0	30.09	764.3	46	7.8	68	sw.	5	2.2			10s;fg		w	0.04	1.0	cloudy	
Barnegat, New Jersey	29.98	761.5	30.00	762.0	43.0	6.1	83	w.	15	6.7			10 s		sw.	0	0	cloudy	
Bismarck, Dakota	27.98	710.7	29.96	761.0	18	— 7.8	87	calm	0	0		1 cs	0	calm		0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.28	692.9	30.24	768.1	32	0.0	88	se.	10	4.5			10 s		calm	0	0	cloudy	
Boston, Massachusetts	29.62	752.3	29.78	756.4	33.0	0.6	88	sw.	8	3.6			10 s		w.	0.05	1.3	cloudy	
Brownsville, Texas	29.97	761.2	30.02	762.5	58	14.4	100	nw.	12	5.4			10 n			0.02	0.5	light rain	
Buffalo, New York	29.38	746.2	30.18	766.6	31.5	— 0.3	83	w.	15	6.7		0	2 ks		w.	0.17	4.3	clear	
Burlington, Vermont	29.57	751.1	29.88	758.9	32.0	0.0	81	nw.	15	6.7		2 ck	6 s	w.	nw.	0.07	1.8	cloudy	
Cairo, Illinois	29.77	756.1	30.19	766.8	40.5	4.7	88	n.	13	5.8			10 s		n.	1.04	26.4	cloudy	
Campo, California																			
Camp Thomas, Arizona	27.50	698.5	30.33	770.4	29.5	— 1.4	86	calm			0	0	0			0	0	clear	
Cape Henry, Virginia	30.14	765.5	30.16	766.1	54	12.2	74	sw.	18	8.0			10 s			0	0	cloudy	
Cape May, New Jersey																			
Castroville, Texas	29.25	742.9	30.09	764.3	46	7.8	77	nw.	8	3.6		0	0			0.02	0.5	clear	
Cedar Keys, Florida	30.18	766.6	30.20	767.1	61	16.1	87	se.	11	4.9		6 cs	0			0	0	fair	
Champaign, Illinois	29.37	746.0	30.24	768.1	27.2	— 2.7	64	nw.	7	3.1		8 ck	0	nw.		Inap.	Inap.	cloudy	
Charleston, S. Carolina	30.17	766.3	30.23	767.8	57	13.9	93	sw.	5	2.2		0	fg.			0	0	clear	
Charlotte, N. Carolina	29.29	744.0	30.18	766.6	49.0	9.4	86	sw.	2	0.9			fg.			0	0	dense fog	
Chattanooga, Tennessee	29.33	745.0	30.19	766.8	52.0	11.1	83	s.	2	0.9			10 n		s.	0.10	2.5	light rain	
Cheyenne, Wyoming	24.01	609.8	30.26	768.6	28.3	— 2.1	51	nw.	12	5.4		0	0			0	0	clear	
Chicago, Illinois	29.46	748.3	30.22	767.6	26.1	— 3.3	80	nw.	3	1.3		0	0			0	0	clear	
Chincoteague, Virginia	30.08	764.0	30.10	764.5	52.5	11.4	59	w.	15	6.7		6 c;k	3 s	nw.		0	0	cloudy	
Cincinnati, Ohio	29.53	750.0	30.22	767.6	41	5.0	73	n.	5	2.2		0	6 s		nw.	0.40	10.2	fair	
Cleveland, Ohio	29.44	747.8	30.23	767.8	33	0.6	90	nw.	7	3.1		2 c	0			0.31	7.9	clear	
Coleman City, Texas	28.26	717.8	30.14	765.5	35	1.7	89	n.	28	12.5			10 s		n.	0.13	3.3	cloudy	
Columbus, Ohio	29.32	744.7	30.22	767.6	39	3.9	73	n.	2	0.9		0	8 s			0.27	6.9	cloudy	
Concho, Texas	28.17	715.5	30.19	766.8	35	1.7	100	nw.	16	7.2			10 n			0.43	10.9	light rain	
Davenport, Iowa	29.56	750.8	30.26	768.6	28	— 2.2	64	nw.	3	1.3		0	hz		calm	0	0	clear	
Dayton, Washington T'y	28.23	717.0	30.04	763.0	33.4	0.8	87	sw.	5	2.2			10 s		sw.	0.19	4.8	threatening	
Deadwood, Dakota	25.21	640.3	30.13	765.3	30	— 1.1	80	sw.	6	2.7		7 c	0	w.		0	0	fair	
Decatur, Texas					36	2.2	100	nw.	10	4.5			10 n			2.07	52.6	heavy rain	
Delaware Breakwater, Del.	30.02	762.5	30.04	763.0	46	7.8	83	w	18	8.0			10 s		w.	Inap.	Inap.	cloudy	
Denison, Texas	29.19	741.4	30.03	762.7	40.3	4.6	100	n.	8	3.6			10 n			0.80	20.3	light rain	
Denver, Colorado	24.74	628.4	30.26	768.6	33.0	0.6	61	s.	10	4.5		0	0			0.01	0.3	clear	
Des Moines, Iowa	29.32	744.7	30.28	769.1	18.0	— 7.8	83	n.	1	0.4		0	fg.			0	0	clear	
Detroit, Michigan	29.47	748.5	30.22	767.6	34.2	1.2	71	nw.	6	2.7		0	0			0.03	0.8	clear	
Dodge City, Kansas	27.59	700.8	30.33	770.4	19.2	— 7.1	87	calm	0	0		0	0			0	0	clear	
Dubuque, Iowa	29.47	748.5	30.23	767.8	20.8	— 6.2	64	w.	1	0.4		0	0			0	0	clear	
Duluth, Minnesota	29.27	743.4	30.03	762.7	19	— 7.2	70	sw.	7	3.1		0	0			0	0	clear	
Eagle Pass, Texas	29.37	746.0	30.21	767.3	46.0	7.8	76	nw.	10	4.5		0	0			0	0	clear	
Eagle Rock, Idaho	25.39	644.9	30.29	769.4	— 6	—21.1	69	ne.	6	2.7		2 cs	6 s	n.	n.	0	0	threatening	
Eastport, Maine	29.66	753.4	29.74	755.4	28	— 2.2	94	e.	11	4.9			10 n			0.22	5.6	light snow	
El Paso, Texas	26.46	672.1	30.34	770.6	32.3	0.2	88	w.	11	4.9		0	0			0.08	2.0	clear	
Erie, Pennsylvania	29.44	747.8	30.22	767.6	35	1.7	79	nw.	5	2.2		10 k	0	nw.		0.23	5.8	cloudy	
Escanaba, Michigan	29.45	748.0	30.17	766.3	12	—11.1	61	s.	3	1.3		0	0			0	0	clear	
Fort Apache, Arizona	25.17	639.3	30.27	768.8	22	— 5.6	64	ne.	8	3.6		0	0			0.11	2.8	clear	
Fort Assinnaboine, Montana	26.85	682.0	29.89	759.2	29	— 1.7	67	sw.	16	7.2		7 c	0	sw.		0	0	fair	
Fort Bennett, Dakota	28.29	718.6	30.02	762.5	18	— 7.8	70	nw.	2	0.9		0	0			0	0	clear	
Fort Benton, Montana	26.88	682.7	29.88	758.9	35	1.7	66	sw.	12	5.4		6 cs	0	sw.		0	0	fair	
Fort Buford, Dakota	27.78	705.6	29.96	761.0	23	— 5.0	64	s.	1	0.4			10 s		calm	0	0	cloudy	
Fort Custer, Montana	26.65	676.9	30.01	762.2	28	— 2.2	77	calm	0	0		c	6 s		calm	0	0	fair	
Fort Davis, Texas	25.28	642.1	30.24	768.1	32	0.0	81	n.	10	4.5		0	0			0	0	clear	
Fort Elliott, Texas	27.33	694.2	30.23	767.8	30	— 1.1	41	n.	20	8.9			10 s		n.	0	0	cloudy	
Fort Gibson, Indian T'y	29.52	749.8	30.12	765.0	40.5	4.7	82	n.	8	3.6			10 s			0.44	11.2	cloudy	
Fort Grant, Arizona	25.42	645.7	30.28	769.1	39	3.9	82	ne.	2	0.9		0	0			0	0	clear	
Fort Griffin, Texas	28.79	731.3	30.16	766.1	35	1.7	89	n.	14	6.3			10 n		n.	0.67	17.0	light rain	
Fort Keogh, Montana	27.30	693.4	29.98	761.5	21	— 6.1	73	se.	1	0.4		10 cs	0			0	0	cloudy	
Fort Macon, North Carolina	30.21	767.3	30.22	767.6	54	12.2	93	sw	3	1.3		6 cs	4 s	sw.	calm	0	0	cloudy	
Fort McKavett, Texas	27.85	707.4	30.23	767.8	38	3.3	92	nw.	18	8.0			10 s			0.49	12.4	cloudy	
Fort Missoula, Montana	26.55	674.4	29.98	761.5	33	0.6	88	sw.	5	2.2			10 n			0.01	0.3	light snow	
Fort St. Michaels, Alaska	30.11	764.8	30.14	765.5	—15	—26.1	100	sw.	10	4.5		0	5 s		sw.	Inap.	Inap.	fair	
Fort Shaw, Montana	26.08	662.4	29.93	760.2	32	0.0	71	sw.	22	9.8		6 k	0	w.		0	0	fair	
Fort Sill, Indian Territory	28.85	732.8	30.16	766.1	33.7	0.9	62	n.	21	9.4			10 s			Inap.	Inap.	cloudy	
Fort Stevenson, Dakota	27.91	708.9	29.93	760.2	14	—10.0	83	nw.	2	0.9		0	7 s		w.	0	0	fair	
Fort Verde, Arizona					28.9	— 1.7	59	nw.			1	0	0			0.01	0.3	clear	
Fredericksburg, Texas	28.27	718.0	30.07	763.8	43	6.1	83	nw.	12	5.4			10 ks		nw.	0.19	4.8	cloudy	
Galveston, Texas	29.92	760.0	29.96	761.0	66	18.9	89	sw.	11	4.9			10 ks		sw.	0	0	threatening	
Grand Haven, Michigan	29.51	749.5	30.22	767.6	27.5	— 2.5	88	ne.	1	0.4		0	0			0	0	clear	
Hatteras, North Carolina	30.20	767.1	30.22	767.6	49	9.4	93	sw.	12	5.4		7 ck	0	sw.		0	0	fair	
Helena, Montana	25.54	648.7	29.94	760.5	29	— 1.7	67	calm	0	0			10 s			0	0	cloudy	
Henrietta, Texas																Inap.	Inap.		
Huron, Dakota	28.54	724.9	30.06	763.5	19	— 7.2	70	se.	9	4.0		0	0			0	0	clear	
Indianapolis, Indiana	29.36	745.7	30.21	767.3	35	1.7	75	ne.	2	0.9		8 cs	fg.	calm	calm	0.39	9.9	fair	
Indianola, Texas	29.91	759.7	29.94	760.5	67.0	19.4	100	s.	15	6.7		4 ck	6 ks	sw.	sw.	0	0	cloudy	
Jacksboro, Texas	28.87	733.3	30.11	764.8	36	2.2	100	n.	9	4.0			10 n		n.	0.79	20.1	heavy rain	
Jacksonville, Florida	30.18	766.6	30.23	767.8	56	13.3	93	e.	5	2.2		2 cs	fg.			0	0	clear	
Keokuk, Iowa	29.56	750.8	30.26	768.6	23.0	— 5.0	73	nw.	2	0.9		0	1 s			0	0	clear	
Key West, Florida	30.17	766.3	30.20	767.1	73.0	22.8	83	e.	9	4.0		0	2 k		e.	0	0	clear	
Kittyhawk, North Carolina	30.18	766.6	30.20	767.1	53	11.7	86	w.	11	4.9		9 c;cs	0	w.		0	0	cloudy	
Knoxville, Tennessee	29.13	739.9	30.21	767.3	49.5	9.7	95	ne.	4	1.8			10 n			0.08	2.0	light rain	
La Crosse, Wisconsin	29.38	746.2	30.22	767.6	19	— 7.2	70	s.	4	1.8		0	0			0	0	clear	
La Mesilla, New Mexico	26.32	668.5	30.33	770.4	27.8	— 2.3	84	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.38	746.2	30.33	770.4	25	— 3.9	64	calm	0	0		0	0			0	0	clear	
Lewiston, Idaho	29.16	740.7	30.04	763.0	36	2.2	100	sw.	1	0.4			10 n		calm	0.01	0.3	light rain	
Little Rock, Arkansas	29.69	754.1	30.02	762.5	49	9.4	100	ne.	9	4.0			10 s			2.79	70.9	cloudy	
Los Angeles, California	29.96	761.0	30.36	771.1	42.2	5.7	65	n.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	29.53	750.0	30.12	765.0	43.5	6.4	83	n.	8	3.6			10 s		n.	0.67	17.0	cloudy	
Lynchburg, Virginia	29.42	747.3	30.14	765.5	47.6	8.7	68	calm	0	0			10s;fg			c.01	0.3	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.16	740.7	30.25	768.3	22	— 5.6	73	nw.	3	1.3		0	0			0	0	clear	
Marquette, Michigan	29.29	744.0	30.07	763.8	21	— 6.1	58	w.	22	9.8		0	0			Inap.	Inap.	clear	
Mason, Texas	28.40	721.3	30.13	765.3	40	4.4	82	n.	16	7.2			10 s		n.	0.20	5.1	cloudy	
Memphis, Tennessee	29.73	755.1	30.08	764.0	49	9.4	100	ne.	4	1.8			10 s			1.37	34.8	cloudy	
Milwaukee, Wisconsin	29.43	747.5	30.23	767.8	22	— 5.6	88	w.	6	2.7		0	3 s			0	0	fair	
Mobile, Alabama	30.04	763.0	30.08	764.0	61.0	16.1	100	sw.	5	2.2		9 cs	0	sw.		0.16	4.1	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	29.87	758.7	30.11	764.8	57.8	14.3	81	se.	4	1.8		hz.	8 ks		sw.	0	0	cloudy	
Moorhead, Minnesota	28.86	733.0	29.96	761.0	14	—10.0	80	s.	12	5.4			10 s		s.	0	0	cloudy	
Morgantown, W. Virginia	29.15	740.4	30.22	767.6	43.0	6.1	74	calm	0	0			10 s		nw.	0.02	0.5	cloudy	
Mt. Washington, N. H.	23.24	590.3	29.86	758.4	19.5	— 6.9	96	nw.	80	35.8			10n;fg		nw.	0.36	9.1	light snow	
Nashville, Tennessee	29.55	750.6	30.11	764.8	54.0	12.2	84	s.	5	2.2			10 n		sw.	0.44	11.2	light rain	
New Haven, Connecticut	29.78	756.4	29.90	759.4	39	3.9	82	w.	11	4.9			10 s		sw.	0.20	5.1	cloudy	
New London, Connecticut	29.86	758.4	29.91	759.7	40	4.4	82	w.	7	3.1			10 s		w.	0	0	cloudy	
New Orleans, Louisiana	30.01	762.2	30.07	763.8	65.0	18.3	93	se.	1	0.4			fg			0.07	1.8	dense fog	
Newport, Rhode Island	29.80	756.9	29.85	758.2	38.0	3.3	89	sw.	18	8.0			10 s		sw.	0.04	1.0	cloudy	
New River, N. Carolina					53	11.7	84	sw.			1		10 s			0	0	cloudy	
New Shoreham, Rhode I'd.	29.83	757.7	29.86	758.4	40.0	4.4	100	sw.	13	5.8			10 n		sw.	0.08	2.0	light rain	
New York, New York	29.78	756.4	29.97	761.2	40	4.4	89	sw.	12	5.4			10 s		sw.	0.02	0.5	cloudy	
Norfolk, Virginia	30.12	765.0	30.15	765.8	54	12.2	74	w.	10	4.5			10 s			0	0	cloudy	
North Platte, Nebraska	27.11	688.6	30.21	767.3	21.6	— 5.8	78	w.	8	3.6		0	0			0	0	clear	
Olympia, Washington T'y	29.95	760.7	29.99	761.7	34.5	1.4	90	s.	10	4.5		9 k	0	s.		1.49	37.8	cloudy	
Omaha, Nebraska	29.04	737.6	30.31	769.9	24.8	— 4.0	76	s.	7	3.1		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.62	752.3	29.64	752.8	—13.2	—25.1	82	wsw.	14	6.3		0	5 s			0	0	fair	
Oswego, New York	29.69	754.1	30.04	763.0	32.0	0.0	45	nw.	22	9.8		0	2 k		nw.	0.31	7.9	clear	
Palestine, Texas	29.36	745.7	29.94	760.5	57	13.9	100	n.	8	3.6			10 s			0.58	14.7	cloudy	
Pensacola, Florida	30.07	763.8	30.10	764.5	62.0	16.7	96	se.	2	0.9		0	5 s		sw.	0.16	4.1	fair	
Philadelphia, Pa.	29.94	760.5	30.05	763.3	44	6.7	83	sw.	6	2.7			10s;fg		nw.	0.04	1.0	cloudy	
Pike's Peak, Colorado	17.63	447.8	30.35	770.9	10	—12.2	48	nw.	25	11.2		0	0			0	0	clear	
Pioche, Nevada	24.22	615.2	30.38	771.6	21	— 6.1	61	sw.	4	1.8		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.35	745.5	30.21	767.3	38.6	3.7	76	nw.	4	1.8			10 s		nw.	0.13	3.3	cloudy	
Port Eads, Louisiana	30.06	763.5	30.07	763.8	60.0	15.6	100	s.	6	2.7		0	fg			0.01	0.3	clear	
Port Huron, Michigan	29.49	749.0	30.22	767.6	25.2	— 3.8	73	nw.	3	1.3		1 cs	0	calm		0.10	2.5	clear	
Portland, Maine	29.68	753.9	29.73	755.1	25	— 3.9	88	nw.	7	3.1			10 s		nw.	0.20	5.1	cloudy	
Portland, Oregon	29.99	761.7	30.06	763.5	37.0	2.8	84	s.	8	3.6			10 s		s.	1.08	27.4	cloudy	
Portsmouth, N. Carolina					57	13.9	74	sw.	10	4.5			10 s		s.	0	0	cloudy	
Prescott, Arizona	24.96	634.0	30.32	770.1	19	— 7.2	61	sw.	3	1.3		0	0			inap.	inap.	clear	
Punta Rassa, Florida	30.20	767.1	30.21	767.3	64	17.8	93	e.	6	2.7		0	hz			0	0	clear	
Red Bluff, California	29.96	761.0	30.34	770.6	39.2	4.0	82	n.	1	0.4			10 s			0	0	cloudy	
Rio Grande City, Texas	29.83	757.7	30.08	764.0	58	14.4	42	n.	22	9.8		0	0			0	0	clear	
Rochester, New York	29.41	747.0	30.12	765.0	31	— 0.6	68	nw.	6	2.7		0	3 s		nw.	0.10	2.5	clear	
Roseburg, Oregon	29.62	752.3	30.19	766.8	39.2	4.0	85	e.	2	0.9			10 s		w.	0.55	14.0	cloudy	
Sacramento, California	30.27	768.8	30.35	770.9	36.8	2.7	82	se.	7	3.1		3 c	0			0	0	clear	
St. Louis, Missouri	29.62	752.3	30.26	768.6	30.0	— 1.1	78	n.	9	4.0			10 s			0.46	11.7	cloudy	
St. Paul, Minnesota	29.20	741.7	30.14	765.5	16.0	— 8.9	83	se.	5	2.2		0	0			0	0	clear	
St. Vincent, Minnesota	28.82	732.0	29.79	756.7	16	— 8.9	83	s.	14	6.3		4 cs	5 s	calm	calm	0	0	cloudy	
Salt Lake City, Utah	25.79	655.1	30.35	770.9	16	— 8.9	54	calm	0	0		8 cs	0	w.		0	0	cloudy	
San Antonio, Texas	29.34	745.2	30.06	763.5	46.6	8.1	77	nw.	10	4.5		3 ck	0	nw.		0.10	2.5	clear	
San Diego, California	30.20	767.1	30.27	768.8	43.8	6.6	71	ne.	5	2.2		5 c	0	w.		0	0	fair	
Sandusky, Ohio	29.51	749.5	30.23	767.8	33.8	1.0	72	w.	8	3.6		0	0			0.18	4.6	clear	
Sandy Hook, New Jersey	29.93	760.2	29.97	761.2	42.0	5.6	82	w.	19	8.5		0	9 k		nw.	0.04	1.0	cloudy	
San Francisco, California	30.29	769.4	30.36	771.1	43	6.1	93	sw.	1	0.4		0	fg			0	0	clear	
Santa Fé, New Mexico	23.30	591.8	30.34	770.6	21	— 6.1	84	ne.	5	2.2		0	0			0.02	0.5	clear	
Savannah, Georgia	30.14	765.5	30.24	768.1	54.5	12.5	79	s.	2	0.9		2 ck	fg			0	0	clear	
Shreveport, Louisiana	29.70	754.4	29.95	760.7	60	15.6	93	s.	3	1.3			10 s			0.02	0.5	threatening	
Silver City, New Mexico	24.39	619.5	30.24	768.1	27	— 2.8	70	nw.	2	0.9		0	0			0.26	6.6	clear	
Sitka, Alaska	29.28	743.7	29.35	745.5	29	— 1.7	82	e.	26	11.6		0	3 s		e.	0.74	18.8	clear	
Smithville, North Carolina	30.19	766.8	30.23	767.8	54	12.2	100	sw.	4	1.8		4 ck	1 s	nw.		0	0	fair	
Spokane Falls, Wash. Ter.	27.83	706.9	29.96	761.0	32	0.0	81	sw.	10	4.5		10 k	0	w.		0.07	1.8	cloudy	
Springfield, Illinois	29.53	750.0	30.26	768.6	31	— 0.6	81	nw.	5	2.2		4cs;hz	3 s	w.	w.	0.01	0.3	fair	
Springfield, Massachusetts	29.74	755.4	29.88	758.9	31.8	— 0.1	88	w.	2	0.9			9 ks		nw.	0.04	1.0	cloudy	
Springfield, Mo.	28.69	728.7	30.26	768.6	30.5	— 0.8	88	ne.	10	4.5		9 c	0			1.29	32.8	cloudy	
Stockton, Texas	27.18	690.4	30.29	769.4	32.5	0.3	100	nw.	12	5.4			10 s		nw.	0	0	cloudy	
Thatcher's Island, Mass.	29.72	754.9	29.78	756.4	32.0	0.0	100	calm	0	0			10 s			0.16	4.1	cloudy	
Toledo, Ohio	29.48	748.8	30.22	767.6	32.5	0.3	76	w.	4	1.8		0	1 s			0.07	1.8	clear	
Tucson, Arizona	27.83	706.9	30.31	769.9	35	1.7	82	s.	5	2.2		0	0			0	0	clear	
Umatilla, Oregon	29.70	754.4	30.08	764.0	38.7	3.7	74	sw.	15	6.7			10 s		w.	inap.	inap.	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.76	755.9	30.03	762.7	64	17.8	93	s.	1	0.4			10 s		calm	0	0	cloudy	
Visalia, California	29.96	761.0	30.34	770.6	33	0.6	80	s.	3	1.3		0	0			0	0	clear	
Washington, D. C.	29.98	761.5	30.10	764.5	45	7.2	83	sw.	2	0.9			10 s		sw.	0.03	0.8	cloudy	
West Los Animas, Colorado	26.14	663.9	30.27	768.8	14	—10.0	66	nw.	4	1.8		0	0			0	0	clear	
Wickenburg, Arizona					29	— 1.7	88	calm			0	0	0			0	0	clear	
Williamsport, Pa.	29.42	747.3	30.05	763.3	43	6.1	60	w.	7	3.1			10 ks		nw.	inap.	inap.	cloudy	
Wilmington, N. Carolina	30.17	766.3	30.23	767.8	57	13.9	86	sw.	1	0.4		7 k	0	w.		0	0	fair	
Winnemucca, Nevada	25.72	653.3	30.24	768.1	14	—10.0	66	ne.	2	0.9		0	0			0	0	clear	
Wood's Holl, Mass.																			
Yankton, Dakota	28.73	729.7	30.15	765.8	26	— 3.3	77	sw.	8	3.6		0	0			0	0	clear	
Yuma, Arizona	30.15	765.8	30.30	769.6	39.1	3.9	70	e.	3	1.3		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8			54.0	12.2	85	calm	0	0		2 k	7 s			0.56	14.2	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.05	763.3	30.06	763.5	79	26.1	70	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	30.01	762.2	30.03	762.7	76	24.4	100	calm	0	0			10 n		calm	0.40	10.2	heavy rain	J. I. Plume.
Guadeloupe, W. I.	30.03	762.7	30.05	763.3	75	23.9	87	e.				7 c	3 k		ese.	0.079	2.0		B. Bigar.
Havana, Cuba, W. I.	30.16	766.1	30.21	767.3	72	22.2	90	e.	1.2	0.5		0	1 ks		calm	0	0	clear	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.13	765.3	30.14	765.5	69.8	21.0	80	n.	1	0.4		0	1 s		e.	0	0	fine	Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.08	764.0	30.08	764.0	74.5	23.6	93	ne			3		10 n	ne.		1.150	29.2	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.56	750.8	30.02	762.5	73	22.8	94	calm			0	10 ck	0	calm		0.43	10.9	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua							98	ne.			2	1 ck	3 ks	ne.	ne.	0	0		Earl Flint.
Santiago de Cuba, W. I.	30.12	765.0	30.15	765.8	74	23.3	72	calm	0	0		1 k	0			inap.	inap.	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.80	756.9	29.86	758.4	—22.0	—30.0		e.	6	2.7		4 k	2 s	e.	e.	0	0	cloudy	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Vigo, Galicia, Spain	30.38	771.6	51	10.6	78	ene.			1		1	ene.				3	wsw.	blue sky	Capt. E. H. Murray.
H. M. S. Albatross, N. 21° 12′, E. 112° 18′	30.22	767.6	61	16.1		ne.			3		10	n.				2	ne.	d. clouds	Capt. A. J. Errington.
H. M. S. Alert, N. 4° 35′, E. 97° 35′	29.92	760.0	81	27.2	78	e.			1-2		7							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Corfu, Ionian Islands	30.23	767.8	59	15.0	73	wnw.			1		7	wsw.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 7° 30′, E. 73° 10′	29 85	758.2	83	28.3	79	n.			2-3		4	n.				3	wnw.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.96	761.0	75	23.9	72	sw.			2-3		0							blue sky	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	29.98	761.5	74	23.3	68	sw.			1		1							blue sky	Capt. A. T. Dale.
H. M. S. Dido, N. 13° 05′, W. 59° 36′	30.16	766.1	78	25.6		ene.			3		4	ne.						d. clouds	Capt. C Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.42	772.7	62	16.7	71	wsw.			1		2	wsw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf																			Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 36° 29′, E. 4° 11′	30.07	763.8	57	13.9	93	w.			2		5					4	wsw.	d. clouds	Capt C. A. G. Bridge.
H. M. S. Fawn, Mocha, Arabia	29.85	758.2	79.5	26.4	81	nnw.			3		4	nnw.				2	nnw.	d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.00	762.0	45	7.2	60	w.			1		6							misty	Capt. R. F. Roskyn.
H. M. S. Gannet, S. 12° 04′, W. 77° 11′	29.99	761.7	67.5	19.7	92	sse.			1		8							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.71	754.6	50	10.0	86	calm			0		10							raining	Capt. L. F. Jones.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 36° 30′, E. 16° 30′	30.20	767.1	56	13.3	68	wnw.			1		8							d. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.22	767.6	56	13.3	87	ene.			1		5	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.99	761.7	65	18.3		calm			0		0							blue sky	Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, Sydney, Australia	30.29	769.4	74	23.3	81	sse.			5		6	nw.						squally	Capt. J. E. Erskine.
H. M. S. Northampton, N. 13° 05′, W. 73° 49′	30.01	762.2	76.5	24.7	86	e.			4		4	e.				3	ene.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 8° 34′, E. 63° 50′	29.88	758.9	82.5	28.1	92	ne.			1		9						ne.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 20° 09′, W. 36° 50′	30.21	767.3	76	24.4	97	ene.			3		2					3	ene.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, N. 1° 30′, W. 5° 20′	29.91	759.7	82	27.8	100	se.			3		10							overcast	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.17	766.3	53	11.7		wnw.			3		0							blue sky	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	29.86	758.4	35	1.7	90	wsw.			4		7	ssw.						snowing	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 4° 29′, E. 39° 59′	29.18	741.2	84	28.9	91	ene.			3-4		3	ene.				3	ene.	d. clouds	Capt. E. T. Church.
H. M. S. Thalia																			
H. M. S. Triumph, Callao Bay, Peru	29.99	761.7	68	20.0	90	s.			1		7	s.						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 4° 51′ E. 106° 06′	29.93	760.2	78.5	25.8	97	n.			4		1	e.				4	nne.	blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.10	764.5	73	22.8		nnw.			1		4							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Jask, West Bay, Persia	29.84	757.9	73.5	23.1	76	nw.			4-6		8	wnw.				4	nw.	raining	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Brava, Cape Verd Ids	30.05	763.2	74.3	23.5	83	ne.			3		0					2	ne.	blue sky	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder																			Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.10	764.5	65	18.3	89	e.	7	3.1			10		s.	0.2	5.			cloudy	
N. Yard, Portsmouth, N. H.	29.80	756.9	37	2.8		nw.	2	0.9			10		nw.	0	0			cloudy	
Naval Hospital																			
Yokohama, Japan	29.47	748.5	41	5.0	36	nnw.			3		0			0	0			clear	
Adams,																			
Callao, Peru	29.79	756.7	69	20.6	95	sse.			0–1		10			0	0	gr'd		cloudy	
Alaska,																			
Valparaiso, Chili	29.94	760.5	64	17.8	94	calm			0		5			0	0	sm'h		fair	
Alert,																			
N. 3° 10′, E. 104° 54′*	29.79	756.7	81	27.2	83	ne.			4		2		sw.			long	ne.	clear	
Alliance,																			
Boston, Mass	29.68	753.9	34	1.1	90	wnw.			1		10			light	light			drizzling	
Ashuelot,																			
Tientsin, China	30.27	768.8	28	— 2.2	88	ese.			2		0							clear	
Brooklyn,																			
S. 40° 26′, W. 57° 40′	29.91	759.7	65	18.3	89	nne.	11	4.9			0			0	0	sm'h		clear	
Colorado,																			
New York, N. Y	29.97	761.2	41	5.0	82	w.	1	0.4			10		w.	0.02	0.5			misty	
Enterprise,																			
Norfolk, Va*	30.14	765.5	55	12.8	80	sw.			1		10		calm					cloudy	
Essex,																			
Madeira I'd, Africa	30.28	769.1	64	17.8	62	w.			1		2		w.			sm'h	sw.	clear	
Franklin,																			
Norfolk, Va	30.19	766.8	55	12.8	68	sw.	9.6	4.3			8		calm	0	0			cloudy	
Galena,																			
N. 36° 35′, W. 2° 25′	30.39	771.9	59	15.0	76	e.			1		0					sm'h		clear	
Independence,																			
N. Yard, Mare I'd, Cal	30.27	768.8	41	5.0	74	calm	0	0			2			0	0			fair	
Kearsarge,																			
New Orleans, La	30.03	762.7	65	18.3	94	se.			1		10		nw.					foggy	
Lackawanna,																			
Valparaiso, Chili*	29.89	759.2	62	16.7	100	calm			0		10							cloudy	
Lancaster,																			
Messina, Italy	30.22	767.6	60	15.6	65	se.			0–1		10							cloudy	
Marion,																			
S. 30° 13′, E. 45° 22′	29.89	759.2	78	25.6	73	ene.			4		10		calm			long	ene.	fair	
Michigan,																			
Erie, Pa	30.20	767.1	33	0.6	80	n.			2		8		n.					cloudy	
Minnesota,																			
Newport, R. I	29.86	758.4	41	5.0	100	wsw.	7	3.1			10		sw.					overcast	
Monocacy,																			
Yokohama, Japan	29.67	753.6	43	6.1	75	nw.			3		0							clear	
Nipsic,																			
N. 36° 28′, W. 2° 24′	30.41	772.4	58	14.4	70	e.			2		0					sm'h		clear	
Onward,																			
Callao, Peru†	30.09	764.3	67	19.4	95	calm			0		10		nnw.			long	w.	cloudy	
Palos,																			
Hong Kong, China	30.25	768.3	56	13.3	81	ene.			1		10							cloudy	
Passaic,																			
Washington, D. C	30.14	765.5	42	5.6	91	sw.			1		10		sw.					cloudy	
Pensacola,																			
Valparaiso, Chili	30.07	763.8	60	15.6	94	calm	0	0			10			0	0			foggy	
Powhatan,																			
N. 35° 56′, W. 72° 14′	30.30	769.6	68	20.0	65	s.			6		8?		sw.			mod.	sw.	clear?	
Quinnebaug,																			
N. 33° 57′, E. 15° 24′	30.23	767.8	57	13.9	63	n.			3		8		nne.			sm'h		rainy	
Ranger,																			
N. 20° 14′, W. 105° 35′*	29.93	760.2	64	17.8	89	ne.			2		2		calm	0	0	sm'h		clear	
Richmond,																			
N. 19° 09′, E. 161° 45′*	29.90	759.4	77	25.0	77	sse.			1		2		ssw.	0	0	mod.		fair	
Shenandoah,																			
S. 32° 52′, W. 46° 04′*	30.02	762.5	75	23.9	72	wsw.			4		0					mod.	sw.	clear	
St. Louis,																			
League Island, Pa	30.20	767.1	38	3.3	90	sw.	7	3.1			10			0.04	1.0			cloudy	
Swatara,																			
Kobe, Japan*	29.84	757.9	46	7.8	62	calm			0		8		calm			sm'h		fair	
Tennessee,																			
New York, N. Y	29.95	760.7	43	6.1	83	sw.	8	3.6			10			0.03	0.8			misty	
Vandalia,																			
Cartagena, U. S. Col*†	30.05	763.3	75	23.9	100	ese.			2		5		nw.					fair	
Wabash,																			
Boston, Mass	29.76	755.9	32	0.0		wsw.	1	0.4			10		wnw.	0.03	0.8			hazy	
Wachusetts,																			
N. 40° 23′, W. 124° 31′	30.15	765.8	47	8.3	92	sse.			4		10		se.			long	se.	rainy	
Wyoming,																			
Port Royal, S. C	30.22	767.6	52	11.1	100	s.	2	0.9			5		sw.	0	0			fair	
Yantic,																			
Aspinwall, Panama*	29.94	760.5	77	25.0	95	n.			3		2		n.					clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 49° 40′, W. 44° 20′	29.84	757.9	37	2.8	80	nw.	7	.....	9	.....	nw.	4 h'r	snow	6	nw.	snow & hail	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 42° 46′, W. 68° 19′*	29.55	750.6	40	4.4	.....	sw.	5	.....	10	.....	sw.	3 h'r	snow	mod.	wsw.	hazy	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen. Glasgow, Scotland*	30.42	772.7	44	6.7	.....	w.	2	.....	9	.....	.....	.....	.....	.....	.....	hazy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Glasgow, Scotland*	30.46	773.7	44	6.7	.....	sse.	2	.....	10	.....	s.	0	0	.....	.....	cloudy	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Liverpool, Eng.	30.18	766.6	49	9.4	93	se.	4	.....	10	.....	se.	.....	.....	.....	.....	overcast	Caufman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 49° 04′, W. 31° 50′†	29.53	750.0	47	8.3	85	wsw.	6	.....	2?	.....	w.	h'vy	h'vy	mod.	wsw.	raining?	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 42° 00′, W. 61° 30′*†	30.09	764.3	39	3.9	.....	se.	3	.....	10	.....	ne.	.....	.....	.....	.....	cloudy	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 12° 06′, W. 74° 42′*†	29.88	758.9	74	23.3	.....	e.	5	.....	.....	.....	ne.	.....	.....	r'gh	e.	cloudy	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Maracaibo, Venezula, S. A.	.....	.....	.....	.....	.....	ne.	2	.....	.....	.....	.....	.....	.....	.....	.....	fine	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 22° —′, W. 74° —′	29.92	760.0	.....	.....	.....	e.	5	.....	6	.....	e.	0	0	r'gh	se.	dull	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 60° 20′, W. 66° 36′	29.43	747.5	42	5.6	.....	nne.	4	.....	10	.....	.....	.....	.....	.....	.....	misty	.....
Baroda, Capt. C. J. Russell, N. 1° 20′, W. 26° 08′	29.99	761.7	81.4	27.4	83	ene.	2	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Caldew, Capt. W. Peterson, S. 52° 43′, W. 57° 06′	29.70	754.4	47.2	8.4	.....	n.	1	.....	10	.....	.....	.....	.....	.....	.....	misty	.....
S. S. Cipero, Capt. W. N. Lailey, Georgetown, Demerara, S. A.	30.04	763.0	79.8	26.6	86	nne.	3	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. City of Agra, Capt. Thos. Young, N. 36° 30′, W. 36° 44′	29.99	761.7	56.0	13.3	.....	wnw.	6	.....	5	.....	.....	.....	.....	.....	.....	squally	.....
Coppename. Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, S. 18° 00′, E. 89° 17′	29.99	761.7	80	26.7	82	ese.	4–5	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. S. G. Jones, S. 53° 29′, W. 58° 54′	29.65	753.1	45.9	7.7	85	wnw	2	.....	10	.....	.....	.....	.....	.....	.....	misty	.....
Hope, Capt. James Campbell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 35° 19′, E. 18° 30′	29.97	761.2	71	21.7	85	w.	6	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, S. 55° 07′, W. 62° 24′	29.53	750.0	50	10.0	86	ne.	2	.....	fog	.....	.....	.....	.....	.....	.....	foggy	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	29.96	761.0	74	23.3	85	calm	0	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
Naiad, Capt. John Smith, N. 25° 07′, W. 50° 39′	30.41	772.4	68.4	20.2	84	n.	6	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry, S. 29° 58′, E. 79° 07′	30.13	765.3	77	25.0	52	ssw.	2	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. C. W. Pearson, N. 50° 14′, W. 9° 52′	30.02	762.5	50.5	10.3	97	sw.	6	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
S. Superb, Capt. Berridge N. 39° 55′, W. 30° 12′	29.75	755.6	60.8	16.0	88	sw.	5	.....	10	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 49° 03′, W. 35° 00′*†	29.60	751.8	.....	.....	.....	wsw.	6	.....	6	.....	w.	0	0	high	w.	fine	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan, N. 50° 10′, W. 19° 16′	29.46	748.3	.....	.....	.....	sw.	6	.....	.....	.....	wsw.	3 h'r	h'vy	r'gh	ssw.	cloudy	E. F. Stembridge, 3d offi
S. S. Gallia, Capt. W. H. P. Hains, N. 48° 55′, W. 31° 54′*	29.51	749.3	47	8.3	77	wsw.	6	.....	8	.....	w.	sh'rs	sh'rs	.....	w.	raining	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, N. 49° 22′, W. 33° 58′	29.48	748.9	42.8	6.0	.....	w.	4	.....	7	.....	sw.	3h'r	3h'r	h'vy	wsw.	cloudy	.....
S. S. France, Capt. Périer d'Hauterive, N. 42° 11′, W. 59° 33′*†	30.28	769.0	26.6	—3.0	.....	sw.	2	.....	n.	.....	w.	rain	rain	.....	w.	raining	.....
S. S. St. Laurent, Capt. A. Sérvan, N. 40° 28′, W. 73° 10′*†	30.24	768.0	42.8	6.0	.....	nw.	5	.....	.....	.....	.....	0	0	sm'h	nw.	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Silesia, Capt. A. Albers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S. S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, La Plata, S. A*†	30.16	766.1	78	25.6	.....	ne.	1	.....	1	.....	nw.	0	0	.....	.....	clear	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 50° 38′, W. 30° 20′	.....	.....	.....	.....	.....	wsw.	3	.....	8	.....	w.	4 h'r	hail	mod.	w.	cloudy	E. Parry.
MALLORY LINE. *O. H. Mallory & Co., Agents, Nem York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 35° 01′, W. 75° 14′*†	30.30	769.6	63	17.2	.....	wsw.	3	.....	2	.....	sw.	1 h'r	1 h'r	light	s.	foggy	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d off.
S. S. Santiago, Capt. S. F. Phillips, N. 20° 35′, W. 79° 15†	30.18	766.6	75	23.9	.....	ene.	3	.....	3	.....	ene.	1 h'r	light	sm'h	.....	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sanson Cartagena, U. S. C† [man	29.94	760.5	77	25.0	.....	var.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Elbe, Capt. W. Willigerod [nolds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Lessing, Capt. B. Voss, N. 50° 20′ W. 27° 10′*†	29.57	751.1	54	12.2	.....	wsw.	6	.....	.....	.....	.....	.....	.....	7	w.	raining	.....
S. S. Maas, Capt. T. H. Bonjer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke, N. 42° 37′, W. 47° 00′*†	30.00	762.0	45	7.2	.....	nw.	7–9	.....	.....	.....	.....	.....	.....	.....	nnw.	snowy	.....
S. S. P. Caland, Capt. E Deddes, N. 49° 44′, W. 18° 41′	29.88	758.9	57.2	14.0	.....	w.	2	.....	.....	.....	.....	.....	.....	1	sw.	fine	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 46° 40′, W. 43′ 09′	29.57	751.1	34	1.1	.....	w.	9	.....	.....	.....	.....	.....	.....	.....	w.	snow & hail	.....
S. S. Scythia, Capt. M Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d off.
S. S. Leipzig, Capt. F. Pfeiffer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sander & Walter.
S. S. Main, Capt. Julius Barre,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Mosel, Capt. F. Hesse, N. 46° 01′, W. 47° 31′	29.85	758.2	25.2	—3.8	.....	wnw.	6	.....	10	.....	.....	4 h'r	snow	r'gh	wnw.	squally	J. Hesse.
S. S. Neckar, Capt. R. Bussius	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, S. 11° 41′, W. 32° 54′*	30.02	762.5	82.4	28.0	78	ene.	4	.....	0	.....	.....	0	0	4	ene.	clear	.....
S. S. Oder, Capt. Undeutsch, N. 44° 01′, W. 52° 31′*	30.17	766.3	25.2	—3.8	.....	n.	4	.....	4?	.....	nw.	0	0	mod.	nw.	cloudy?	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, N. 39° 03′, W. 26° 05′	30.02	762.5	.....	.....	.....	ssw.	6	.....	4	.....	ssw.	0	0	cross	ssw.	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 06′, E. 166° 23′†	29.87	758.7	65	18.3	90	ssw	4	.....	2	.....	ssw.	0	0	mod.	s.	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, San Francisco, Cal*†	30.55	776.0	56	13.3	80	se.	2	.....	1	.....	ssw.	.....	.....	.....	.....	clear	.....
S. S. Oceanic, Capt. J. Metcalfe, N. 25° 56′, E. 121° 54′..*	30.29	769.4	57	13.9	62	nne.	4	.....	4	.....	wnw.	.....	.....	3	nne.	fair	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.76	755.9	.....	.....	.....	wnw.	4	.....	2	.....	nw.	.....	.....	.....	.....	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Boston, Mass..†	29.72	754.9	40	4.4	.....	w.	3	.....	1	.....	w.	.....	.....	.....	.....	clear	H. K. Hallett.

MERCHANT-MARINE SERIES.—Continued

Vessels and Masters.	Barometer reduced to sea-level. Inch.	Barometer reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Sea Swell. Character.	Sea Swell. Direction.	Weather.	Observers.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	29.98	761.5	40	4.4	82	ssw.	2		10		sw.					cloudy	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann N. 40° 28′, W. 124° 30′†	30.18	766.6	45	7.2	100	sse.	5		10		sse.	rain	rain	high	w.	rainy	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.99	761.7	38	3.3	90	calm	0		10		sw.					heavy rain	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 33° 00′, W. 117° 34′†	30.25	768.3	51	10.6	78	ese.	2		0					sm'h		clear	
S. S. G. W. Elder, Capt. H. G. Morse,																	
S. S. Idaho, Capt. H. M. Hayward, Seattle, Wash. Ter†	30.01	762.2	39	3.9	91	se.	3		8							cloudy	
S. S. Orizaba, Capt. Chas. B. Johnson,																	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.48	774.2	42	5.6	91	s.	1		0			0	0			clear	
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.34	770.6	43	6.1	83	se.	2		0			0	0			clear	
S. S. Victoria, Capt. W. E. Plummer, Nanaimo, Vancouver's Isl'd †	29.86	758.5	31	—0.6	89	calm	0		0							clear	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh																	
S. S. City of New York, Capt. W. B. Cobb, S. 4° —′, W. 167° 10′†	29.93	760.2	83	28.3	91	ne.	3		5		ne.	0	0	light	ne.	fair	W. H. Hawes, 2d off. J. M. Dow, 3d officer.
S. S. City of Rio de Janeiro, Capt. Cavarly,																	
S. S. City of Sidney, Capt. H. C. Dearborn, S. 34° 09′, E. 165° 42′†	30.13	765.3	66	18.9	54	ssw.	4		8		sw.	0	0	mod	sw.	cloudy	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, Hong Kong, China†	30.26	768.6	60	15.6	76	sse.	2		10		sse.	0	0			cloudy	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle,																	
S. S. Grenada, Capt. M. Connolley, Panama, Panama †	29.93	760.2	72	22.2	95	nw.	2		0			0	0			clear	
S. S. South Carolina, Capt. W. J. Russell, N. 13° 35′, W. 89° 56′†	30.08	764.0	80	26.7	78	ese.	2		5		se.	0	0	light	sw.	hazy	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.33	770.4	72	22.2	71	nw.	2		10		nw.					cloudy	
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth																	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke,																	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 43° 06′, W. 50° 21′*†	30.25	768.3	24	—4.4		wnw.	7		9		nw.	8 h'r	snow	h'vy	nnw.	snowy	
S. S. Nederland, Capt J. Ueberweg, N. 48° 49′, W. 34° 58′*†	29.92	760.0	42	5.6		wsw.	4		5		w.			mod.	sw.	showery	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Jersey City, N. J*	29.98	761.5	43	6.1	75	wsw.	2		10		wsw.	0	0			cloudy	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,																	
S. S. Vaderland, Capt. W. A Beynon, N. 45° 29′, W. 47° 20′*†	29.68	753 9	28	—2.2	100	wnw.	6		10		wnw.	snow	sq'lls	r'gh	nw.	overcast	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, Antwerp, Belgium*	30.26	768.6	38	3.3		e.	1		10		se.	0	0			hazy	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 40° 50′, W. 64° 44′*	30.00	762.0	61.0	16.1	82	wsw.	6		6		w.	1 h'r	1 h'r	sm'h	w.	cloudy	
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 59° 01′, W. 7° 25′†	30.27	768.8	46.4	8.0		ssw.	4		10		ssw.	2 h'r	2 h'r	r'gh	ssw.	covered	J. T. Eberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters.																	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry,																	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell N. 43° 35′ W. 52° 26′*†			28	—2.2	77	nw.	4		8		nw.	4 h'r	snow	high	wnw.	cloudy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 42° 50′ W. 46° 26′*†	30.04	763.0	37	2.8		nnw.	6		5		n.	snow	snow	mod.	nnw.	snowing	H. Day, 4th officer. H. Goulden, 4th officer
S. S. Republic, Capt. P. J. Irving,																	
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, Stallingborough, Eng*	30.45	773.4	42	5.6													Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. Pensacola, Florida †	30.20	767.1	63	17.2	94	e.	2	0	3 s		se.	0.19	4.8			fair	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey,																	C. Bailey.
Bk. Alpha, Capt. O. Grönn N. 26° 45′, W. 21° 50′*†	30.26	768.6	69	20.6		nne.	5		3		ne.	0	0	mod.	ne.	fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, Ponce, Porto Rico, W. I.*†	30.18	766.6	78	25.6		calm	0		2		ene.	2 h'r	2 h'r			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 15° 46′, W. 29° 34′*†	30.10	764.5	73	22.8		ene.	6		4		ene.	0	0	r'gh.	ene.	fair	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 47° 42′, W. 31° 10′*†	29.47	748.5				sw.	3				wsw.	rain	rain	mod.	nw.	raining	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill, S. 40° 02′ W. 51° 31′†	30.00	762.0				sw.	2		0			0	0	cross	ssw.	clear	A. J. Pettengill.
S. Enoch Train, Capt. H. D. Chapman, Bremerhaven, Germany*	30.45	773.4				wnw.	1		2		nw.	0	0			hazy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.																	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C†	30.17	766.3	47	8.3	77	s.	1		10		ssw.	0	0			cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison S. 27° 56′, W. 79° 39′†	30.18	766.6	77	25.0		calm	0		5		se.	0	0	mod.	wsw.	fair	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaauw, N. 32° 01′, W. 21° 39′			66	18.9		calm	0		2			0	0	sm'h		fine	
Bk. Gamaliel, Capt. D. J. Anthony, N. 3° 16′, W. 41° 04′*†	29.06	738.1				ne.	6		*10		ne.	light	light	reg.	ne.	cloudy	
Bk. Geo. Booth, Capt. D. Williams, N. 28° 40′, W. 41° 20′*†	30.20	767.1	66	18.9		nnw.	1		10			0	0		nnw.	overcast	D. Williams.
Bk. Granville, Capt. R. Bonney																	
Schr. Henry Denison, Capt Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 42° 01′. E. 23° 03′*	29.59	751.6				w.	3		2		wnw.	5 h'r	light	long	w.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo T. L. Compte																	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen, N. 36° 20′, W. 3° 07′*†	30.50	774.7				s.	1				se.	0	0	sm'h		fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 42° 15′, W. 19° 25′*†	30.38	771.6	57	13.9	87	ssw.	5		8		ssw.			mod	ssw.	misty	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.22	767.6	55	12.8	62	ne.	2		0							clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 11° 20′, W. 33° 15′*†	29.94	760.5				ese.					ese.	0	0			clear	J. Connolly.
Schr. S. B. Hubbard, N. 40° 05′, W. 73° 47′*†	30.01	762.2	50	10.0		wsw.	1		10		sw.	light	light	long	ssw.	threatening.	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 5° 48′, W. 31° 45′*	29.90	759.4	79.3	26.3	92	se.	3		1		se.			mod.	se.	d. clouds	H. N. T. Sumner.
Bk. Sunbeam, Capt. Joseph Hand, N. 35° 35′, W. 19° 41′*†	30.26	768.6	63	17.2	83	wnw.	1		8		w.	0	0	mod.	sw.	cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 34° 33′, E. 10° 02′*†	30.20	767.1				sw.	7		9		sw.	0	0	light	nw.		
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 39° 17′, W. 44° 44′*†	29.85	758.2	49	9.4	64	nnw.	7				nw.			cross	wnw.	cloudy	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, N. 1° 27′, W. 28° 13′*†	30.00	762.0				n. to e.					n. to e.			light	nne.		N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 9, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.38	771.7	68.0	20.0	81	w.			2		0			0	0	clear	Moiroud.
Algiers			30.40	772.1	55.4	13.0	86	nw.			1		0			0.146	3.7	clear	Nicolas.
La Calle			30.45	773.3	53.2	11.8	84	wnw.			1		5			0.512	13.0	cloudy	Fonfrède.
Tunis			30.47	773.8															Jacques.
Sfax																			Gau.
Saida			30.44	773.1	52.5	11.4	46	n.			1		0			0	0	clear	Dumas.
Tebessa			30.47	774.0	45.3	7.4	59	n.			2		8			imap.	imap.	very cloudy	Derché.
Geriville					45.0	7.2	58	nnw.			2		0			0	0	clear	Lonchamp.
Laghouat			30.58	776.6	51.8	11.	45	se.			1		1			0	0	very fair	Herbin.
Biskra			30.52	775.2	60.8	16.0	36	ssw.			1		3			0	0	pretty fair	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	72.0	22.2	47	se.	10	4.5			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.99	761.8	30.58	776.7	34.2	1.2	71	ne.			1		10			0.008	0.2		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.74	755.3	30.56	776.2	28.4	— 2.0	90	w.	6.3	2.8			9			0	0		Dr. Wierzbiski.
Eperies	29.56	750.9	30.51	775.0	25.9	— 3.4	60	calm			0	cs	7 s			0.039	1.0		Julius Mikolik.
Gratz	29.15	740.5	30.47	773.8	37.0	2.8	80	s.			2		10			0	0		Andreas Rospini.
Hermannstadt	28.95	735.4	30.52	775.1	19.0	— 7.2	100	nw.			3		1			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.12	739.7	30.54	775.8	36.9	2.7	74	e.			2		3			0	0	clear	The Staff.
Lemberg	29.20	741.7	30.26	768.6	22.0	— 5.2	63	nw.			2		10			0	0		Dr. T. Stanecki.
Pola	30.36	771.1	30.48	774 1	45.7	7.6	48	e.			4		5			0	0		I. R. Hydrographic Office.
Szathmar	30.01	762.3	30.48	774.2	22.1	— 5.5	63	w.			3		0			0	0		Joseph Midlinszky, S. J.
Szegedin	30.23	767.9	30.54	775.6	27.3	— 2.6	58	n.			3		3			0	0		Karl Stancel.
Trieste	30.39	771.9	30.49	774.5	46.8	8.2	39	ne.			1		0			0	0		Rieder.
Vienna	29.84	757.8	30.00	777.1	36.0	2.2	65	calm			0		10			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.04	763.0	30.14	765.5	39.5	4.2	71	s.	9	4.0			2			0	0	misty	W. Boswell.
Armagh, Observatory	29.79	756.7	30.04	763.0	50.9	10.5	89	s.	19	8.5			10					gloomy	S. Call.
Bidston, Liverpool Obs'y			30.24	768.1	41.0	5.0	93	se.	22	9.8			10					overcast	John Hartnup.
Bolton, Sharples	29.72	754.9	30.27	768.8	37.8	3.2	96	sse	12	5 4			10					gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.84	757.9	30.24	768.1	42.5	5.8	89	sw.			2		10			0.02	0.5	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	80.0	26.7	76	ne.			4		8					raining	Corpl. J. Surgenor, A. H. C.
Cardington			30.35	770.9	39.4	4.1	87	s.			0.4		10					overcast	John McLaren.
Chatham, School M. E.	30.33	770.4	30.47	773.9	35.2	1.8	87	sw.			2		10					misty	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.04	763.0	30.27	768.8	47.5	8.6	92	s.			5		10					foggy	The Staff.
Fort Napier, Natal	27.69	703.3	29.91	759.7	82.3	27.9	55	se.			2		2					blue sky	Pvt. E. K. Annis, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.86	758.4	89.0	31.7	59	w.			1		3						Sergt. John Robinson.
Galway, Queen's College			29.87	758.7	51	10.6	93	s.			2		10					overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.36	771.1	30.42	772.7	59.4	15.2	84	ne.			2		4					blue sky	Opl. O. Baldwin.
Glasgow, Observatory	29.92	760.0	30.13	765.3	39.8	4.3	87	ene.			3		10					misty	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.26	768.6	30.44	773.2	36.1	2.3	85	ssw.			1		10					overcast	The Staff.
Guernsey	30.09	764.3	30.41	772.4	39.0	3.9	90	sse.			2		10					misty	A. Collenette, F. M. S.
Kew, Observatory	30.40	772.1	30.44	773.2	37.5	3.1	85	s.	11	4.9			10					threatening	The Staff.
Leicester, Museum	30.07	763.8	30.34	770.6	38.8	3.8	89	sw.			4		10					overcast	J. O. Smith.
Malta, Mediterranean	30.17	766.3	30.25	768.3	58.2	14.6	53	n.			2		4					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.16	766.1	30.20	767.1	74.2	22.3	95	se.			2		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.79	756.7	30.34	770.6	37.1	2.8	98	s.			2		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.16	766.1	30.39	771.9	37.4	3.0	88	sse.			5		10					squally	The Staff.
Plymouth	30.25	768.3	30.33	770.4	46.0	7.8	92	s.			4		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.03	762.7	42	5.6	87	s.	18	8.0			0					blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.24	768.1	30.31	769.9	29.0	— 1.7	88	n.			2		10			blank	blank	gloomy	W. H. Lyne.
Sheffield	30.01	762.2	30.30	769.6	40.1	4.5	92	ssw.			1		10			0.04	1.0	overcast	W. F. Cooper.
Silloth Rectory	30.12	765.0	30.15	765.8	41.0	5.0	98	s.			2		10			0.060	1.5	drizzling	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.20	768.6	38.8	3.8	92	s.	16	7.2			10					foggy	I. New.
Stratfield Turgiss	30.21	767.3	30.44	773.2	36.8	2.7	92	s.			0—7		10					d clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.20	767.1	30.27	768.8	49	9.4	92	s.			6		10					raining	W. Newcombe.
Valencia, Observatory	29.90	759.4	29.93	760.2	52.2	11.2	93	sse.	33	14.8			9					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.10	764.5	30.13	765.3	74.6	23.7	81	e.	10.6	4.7		5 cs	0			0	0		John Duthie.
Cape Town, C. G. H. Obs'y	29.95	760.7	29.09	761.7	85.0	29.4	48	s.	25	11.2		0	0			0	0		The Staff, for D. Gill.
Worcester†																			C. Stokes.

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STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.94	760.5	29.99	761.7	9	—12.8	100	sw.	4	1.8		0	0			0.525	13.3	clear.	H. J. Cundall, C. E.
Chatham, N. B.*	29.87	758.7	29.94	760.5	6	—14.4	100	sw.	3	1.3		0	0			0.39	9.9	clear.	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.76	755.9	29.78	756.4	18	— 7.8	96	sw.	18	8.0		8 k	0	nw.		0.15	3.8	clearing	J. McWilliams.
Fort Garry, Manitoba*	29.00	736.6	29.88	758.9	16	— 8.9	100	ne.	10	4.5			10 n			0.110	2.8	light snow	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.97	761.2	30.11	764.8	16	— 8.9	76	sw.	4	1.8		0	0			0.282	7.2	clear.	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.63	752.6	29.99	761.7	25	— 3.9	92	sw.	3	1.3		2 cs	0			0	0	foggy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.78	756.4	30.00	762.0	20	— 6.7	84	w.	20	8.9		0	0			0	0	clear.	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.20	741.7	29.96	761.0	8	—13.3	76	e.	7	3.1		c	0			0	0	clear.	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.21	741.9	29.94	760.5	24	— 4.4	87	nw.	2	0.9		0	0			0	0	clear.	H. Morgan.
Port Stanley, Ontario	29.26	743.2	29.94	760.5	21	— 6.1	96	e.	4	1.8		0	5 ks		w.	0	0	fair.	M. Payne.
Quebec, Quebec*	29.53	750.0	29.87	758.7	18	— 7.8	100	nw.			5	0	5 s		nw.	0.20	5.1	fair.	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.46	748.3	29.98	761.5	— 6	—21.1	82	calm	0	0		0	0			0	0		W. H. McIntyre.
Saugeen, Ontario*	29.18	741.2	29.94	760.5	22	— 5.6	100	s.	4	1.8		0	0			0	0	clear.	
St. Andrews, N. B.	29.98	761.5	30.03	762.7	19	— 7.2	80	w.	1	0.4		0	0			0.20	5.1	clear.	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B.*	29.91	759.7	29.98	761.5	11	—11.7	87	s.	3	1.3		2 c	0			0.35	8.9	clear.	T. C. Hill, C. E.
Toronto, Ontario*	29.56	750.8	29.96	761.0	24	— 4.4	80	w.	3	1.3		5 cs	hz			0	0	fair.	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S.*	30.02	762.5	30.09	764.3	25	— 3.9	84	se.	2	0.9		0	0			0.34	8.6	clear.	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.45	748.0	29.71	754.6	17	— 8.3		ne.	3	1.3			10			0.60	15.2	snowing	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow																			N. Titoushkin.
Sung-shu-chwangf	24.66	626.4			26.2	—3.2		calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.35	771.0	30.38	771.6	39.0	4.4	85	ene.	3.1	1.4			0			0	0	clear.	M. Marc Dechevrens, S. J.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.41	772.3	30.45	773.5	36.0	2.2	94	w.	13	6			10					foggy	Oversergent Fischer.
Fanöe	30.44	773.1	30.46	773.6	36.3	2.4	82	sw.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.08	738.5	29.12	739.6	8.2	—13.2		nne.			7		4						S. Kleinschmidt.
Stykkisholm, Iceland	29.14	740.2	29.19	741.3	38.8	3.8		s.			7		10					raining	A. O. Thorlacius.
Thorshavn	29.76	755.8	29.79	756.7	45.9	7.7	94	s.	18	8			10						Overloerer Bergh.
Vestervig	30.29	769.3	30.38	771.6	37.2	2.9	80	sw.			4		10						Loerarer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.80	756.9	30.48	774.1	42.1	5.6	91	calm			0		kn			0	0		M. Labroue, Director.
Alençon, Normal School	29.94	760.4	30.49	774.4	29.5	—1.4	92	s.			3		k		n.	0	0		M. Nicot, Director.
Arras, Engineer School	30.22	767.6	30.50	774.7	32.5	0.3	88	sw.			3		1c n			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.37	771.5	30.45	773.5	44.6	7	57	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.95	760.6	30.54	775.8	29.7	—1.3	92	se.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.25	768.4	30.54	775.6	32.5	0.3	89	s.			1		10			0	0	covered	M. Frère Eugène Marié.
Besançon, Normal School			30.48	774.3	29.3	—1.5	88	sw.			1		10		s.	0	0	foggy	M. Gobin, Director.
Bordeaux, Observatory	30.17	766.2	30.44	773.1	40.6	4.8	71	se.			1		0			0	0	hazy	M. Rayet, Director.
Bourges, Normal School	29.91	759.8	30.50	774.8	32.0	0	82	ne			1		n		ne.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.13	765.3	30.37	771.4	41.0	5.0	87	s.			2		10		s.	0	0		M. de Kennaree, Dir.
Caen, Normal School	30.36	771.2	30.44	773.2	32.0	0	89	s.			1		10			0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.10	764.5	30.44	773.1	31.3	—0.4	89	sse.			2		10			0	0	covered	M. Jadot, Director.
Charleville, Normal School	30.00	762.1	30.55	776.0	29.5	—1.4	72	ese.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.06	738.0	30.49	774.4	34.7	1.5	76	sw.			1		5			0	0	⅜ covered	M. Allnard, Director.
Cluny, Normal School	29.63	752.5	30.52	775.2	29.3	—1.5	88	n.			1		fg			0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School.	29.63	752.7	30.55	776.0	32.0	0	93	e.			1		10 n	e.	e.	0	0	covered	Dr. Goulet, Director.
Gap, Normal School	27.86	707.6	30.44	773.1	50.4	10.2	23	nw.			1					0	0		M. Jeanginard, Director.
Gréasque, du. Rhone	29.26	743.2	30.40	772.2	56.3	13.5	21	s.			1		2		se.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.70	754.4	30.52	775.1	35.8	2.1	79	e.			1	0	0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.81	731.7	30.48	774.2	29.3	—1.5	100	sw.			1		fg			0	0	covered	M. Rivoire, Director.
Lamballe, Normal School	30.20	767.0	30.49	774.4	32.9	0.5	92	sse.			2		1		sse.	0	0	clear	M. Ollitrault, Director.
Lescar, Normal School	29.85	758.2	30.43	772.8	52.2	11.2	73	wsw.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.38	771.6	30.48	774.2	38.3	3.5	90	se.			2		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.43	747.6	30.56	776.3	27.7	—2.4	87	w.			1		fg			0	0	foggy	M. André, Director.
Mans, Normal School	30.17	766.3	30.50	774.7	29.3	—1.5	94	s.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.14	765.6	30.42	772.6	59.2	15.1	30	sse.			1		1		se.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.05	636.2	29.89	759.2	40.1	4.5	27	se.	3.8	1.7			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.32	770.2	30.44	773.1	47.1	8.4	42	ne.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.73	755.1	30.57	776.4	29.8	—1.2	85	sw.			1		kn			0	0	misty	M. Hasse, Director
Nantes, Observatory	30.35	770.8	30.51	775.0	32.7	0.4	85	ese.			0-1		10			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director
Perpignan, Observatory	30.33	770.3	30.44	773.2	51.1	10.6	54	se.	3.8	1.7			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.36	542.4			25.7	—3.5		sse.			1		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.38	746.3	30.51	774.9	36.0	2.2		n.			1		0			0	0	clear	M. Tailleu.
Puy de Dôme Obs'y, Summit	25.30	644.8			38.8	3.8	46	s.			1		0			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.46	773.6	30.49	774.4	33.4	0.8	89	se.			1		10			0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.20	767.1	30.43	773.0	30.6	—0.8	96	ene.			1		10			0	0	misty	M. Mouillot, Director.
Rodez, Normal School	28.24	717.2	30.49	774.4	35.6	2	61	ne.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.46	773.6	30.50	774.8	31.3	—0.4	89	s.			3		1c			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.31	769.8	30.47	773.8	32.7	0.4	79	s.			1		10		s.	0	0	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.36	771.1	30.52	775.3	28.0	—2.2	84	s.			1		1c			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.74	755.3	30.47	773.9	45.7	7.6	69	ese.			1		1		w.	0	0	clear	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.01	762.2	30.50	774.7	28.0	—2.2	83	s.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.24	768.0	30.53	775.4	29.6	—1.9	81	se.			1		10			0	0	misty	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours Inch.	Rain-fall or melted snow in the past 24 hours Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.66	753.3	30.53	775.4	34.3	1.3	66	n.			1	0	2s			0	0	foggy	Prof. Dr. Hoh
Berlin	30.35	770.9	30.54	775.6	37.4	3.0	83	sw.			1		10			0.020	0.5		Prof. Dr. Arndt.
Breslau	30.01	762.3	30.55	776.0	31.8	— 0.1	79	s.			2		10			0	0	foggy	Royal University Obs'y.
Carlsruhe	30.07	763.7	30.54	775.7	31.6	— 0.2	73	s.			1		10			0	0	foggy	Albert Senz.
Cassel	29.77	756.2	30.57	776.4	33.4	0.8	89	sw.			1		10			0	0		Dr. H. Möhl.
Frankfort on the Main	30.17	766.2	30.56	776.1	38.7	3.7	75	e.			1		0			0	0		Physical Society.
Friedrichshafen	29.02	737.2	30.56	776.1	29.5	— 1.4	72	ssw.			2		10	sw.		0	0		Wilhelm, Chief Tel.
Hamburg	30.45	773.3	30.54	775.7	35.2	1.8	93	ssw.			3		10			0	0	foggy	E. Preller.
Kiel	30.47	773.9	30.48	774.3	36.0	2.2	93	sw.			2		10			0.004	0.1		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.14	765.6	30.55	776.9	35.4	1.9	88	sw.			2		10			0.039	1.0		H. Leppig, Asst.
Magdeburg	30.35	770.9	30.55	776.0	37.0	2.8	82	se.			1		10 ks			0.012	0.3		Dr. Assmann.
Memel	30.25	768.3	30.30	769.5	35.4	1.9	91	wnw.			5		10 s						Issermann.
Munich	28.61	726.8	30.51	774.9	36.9	2.7	56	e.			2		0			0	0		Central Station.
Neufahrwasser	30.37	771.5	30.39	771.9	39.4	4.1	84	nw.			4		10	nw.		0.004	0.1		A. Lothes.
Neustadt, Palatinate	30.01	762.3	30.55	775.9	36.0	2.2		e.			1		0			0	0		Dicknether.
Stuttgart	29.51	749.5	30.45	773.3	37.4	3.0	50	e.			1		0			0	0		Prof. Dr. Schoder
Wustrow	30.49	774.7	30.52	775.1	36.9	2.7	100	sw.			4		10			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.82	757.5	30.23	767.8	41.2	5.1		ne.			3.0		9			inap.	inap.	covered	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.91	759.8	29.96	761.1	76.9	24.9	76	wsw.	22	9.8			2			0	0	d. clouds	
Deesa	29.42	747.3	29.89	759.2	89.3	31.8	37	se.	8.1	3.6			0			0	0	blue sky	
Bombay	29.86	758.3	29.89	759.3	82.6	28.1	65	nw.	11	4.9			0			0	0	blue sky	
Poona, Yarrowda.	28.03	712.0	29.85	758.2	90.3	32.4	22	ssw.	13	5.8			1	wnw.		0	0	d. clouds	
Belgaum	27.35	694.8	29.84	758.0	86.2	30.1	21	ne.	6	2.7			1	se.		0	0	d. clouds	
Lahore	29.15	740.4	29.91	759.8	68.7	20.4	65	n.	2.1	0.9			10			0	0	overcast	
Roorkee	28.99	736.3	29.90	759.5	71.4	21.9	57	nw.	2.0	0.9			7			0	0		
Agra	29.34	745.1	29.90	759.6	79.2	26.2	38	w.	4.1	1.8						0	0		
Nagpur	28.85	732.9	29.88	759.0	88.7	31.5	22	calm	2.7	1.2			0			0	0	blue sky	
Jubbulpore	28.61	726.7	29.99	761.7	74.1	23.4	17	ne.	1.1	0.5			0			0	0	blue sky	
Lucknow	29.54	750.2	29.92	759.9	75.2	24.0	44	calm	2.0	0.9			7	ene.		0	0		
Allahabad	29.60	751.8	29.91	759.8	76.0	24.4	49	calm	1.3	0.6			0			0	0	blue sky	
Patna	29.75	755.6	29.94	760.4	74.5	23.6	45	w.	2.7	1.2			0			0	0	blue sky	
Hazaribagh	27.92	709.0	29.96	760.9	72.8	22.7	30	nw.	5.0	2.2			0			0	0	blue sky	
Cuttack	29.84	757.9	29.92	760.0	80.5	26.9	44	calm	0.7	0.3			0			0	0	blue sky	
Calcutta, Alipore	29.92	759.8	29.94	760.4	74.0	23.3	50	nw.	2.0	0.9			0			0	0	blue sky	
Dhubri	29.83	757.7	29.95	760.8	72.1	22.3	42	calm	1.8	0.8			0			0	0	blue sky	
Chittagong	29.86	758.4	29.95	760.8	77.4	25.2	59	w.	2.5	1.1			1			0	0	blue sky	
Sibsagar	29.62	752.4	29.97	761.2	66.0	18.9	75	sw.	1.9	0.8			0			0	0	blue sky	
Jeypore	28.45	722.6	29.88	759.0	84.7	29.3	27	wsw.	4.7	2.1			4	sw.		0	0	d. clouds	
Zanzibar, Africa	29.79	756.7			85.8	29.9	70	n.	8.2	3.7			4			0	0	d. clouds	
Trichinopoly	29.66	753.4			85.3	29.6	46	e.	2	0.9			6			0	0	d. clouds	
Bellary	28.43	722.1			87.6	30.9	20	e.	4.3	1.9			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	30.08	763.9	30.50	774.7	45.5	7.5	38	calm	0	0			1			0	0		Prof. Giovanni Clodig.
Milan	29.97	761.2	30.48	774.2	42.3	5.7	67	se.	0	0			2			0	0		Prof. Schiaparelli.
Padua	30.38	771.6	30.49	774.5	44.6	7.0	55	ne.	3.1	1.4			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.56	750.8	30.51	775.0	40.6	4.8	70	e.	0.7	0.3			0			0	0		Prof. P. F. Denza.
Genoa	30.23	767.9	30.43	773.0	54.5	12.5	21	e.	1.3	0.6			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.50	723.9	30.53	775.4	38.7	3.7	54	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.45	773.5	30.50	774.8	43.9	6.6	62	n.	4.9	2.2			9			0	0		Prof. Luigi Guidi.
Florence	30.17	766.3	30.44	773.1	51.6	10.9	29	ne.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.26	768.7	30.35	771.0	50.0	10.0	46	ne.	0.7	0.3			0			0	0		Prof. P. Monte.
Rome	30.18	766.6	30.30	771.2	55.0	12.8	24	nnw.	3.1	1.4			6			0	0		Prof. P. S. Ferrari.
Lecce	30.00	762.0	30.26	768.6	48.4	9.1	47	n.	20.6	9.2			3	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.39	746.4	30.32	770.0	47.5	8.6	73	wnw.	8.1	3.6			6	nw.		0	0		Prof. D. Conti.
Cagliari	30.15	765.9	30.35	770.9	54.5	12.5	49	calm			0		1			0.008	0.2		Prof. A. Pacinotti.
Palermo	30.09	764.3	30.35	770.9	53.1	11.7	51	nne.	8.7	3.9			4	nne.		0.012	0.3		Prof. G. Ciacciatore.
Syracuse	30.17	766.4	30.22	767.6	54.9	12.7	59	e.	4.9	2.2			4	w.		0.039	1.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.80	757.0	30.34	770.7	51.8	11.0	52	ene.	8.7	3.9			4	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.33	567.1			21.0	— 6.1	36	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.38	568.3			27.0	— 2.8	32	e.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.87	758.7	29.90	759.4	33.8	1.0	82	e.	2.9	1.3			10 s			0.019	0.5	covered	
Hakodate	29.87	758.7	29.88	758.9	36.9	2.7	68	n.	15.0	6.7			10		n.	0	0	overcast	
Hiroshima, I. M. Obs'y	30.27	768.8	30.29	769.3	36.4	2.4	80	ne.	1.1	0.5		2 ck	0			0	0	fair	K. Sasaki.
Kanazawa	30.11	764.8	30.21	767.3	36.8	2.7	92	ese.	5.0	2.2		ck	10 ks			0.610	15.5	light rain	S. Endo.
Kioto	30.01	762.2	30.20	767.1	38.7	3.7	79	wnw.	4.4	2.0			10 s			0.105	2.7	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.12	765.0	30.33	770.4	40.1	4.5	61	e.	2.3	1.0		0	0			0	0	clear	S. Takehayashi.
Niigata	30.02	762.5	30.05	763.3	41.2	5.1	68	nnw.	13.3	5.9		10 ck	0			0.495	12.6	cloudy	
Nobiru	29.85	758.2	29.87	758.7	38.7	3.7	86	nw.	8.4	3.8			9 s			0.035	0.9	cloudy	H. Midzushina.
Supporo					30.3	— 0.9	70	nw	9.0	4.0			3			0	0	clear	
Tokei Obs'y, Yeddo	29.82	757.4	29.89	759.2	41.7	5.4	61	wnw.	11.2	5.0		0	0			0	0	clear	The Staff.
Wakayama	30.18	766.0	30.23	767.8	41.9	5.5	62	nw.	6.6	2.9		ck	10s; ks		n.	0	0	cloudy	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.45	621.0	30.27	768.9	46.9	8.3	73	sw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.76	756.0	30.03	762.7	58.5	14.7	91	e.	1.6	0.8		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.13	587.5	30.29	769.5	46.4	8.0	84	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.33	618.0	30.55	776.1	52.2	11.2	70	s.			3	2 c	0	s.		0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.00	609.6	30.12	764.9	44.8	7.1	53									0	0		M. Y de Leon, M. E.
Puebla, Catholic Institute	23.43	595.1	30.28	769.0	46.4	8.0	76	calm	0	0		0	0			0	0	very fine	Prof. P. Spina.
San Luis Potosi	24.18	614.3	30.30	769.8	50.0	10.0	69	ene.			1	0	5		e.	0	0	½ cloudy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.57	573.3	30.32	770.3	45.1	7.3	65	ne.	5.4	2.4		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.60	751.8	29.79	756.7	80.9	27.2	71	nw.	16.5	7.4	.....	2 cs	4 k;ks	w.	nw.	0.18	4.6	fair	Oliver & Figot.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.52	775.2	30.52	775.2	35.6	2.0	.....	s.	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Groningen	30.47	773.8	30.52	775.2	32.0	0.0	.....	sw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Helder	30.48	774.3	30.48	774.3	33.8	1.0	.....	s.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.50	774.7	30.50	774.7	35.1	1.7	71	s.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Utrecht	30.49	774.4	30.54	775.6	33.6	0.9	80	ssw.	.....	.....	2	.....	8	.....	.....	0	0	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.19	766.9	30.26	768.5	39.6	4.2	77	sse.	13	6	.....	.....	8	.....	.....	0	0	.....	
Brono	29.85	758.3	29.89	759.3	39.6	4.2	87	sw.	18	8	.....	.....	10	.....	.....	0.118	3.0	.....	
Christiania	30.11	764.8	30.27	768.8	23.9	— 4.5	98	wnw.	0	0	.....	.....	10	.....	.....	0	0	foggy	
Gjæsvær	29.24	742.8	29.27	743.4	35.6	2.0	.....	wnw.	.....	.....	6	.....	10	.....	.....	.....	.....	raining	
Lodingen	29.61	752.1	29.66	753.3	38.1	3.4	83	wsw.	.....	.....	4–6	.....	9	.....	.....	0.236	6.0	.....	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	50.0	10.0	79	nw.	19.9	8.9	.....	.....	4	.....	.....	0.276	7.0	.....	Dr. J. A. Sampaio.
Campo Major	29.38	746.3	30.40	772.1	57.2	14.0	43	ese.	4.3	1.9	.....	.....	3	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.25	768.4	30.34	770.7	62.1	16.7	54	w.	2.5	1.1	.....	.....	1	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	30.06	763.4	30.43	772.8	52.3	11.3	72	ene.	3.1	1.4	.....	.....	2	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.02	762.5	30.09	764.3	52.5	11.4	73	nw.	18.1	8.1	.....	.....	3	.....	.....	0.449	11.4	.....	
Saint Paul de Loando	29.69	754.2	29.90	759.4	79.2	26.2	79	nw.	0.7	0.3	.....	.....	7	sse.	.....	0.039	1.0	.....	
Serra da Estrella	25.53	648.4	30.37	771.5	42.1	5.6	60	se.	11.2	5.0	.....	.....	5	.....	.....	0	0	.....	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.70	729.0	29.87	758.8	6.6	—14.1	.....	sse.	13	6	.....	7 ck	0	.....	.....	0.008	0.2	.....	Major K. Lasarew.
Archangel	29.65	753.1	29.67	753.6	—11.6	—24.2	78	ese.	4	2	.....	.....	10	.....	.....	0	0	.....	Capt. Sseliwerstow.
Astrakhan	30.07	763.7	29.98	761.6	10.2	—12.1	70	w.	27	12	.....	.....	10 s	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	29.67	753.6	30.21	767.3	15.4	— 9.2	88	calm	0	0	.....	.....	10	.....	.....	0.016	0.4	.....	Meteorological Obs'y.
Dorpat	29.67	753.5	29.92	759.9	33.3	0.7	90	nnw.	9	4	.....	.....	10 n	.....	.....	0	0	.....	Observatory.
Ekaterinburg	28.39	721.0	29.43	747.5	1.6	—16.9	54	ssw.	7	3	.....	7 c	0	.....	.....	0	0	light clouds	Meteorological Obs'y.
Kasan	29.13	740.0	29.43	747.6	— 3.5	—19.7	72	nnw.	9	4	.....	.....	10	.....	.....	0	0	solar corona	Observatory.
Kertch	30.14	765.6	30.16	766.1	15.3	— 9.3	72	nw.	7	3	.....	0	3 k	.....	.....	0	0	.....	Lagorio & Sustyrez.
Kieff	29.50	749.4	30.20	767.0	15.8	— 9.0	54	nw.	16	7	.....	c;cs	8 ks	.....	.....	0.130	3.3	light clouds	Observatory.
Lugan	29.75	755.7	29.98	761.4	11.8	—11.2	65	wnw.	22	10	.....	.....	6	.....	.....	blank	blank	light clouds	Meteorological Obs'y.
Moscow	29.24	742.7	29.76	756.0	11.1	—11.6	60	n.	13	6	.....	.....	10 s	.....	.....	.....	.....	light snow	Meteorological Obs'y.
Nikolaiev	30.22	767.7	30.30	759.5	17.2	— 8.2	62	nw.	22	10	.....	0	0	.....	.....	0	0	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.13	765.3	30.22	767.5	3.9	—15.6	90	calm	0	0	.....	.....	6	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	30.25	768.4	30.39	772.0	34.3	1.3	54	calm	0	0	.....	0	2 k	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.75	755.7	29.77	756.1	18.7	— 7.4	89	w.	9	4	.....	.....	10 n	.....	.....	0.102	2.6	light snow	Central Physical Obs'y.
Tashkend, Laboratory	28.39	721.0	30.02	762.5	36.1	2.3	89	calm	0	0	.....	.....	10	.....	.....	0.150	3.8	.....	Teich, A. M.
Tiflis	28.56	725.3	30.06	763.5	26.8	— 2.9	57	nw.	9	4	.....	9 ck	0	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	30.22	767.5	30.28	769.2	18.5	— 7.5	71	n.	13	6	.....	0	0	.....	.....	0	0	.....	
Warsaw	30.01	762.3	30.47	773.8	28.6	— 1.9	60	w.	16	7	.....	.....	10 k;ks	.....	.....	.....	.....	light clouds	Astronomical Obs'y.
Wilna	29.73	755.1	30.19	766.7	25.7	— 3.5	91	sw.	7	3	.....	.....	10	.....	.....	0.004	0.1	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.91	759.6	30.22	767.6	7.2	—13.8	62	calm	0	0	.....	.....	1	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.85	758.2	46	7.8	92	s.	.....	.....	7	.....	10	.....	.....	0.1	3.	overcast	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.31	769.8	30.42	772.6	51.4	10.8	75	s.	1.3	0.5	.....	.....	1 k	.....	.....	0	0	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.34	770.7	30.40	772.2	59.4	15.2	53	se.	3.1	1.4	.....	0	0	.....	.....	0	0	clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.39	695.8	30.45	773.3	48.7	9.3	39	ne.	2.5	1.1	.....	0	0	.....	.....	0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.15	714.9	30.43	772.9	53.1	11.7	69	sw.	2.9	1.3	.....	0	0	.....	.....	0	0	clear	The Staff.
Murcia, Met. Obs'y	30.28	769.2	30.44	773.1	58.3	14.6	55	s.	2.0	0.9	.....	0	0	.....	.....	0	0	clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.37	746.0	30.27	768.8	60.3	15.7	49	sw.	18.1	8.1	.....	0	4	.....	.....	0	0	cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.04	763.1	30.11	764.8	69.6	20.9	90	se.	1.8	0.8	.....	0	0	.....	.....	0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.98	761.6	30.04	763.0	74.8	23.8	63	e.	14.3	6.4	.....	0	1 ks	.....	ene.	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.32	770.0	30.42	772.6	60.6	15.9	53	se.	3.1	1.4	.....	1	2	n.	e.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I.	30.10	764.4	30.19	766.7	72.7	22.6	98	e.	1.8	0.8	.....	1 k	3 kn	e.	e.	0.138	3.5	d. clouds	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.00	762.0	30.13	765.3	69.4	20.8	89	nw.	1.8	0.8	.....	0	8 ks	.....	wnw.	0.03	0.8	covered	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.64	752.8	29.68	753.8	36.0	2.2	65	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	
Umea	29.85	758.1	29.90	759.4	40.6	4.8	59	nw.	.....	.....	2	.....	5	.....	.....	0	0	.....	
Hernosand	30.00	762.0	30.05	763.3	42.6	5.9	66	w.	.....	.....	2	.....	2	.....	.....	0	0	.....	
Stockholm	30.00	762.0	30.18	766.5	32.5	0.3	94	w.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Wisby	30.20	767.0	30.26	768.5	36.7	2.6	82	wnw.	.....	.....	4	.....	7	.....	.....	0	0	.....	
Sub Series.																			
Upsala	30.05	763.2	30.13	765.4	36.7	2.6	56	sw.	9.4	4.2	.....	.....	2	nw.	.....	0	0	.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.05	737.8	30.56	776.1	29.1	— 1.6	79	n.	.....	.....	1	.....	.....	.....	.....	0	0	foggy	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.35	770.9	27.1	— 2.7	92	wnw.	19	8.5	.....	.....	10	.....	n.	0.236	6.0	snowing	The Observatory.
Valona	.....	.....	30.19	766.8	54.2	11.2	.....	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.91	759.6	57.6	14.2	70	sw.	.....	.....	3	.....	9 n	.....	sw.	0.85	21.6	.....	Prof. C. V. A. van Dyck.

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

Stations.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	29.99	761.7	30.08	764.0	22	— 5.6	64	nw.	1	0.4		7 ck	sk.	nw.		0	0	fair	
Alpena, Michigan	29.20	741.7	29.91	759.7	21.5	— 5.8	70	sw.	3	1.3		0	0			0	0	clear	
Atlanta, Georgia	28.50	723.9	29.72	754.9	62.5	16.9	88	s.	21	9.4			10 s;k		s.	1.96	49.8	cloudy	
Atlantic City, New Jersey	30.01	762.2	30.02	762.5	39.2	4.0	100	e.	6	2.7			10 n			0.04	1.0	light rain	
Augusta, Georgia	29.64	752.8	29.84	757.9	62.1	16.7	93	se.	5	2.2			10 n			0.90	22.9	light rain	
Baltimore, Maryland	29.93	760.2	29.98	761.5	40	4.4	89	ne.	4	1.8			10n;fg			0.03	0.8	light rain	
Barnegat, New Jersey	30.01	762.2	30.03	762.7	39.2	4.0	86	e.	8	3.6			10 s			0	0	cloudy	
Bismarck, Dakota	28.15	715.0	30.13	765.3	16	— 8.9	83	nw.	5	2.2		1 cs	0	nw.		0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.02	686.3	29.98	761.5	35	1.7	92	n.	4	1.8			10 n		calm	0.37	9.4	light rain	
Boston, Massachusetts	29.94	760.5	30.10	764.5	26.0	— 3.3	68	sw.	3	1.3		7 c	hz.	w.		0	0	fair	
Brownsville, Texas	30.13	765.3	30.18	766.0	49	9.4	77	w.	2	0.9		0	0			inap.	inap.	clear	
Buffalo, New York	29.19	741.4	29.99	761.7	28.3	— 2.1	84	se.	3	1.3			fg.			0	0	dense fog	
Burlington, Vermont	29.74	755.4	30.04	763.0	21.0	— 6.1	84	se.	3	1.3		0	0			0	0	clear	
Cairo, Illinois	29.42	747.3	29.84	757.9	43.0	6.1	94	nw.	19	8.5			10 n		nw.	0.93	23.6	light rain	
Campo, California																			
Camp Thomas, Arizona	27.34	694.4	30.17	766.3	28.5	— 1.9	82	se.			1	3 cs	0			0	0	clear	
Cape Henry, Virginia	29.94	760.5	29.96	761.0	49	9.4	93	se.	12	5.4			10 s		sw.	0.11	2.8	cloudy	
Cape May, New Jersey	29.95	760.7	29.98	761.5	44	6.7	93	e.	14	6.3			10 n		e.	0.35	8.9	light rain	
Castroville, Texas	29.34	745.2	30.18	766.6	43	6.1	74	nw.	4	1.8		0	0			0	0	clear	
Cedar Keys, Florida	29.94	760.5	29.96	761.0	67	19.4	90	s.	12	5.4			10 s		s.	0	0	threatening	
Champaign, Illinois	29.05	737.9	29.92	760.0	31.3	— 0.4	68	ne.	6	2.7			10 s		n.	0	0	cloudy	
Charleston, S. Carolina	29.85	758.2	29.91	759.7	64	17.8	93	sw.	13	5.8			10 s		sw.	0.12	3.0	threatening	
Charlotte, N. Carolina	28.93	734.8	29.82	757.4	58.0	14.4	100	s.	12	5.4			10 n		s.	1.37	34.8	light rain	
Chattanooga, Tennessee	28.82	732.0	29.68	753.9	54.0	12.2	100	ne.	6	2.7			10s;fg		calm	1.30	34.5	cloudy	
Cheyenne, Wyoming	23.97	608.8	30.22	767.6	34.2	1.2	51	w.	6	2.7		0	0			0	0	clear	
Chicago, Illinois	29.15	740.4	29.90	759.4	32.8	0.4	75	nw.	1	0.4		0	0			0	0	clear	
Chincoteague, Virginia	29.92	760.0	29.94	760.5	49	9.4	100	se.	8	3.6			10 s			0.06	1.5	cloudy	
Cincinnati, Ohio	29.12	739.6	29.82	757.4	47	8.3	86	n.	4	1.8			10 n			0.07	1.8	light rain	
Cleveland, Ohio	29.14	740.1	29.93	760.2	35	1.7	89	calm	0	0			10 s			0	0	cloudy	
Coleman City, Texas	28.28	718.3	30.16	766.1	36	2.2	92	nw.	1	0.4		0	0			0.35	8.9	clear	
Columbus, Ohio	28.95	735.3	29.85	758.2	42	5.6	92	ne.	5	2.2			10 n			0.01	0.3	light rain	
Concho, Texas	28.15	715.0	30.17	766.3	34	1.1	89	sw.	2	0.9		0	0			0.02	0.5	clear	
Davenport, Iowa	29.23	742.4	29.93	760.2	32	0.0	68	s.	1	0.4		4 cs	sk.		calm	0	0	fair	
Dayton, Washington T'y	28.06	712.7	29.87	758.7	32	0.0	85	s.	2	0.9			10 s		sw.	0.80	20.3	cloudy	
Deadwood, Dakota	25.28	642.1	30.20	767.1	22	— 5.6	76	sw.	2	0.9		0	0			inap.	inap.	clear	
Decatur, Texas					40	4.4	48	w.	6	2.7		0	0			0.71	18.0	clear	
Delaware Breakwater, Del.	29.96	761.0	29.98	761.5	41	5.0	100	se.	14	6.3			10n;fg		se.	0.07	1.8	light rain	
Denison, Texas	29.24	742.7	30.08	764.0	38.0	3.3	73	nw.	6	2.7		0	0			0.89	22.6	clear	
Denver, Colorado	24.70	627.4	30.22	767.6	34.0	1.1	60	sw.	8	3.6		0	0			0	0	clear	
Des Moines, Iowa	28.98	736.1	29.95	760.7	32	0.0	68	sw.	3	1.3		0	fg.			0	0	clear	
Detroit, Michigan	29.20	741.7	29.95	760.7	33.2	0.7	68	e.	6	2.7			fg.			0	0	dense fog	
Dodge City, Kansas	27.38	695.4	30.12	765.0	27.2	— 2.7	77	calm	0	0		0	0			0	0	clear	
Dubuque, Iowa	29.14	740.1	29.90	759.4	25.2	— 3.8	73	s.	3	1.3		0	fg.		calm	0	0	clear	
Duluth, Minnesota	29.05	737.9	29.81	757.2	29	— 1.7	77	sw.	2	0.9			10 s		calm	0	0	cloudy	
Eagle Pass, Texas	29.39	746.5	30.23	767.8	49.1	9.5	93	calm	0	0		0	0			0	0	clear	
Eagle Rock, Idaho	25.28	642.1	30.18	766.6	34	1.1	66	sw.	22	9.8			10 s		w.	0	0	cloudy	
Eastport, Maine	29.98	761.5	30.06	763.5	20	— 6.7	76	sw.	4	1.8		0	0			0.06	1.5	clear	
El Paso, Texas	26.37	669.8	30.25	768.3	28.3	— 2.1	88	nw.	1	0.4		hz.	0	calm		0	0	hazy	
Erie, Pennsylvania	29.16	740.7	29.93	760.2	32	0.0	88	se.	4	1.8		5 cs	fg.			0	0	fair	
Escanaba, Michigan	29.07	738.4	29.79	756.7	24	— 4.4	73	w.	4	1.8		4 c	0			0	0	fair	
Fort Apache, Arizona	25.12	638.0	30.22	767.6	23	— 5.0	56	ne.	4	1.8		0	6 s		calm	0	0	fair	
Fort Assininiboine, Montana	26.94	684.3	29.98	761.5	23	— 5.0	64	se.	3	1.3		3 c	0	sw.		0	0	clear	
Fort Bennett, Dakota	28.40	721.3	30.14	765.5	28	— 2.2	77	n.	2	0.9		0	9 ks		nw.	0	0	cloudy	
Fort Benton, Montana	26.98	685.3	29.98	761.5	18	— 7.8	58	sw.	1	0.4		3 c	0	calm		0	0	clear	
Fort Buford, Dakota	27.94	709.7	30.12	765.0	12	—11.1	64	w.	1	0.4		5 ck	0	calm		0	0	fair	
Fort Custer, Montana	26.70	678.2	30.06	763.5	26	— 3.3	67	e.	3	1.3		0	8 s		w.	0	0	cloudy	
Fort Davis, Texas	25.20	640.1	30.16	766.1	29	— 1.7	80	se.	3	1.3		0	0			0	0	clear	
Fort Elliott, Texas	27.22	691.4	30.12	765.0	29	— 1.7	49	calm	0	0		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.46	748.3	30.06	763.5	27.0	— 2.8	88	n.	3	1.3		0	0			0	0	clear	
Fort Grant, Arizona	25.28	642.1	30.14	765.5	41	5.0	54	se	6	2.7			10 s			0	0	cloudy	
Fort Griffin, Texas	28.78	731.0	30.15	765.8	39	3.9	82	sw.	3	1.3		0	0			0.35	8.9	clear	
Fort Keogh, Montana	27.40	695.9	30.08	764.0	24	— 4.4	76	se.	3	1.3		6 c	0	w.		0	0	fair	
Fort Macon, North Carolina	29.96	761.0	29.98	761.5	54	12.2	93	se.	1	0.4			10 ks		se.	0.04	1.0	cloudy	
Fort McKavett, Texas	27.88	708.1	30.26	768.6	33.3	0.7	81	sw.	4	1.8		0	0			0	0	clear	
Fort Missoula, Montana	26.52	673.6	29.96	761.0	28	— 2.2	88	n.	4	1.8			10 n			0.10	2.5	light snow	
Fort St. Michaels, Alaska	29.87	758.7	29.90	759.4	8	—13.3	100	se.	25	11.2			10 n			0.08	2.0	light snow	
Fort Shaw, Montana	26.12	663.4	29.97	761.2	30	— 1.1	70	sw.	24	10.7		6 cs	0	w.		0	0	fair	
Fort Sill, Indian Territory	28.79	731.3	30.10	764.5	33.5	0.8	73	calm	0	0		0	0			0	0	clear	
Fort Stevenson, Dakota	28.10	713.7	30.12	765.0	14	—10.0	83	w.	3	1.3		3 c	3 s	w.	w.	0	0	fair	
Fort Verde, Arizona					27	— 2.8	67	w.			1	3 cs	4 s	sw.	w.	0	0	fair	
Fredericksburg, Texas	28.36	720.3	30.16	766.1	37	2.8	92	w.	1	0.4		0	0			0	0	clear	
Galveston, Texas	30.10	764.5	30.14	765.5	48	8.9	78	nw.	14	6.3		hz.	0			0.20	5.1	clear	
Grand Haven, Michigan	29.20	741.7	29.91	759.7	24.5	— 4.2	94	e.	2	0.9		0	0			0	0	clear	
Hatteras, North Carolina	29.97	761.2	29.99	761.7	55	12.8	93	e.	2	0.9			10 s		e.	0.07	1.8	cloudy	
Helena, Montana	25.58	649.7	29.98	761.5	23	— 5.0	64	sw.	5	2.2			10 s		sw.	0.03	0.8	cloudy	
Henrietta, Texas																			
Huron, Dakota	28.59	726.2	30.11	764.8	29	— 1.7	77	nw.	5	2.2			9 k		w.	0	0	cloudy	
Indianapolis, Indiana	29.00	736.6	29.85	758.2	35	1.7	82	n.	6	2.7		6 c;hz	fg.	calm	calm	0	0	cloudy	
Indianola, Texas	30.14	765.5	30.16	766.1	45.5	7.5	93	w.	4	1.8		0	0			0.01	0.3	clear	
Jacksboro, Texas	28.89	733.8	30.13	765.3	37	2.8	82	w.	4	1.8		0	0			0.71	18.0	clear	
Jacksonville, Florida	29.91	759.7	29.96	761.0	66	18.9	90	se.	20	8.9		5 cs	2 s	sw.		0	0	fair	
Keokuk, Iowa	29.22	742.2	29.92	760.0	30.0	— 1.1	77	se.	3	1.3		0	1 s			0	0	clear	
Key West, Florida	30.08	764.0	30.11	764.8	74.0	23.3	88	se.	8	3.6		0	3 k		se.	0	0	clear	
Kittyhawk, North Carolina	29.97	761.2	29.99	761.7	54	12.2	96	s.	5	2.2			10n;fog		sw.	0.03	0.8	light rain	
Knoxville, Tennessee	28.67	728.2	29.75	755.6	51.1	10.6	98	ne.	6	2.7			10 s		sw.	0.70	17.8	cloudy	
La Crosse, Wisconsin	29.03	737.3	29.87	758.7	30	— 1.1	67	s.	4	1.8		0	0			0	0	clear	
La Mesilla, New Mexico	26.21	665.7	30.22	767.6	27.5	— 2.5	86	nw.	1	0.4		2 c	0			0	0	clear	
Leavenworth, Kansas	29.04	737.6	30.00	762.0	37	2.8	51	nw.	1	0.4		0	0			0	0	clear	
Lewiston, Idaho	29.06	738.1	29.93	760.2	33.2	0.7	95	se.	1	0.4			10 n		calm	0.08	2.0	sleeting	
Little Rock, Arkansas	29.60	751.8	29.92	760.0	44	6.7	93	nw.	11	4.9		0	0			2.59	65.8	clear	
Los Angeles, California	29.78	756.4	30.18	766.6	39.1	3.9	71	ne.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	29.14	740.1	29.72	754.9	45.0	7.2	93	n.	11	4.9			10 n			0.15	3.8	light rain	
Lynchburg, Virginia	29.20	741.7	29.92	760.0	46.0	7.8	83	calm	0	0			10n;fog			0.37	9.4	light rain	
Mackinac City, Michigan																			
Madison, Wisconsin	28.82	732.0	29.91	759.7	25	— 3.9	73	se.	6	2.7		0	0			0	0	clear	
Marquette, Michigan	29.06	738.1	29.84	757.9	31	— 0.6	88	sw.	4	1.8			10 s		sw.	0.02	0.5	cloudy	
Mason, Texas	28.45	722.6	30.18	766.6	37	2.8	82	calm	0	0		0	0			0	0	clear	
Memphis, Tennessee	29.48	748.8	29.82	757.4	45	7.2	100	w.	2	0.9			10 n		w.	1.18	30.0	light rain	
Milwaukee, Wisconsin	29.11	739.4	29.91	759.7	28	— 2.2	88	s.	6	2.7		4 cs	fg.			0	0	fair	
Mobile, Alabama	29.88	758.9	29.92	760.0	53.0	11.7	72	w.	10	4.5			10 s		nw.	0.58	14.7	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	29.57	751.1	29.81	757.2	57	13.9	64	w.	20	8.9			10 ks		w.	3.13	79.5	cloudy	
Moorhead, Minnesota	28.90	734.0	30.00	762.0	20	— 6.7	84	w.	10	4.5		0	0			0	0	clear	
Morgantown, W. Virginia	28.81	731.8	29.88	758.9	44.0	6.7	83	calm	0	0			10 n			inap.	inap.	light rain	
Mt. Washington, N. H	23.47	596.1	30.09	764.3	6.0	—14.4	74	nw.	62	27.7		0	0			0.08	2.0	clear	
Nashville, Tennessee	29.04	737.6	29.60	751.8	56.1	13.4	92	e.	3	1.3			10 n			0.53	13.5	light rain	
New Haven, Connecticut	29.96	761.0	30.08	764.0	25	— 3.9	88	calm	0	0			10s;sk		sw.	0	0	cloudy	
New London, Connecticut	30.06	763.5	30.10	764.5	24	— 4.4	73	n.	5	2.2			10 s		calm	0	0	cloudy	
New Orleans, Louisiana	29.93	760.2	29.99	761.7	52.5	11.4	68	nw.	10	4.5		0	2 s		nw.	0.17	4.3	clear	
Newport, Rhode Island	30.04	763.0	30.09	764.3	32.8	0.4	75	w.	1	0.4		6 k	sk	w.		0	0	fair	
New River, N. Carolina																			
New Shoreham, Rhode I'd.	30.07	763.8	30.10	764.5	36.5	2.5	69	calm	0	0		4 ck	0	nw.		inap.	inap.	fair	
New York, New York	29.90	759.4	30.09	764.3	33	0.6	88	ne.	7	3.1			10s;fg			0	0	cloudy	
Norfolk, Virginia	29.94	760.5	29.96	761.0	54	12.2	93	se.	3	1.3			10 ks			0.01	c.3	cloudy	
North Platte, Nebraska	27.10	688.3	30.20	767.1	31.6	— 0.2	74	nw.	12	5.4		5 cs	0			0	0	fair	
Olympia, Washington T'y	29.69	751.8	29.64	752.8	36.0	2.2	89	n.	2	0.9			10 s		calm	0.34	8.6	cloudy	
Omaha, Nebraska	28.76	730.5	30.03	762.7	34.3	1.3	63	n.	8	3.6		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.62	752.3	29.64	752.8	—13.2	—25.1	63	wsw.	17	7.6			10 s			0	0	cloudy	
Oswego, New York	29.66	753.4	30.01	762.2	27.0	— 2.8	72	s.	4	1.8		2 c	0	w.		0	0	clear	
Palestine, Texas	29.55	750.6	30.13	765.3	39	3.9	82	nw.	4	1.8		0	0			0	0	clear	
Pensacola, Florida	29.86	758.4	29.90	759.4	55.7	13.2	75	w.	20	8.9		0	7 s		w.	0.50	12.7	clearing	
Philadelphia, Pa	29.94	760.5	30.05	763.3	39	3.9	100	ne.	8	3.6			10 n			0.03	0.8	light rain	
Pike's Peak, Colorado	17.57	446.3	30.29	769.4	9	—12.8	73	w.	44	19.7		0	0			0	0	clear	
Pioche, Nevada	24.10	612.1	30.26	768.6	28	— 2.2	70	s.	6	2.7		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.04	737.6	29.90	759.4	41.9	5.5	79	ne.	2	0.9			10s;fg			0	0	cloudy	
Port Eads, Louisiana	30.00	762.0	30.01	762.2	55.6	13.1	86	nw.	29	13.0			10 s		nw.	0.91	23.1	cloudy	
Port Huron, Michigan	29.20	741.7	29.93	760.2	24.3	— 4.3	80	s.	1	0.4		4 c	sk	calm	calm	0	0	fair	
Portland, Maine	30.00	762.0	30.05	763.3	23.0	— 5.0	73	sw.	3	1.3		0	3 s		calm	0	0	clear	
Portland, Oregon	29.55	750.6	29.62	752.3	38.0	3.3	89	calm	0	0			10 n		s.	0.51	13.0	light rain	
Portsmouth, N. Carolina					54	12.2	80	e.	2	0.9			10 ks		s.	0.01	0.3	cloudy	
Prescott, Arizona	24.93	633.2	30.29	769.4	23	— 5.0	67	sw.	3	1.3		0	0			0	0	clear	
Punta Rassa, Florida	30.04	763.0	30.05	763.3	71	21.7	92	s.	14	6.3		0	hz			0	0	clear	
Red Bluff, California	29.66	753.4	30.04	763.0	44.2	6.8	93	sw.	8	3.6			10 s		sw.	0	0	cloudy	
Rio Grande City, Texas	29.84	757.9	30.09	764.3	40	4.4	82	nw.	3	1.3		0	0			0	0	clear	
Rochester, New York	29.28	743.7	29.99	761.7	28	— 2.2	88	sw.	1	0.4		2 cs	sk			0	0	clear	
Roseburg, Oregon	29.16	740.7	29.73	755.1	41	5.0	89	calm	0	0			10 n			0.60	15.2	light rain	
Sacramento, California	30.02	762.5	30.10	764.5	41.2	5.1	92	se.	5	2.2		0	5 s			0	0	fair	
St. Louis, Missouri	29.30	744.2	29.94	760.5	33.0	0.6	78	nw.	8	3.6			10 s			0	0	cloudy	
St. Paul, Minnesota	28.93	734.8	29.87	758.7	28.0	— 2.2	88	sw.	8	3.6			10 ks		w.	0	0	cloudy	
St. Vincent, Minnesota	28.96	735.6	29.93	760.2	18	— 7.8	84	nw.	14	6.3			10 n		calm	inap.	inap.	light snow	
Salt Lake City, Utah	25.63	651.0	30.19	766.8	28	— 2.2	47	calm	0	0			10 s			0	0	cloudy	
San Antonio, Texas	29.43	747.5	30.15	765.8	40.7	4.8	92	calm	0	0		0	0			0	0	clear	
San Diego, California	29.99	761.7	30.05	763.3	45.0	7.2	74	calm	0	0		6 k	4 s			0	0	cloudy	
Sandusky, Ohio	29.20	741.7	29.92	760.0	36	2.2	79	ne.	10	4.5			10 s			0	0	cloudy	
Sandy Hook, New Jersey	30.03	762.7	30.07	763.8	35.0	1.7	89	ne.	6	2.7			10 n		ne.	inap.	inap.	light rain	
San Francisco, California	30.04	763.0	30.11	764.8	48	8.9	93	s.	3	1.3			10 s		sw.	inap.	inap.	cloudy	
Santa Fé, New Mexico	23.27	591.0	30.31	769.9	26	— 3.3	49	ne.	6	2.7		5 c	0	w.		0	0	fair	
Savannah, Georgia	29.80	756.9	29.89	759.2	64	17.8	90	s.	14	6.3		6 ck	4 s		s.	0.27	6.9	cloudy	
Shreveport, Louisiana	29.82	757.4	30.07	763.8	40	4.4	82	nw.	8	3.6		0	0			0.16	4.1	clear	
Silver City, New Mexico	24.31	617.5	30.16	766.1	26	— 3.3	80	nw.	3	1.3		0	3 s		nw.	0	0	clear	
Sitka, Alaska	29.56	750.8	29.63	752.6	19	— 7.2	70	ne.	11	4.9		0	0			0.47	11.9	clear	
Smithville, North Carolina	29.89	759.2	29.93	760.2	56	13.3	93	se.	9	4.0			10 s		sw.	0.07	1.8	cloudy	
Spokane Falls, Wash. Ter.	27.81	706.4	29.94	760.5	28	— 2.2	88	calm	0	0			10 s		calm	0.10	2.5	cloudy	
Springfield, Illinois	29.20	741.7	29.93	760.2	35	1.7	69	n.	1	0.4		5 c	sk	w.		0	0	fair	
Springfield, Massachusetts	29.97	761.2	30.11	764.8	15.1	— 9.4	83	calm	0	0		8 k	fg	sw.		0	0	cloudy	
Springfield, Mo	28.50	723.9	30.07	763.8	31.5	— 0.3	85	nw.	4	1.8		0	2 s		nw.	0	0	clear	
Stockton, Texas	27.07	687.6	30.20	767.1	33	0.6	88	calm	0	0		0	0			0	0	clear	
Thatcher's Island, Mass	30.05	763.3	30.11	764.8	30.0	— 1.1	77	w.	4	1.8		2 c	0			0	0	clear	
Toledo, Ohio	29.19	741.4	29.93	760.2	32	0.0	88	n.	6	2.7			fg			0	0	dense fog	
Tucson, Arizona	27.01	701.3	30.09	764.3	36	2.2	82	e.	2	0.9		8 cs	0			0	0	cloudy	
Umatilla, Oregon	29.44	747.8	29.82	757.4	36.4	2.4	84	e.	5	2.2			10 s			inap.	inap.	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	29.67	753.6	29.94	760.5	51	10.6	86	w.	15	6.7		0	9 s		w.	1.36	34.5	cloudy	
Visalia, California	29.70	754.4	30.08	764.0	39	3.9	68	se.	3	1.3		0	0			0	0	clear	
Washington, D. C	29.86	758.4	29.98	761.5	37	2.8	100	ne.	4	1.8			10n;fg			0.05	1.3	light rain	
West Los Animas, Colorado	26.04	661.4	30.18	766.6	21	— 6.1	73	w.	6	2.7		0	0			0	0	clear	
Wickenburg, Arizona					35	1.7	88	calm			0		9 ks		w.	0	0	cloudy	
Williamsport, Pa	29.47	748.5	30.10	764.5	37.5	3.1	77	calm	0	0			10 s			0	0	threatening	
Wilmington, N. Carolina	29.88	758.9	29.94	760.5	60	15.6	87	se.	4	1.8		10 k	0	sw.		0.09	2.3	cloudy	
Winnemucca, Nevada	25.51	647.9	30.03	762.7	40	4.4	35	sw.	13	5.8		8 ck	0	sw.		0	0	cloudy	
Wood's Holl, Mass																			
Yankton, Dakota	28.76	730.5	30.18	766.6	33	0.6	78	w.	4	1.8		0	0			0	0	clear	
Yuma, Arizona	29.91	759.7	30.07	763.8	47.0	8.3	56	ne.	3	1.3			10 s			0	0	cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.04	559.8			53.5	11.9	85	e.	1	0.4		5 k	2 s			0 36	9.1	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.08	764.0	30.09	764.3	77	25.0	90	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C	30.00	762.0	30.02	762.5	77	25.0	90	calm	0	0			10 ks		sw.	0.20	5.1	cloudy	J. I. Plume.
Guadeloupe, W. I	30.04	763.0	30.06	763.5	76	24.4	87	e.				4 k	5 ks			0	0	cloudy	B. Bigar.
Havana, Cuba, W. I	30.09	764.3	30.14	765.5	74	23.3	97	se.	1.2	0.5		0	2 ks		calm	0	0	fair	A. Van Oaneghem.
Kingston, Jamaica, W. I	30.11	764.8	30.12	765.0	69.0	20.6	83	calm	0	0		0	1 s		e.	0	0	fine	Robert Johnstone
Navassa, W. I																			F. M. Everett.
Paramaribo, S. A	30.04	763.0	30.05	763.3	77	25.0	86	e.			2	4 ck	5 k	e.		1.770	45.0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.52	749.8	29.98	761.5	78	25.6	89	calm			0		10 s		calm	0	0	foggy	Miss Flora A. Nichols.
Rivas, Nicaragua							96	ne.			3	0	8 ks		ne.	0	0	cloudy	Earl Flint.
Santiago de Cuba, W. I	30.11	764.8	30.13	765.3	75	23.9	72	calm	0	0		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	29.91	759.7	29.97	761.2	—24.0	—31.1		w.	4	1.8		0	0			0.01	0.3	clear	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Vigo, Spain	30.35	770.9	54.5	12.5	73	ese.			2		5	sse.				3	wsw.	d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 21° 27′, E. 112° 37′	30.22	767.6	60	15.6		ene.			2		0					3	e.	misty	Capt. A. J. Errington.
H. M. S. Alert, N. 5° 56′, E. 95° 47′	29.92	760.0	81.5	27.5	74	e.			3		3							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.29	769.4	58	14.4	64	nne.			1		2							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 8° 12′, E. 71° 21′	29.90	759.4	82	27.8	78	nnw.			3-4		7	n.				2	nnw.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.94	760.5	76	24.4	72	ese.			5-6		0							squally	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	30.01	762.2	72	22.2	71	ese.			6		1							blue sky	Capt. A. T. Dale.
H. M. S. Dido, N. 12° 00′, W. 61° 45′	30.13	765.3	76	24.4		ene.			2		2	ne.						d. clouds	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.26	768.6	66	18.9	78	ssw.			1		4	wsw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf																			Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 36° 42′, E. 7° 08′	30.11	764.8	64	17.8	83	n.			4		2					3	w.	d. clouds	Capt. C. A. G. Bridge.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.21	767.3	43	6.1	75	nw.			1		7	wsw.						misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 12° 04′, W. 77° 11′	29.97	761.2	68	20.0	92	sse.			1		9							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.60	751.8	55	12.8	93	w.			2		10							overcast	Capt. L. F. Jones.
H. M. S. Inconstant, Hong Kong, China	30.17	766.3	59	15.0	81	ne.			1		10							overcast	
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.12	765.0	58	14.4	87	calm			0		5	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey, Coquimbo, Chili	29.98	761.5	64	17.8		calm			0		10							overcast	Capt. J. T. R. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, Sydney, Australia	30.20	767.1	70	21.1	84	ne.			1-2		3							d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, N. 12° 25′, W. 76° 00′	29.95	760.7	76.5	24.7	82	ene.			6		2					4	ene.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 5° 24′, E. 61° 26′	29.88	758.9	83.5	28.6	93	nne.			4		8	ne.					ne.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 22° 34′, W. 38° 04′	30.27	768.8	74	23.3	97	ne.			4		7					3	ene.	drizzling	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, N. 2° 47′, W. 3° 20′	29.89	759.2	83	28.3	100	s.			2		9	s.						d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.11	764.8	57	13.9		nw.			1		0							blue sky	Capt. W. H Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id.	29.44	747.8	35	1.7	100	ene.			2		10							squally	Lieut. V. B. Orlebar.
H. M. S. Sea Gull																			Capt. M. Byles.
H. M. S. Thalia																			
H. M. S. Triumph, Callao Bay, Peru	29.99	761.7	69	20.6	84	s.			1		7	s.						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 7° 12′, E. 107° 08′	29.98	761.5	78	25.6	100	nne.			4-5		9	nne.				4	nne.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica W I.	30.08	764.0	76	24.4		nnw.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Muscat, Arabia	29.96	761.0	73.5	23.1	59	nnw.			5		2	wnw.				5	nw.	d. clouds	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon																			
Quanza, Brava, Cape Verd Ids.	30.05	763.2	71.6	22.0	82	ne.			2		0					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder																			Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	29.87	758.7	55	12.8	80	w.	22	9.8	.....	.....	8	.....	w.	0.56	14.2	.....	.....	cloudy	
N. Yard, Portsmouth, N. H.	30.08	764.0	16	— 8.9	.....	wsw.	1	0.4	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Naval Hospital																			
Yokohama, Japan	29.67	753.6	43	6.1	51	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear	
Adams.																			
Callao, Peru	29.75	755.6	70	21.1	95	sse.	.....	.....	1-2	.....	10	.....	.....	0	0	gr'd	.....	cloudy	
Alaska,																			
Valparaiso, Chili	29.97	761.2	67	19.4	84	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert.																			
Singapore, India*	29.79	756.7	82	27.8	79	nne.	.....	.....	2	.....	2	.....	nne.	0	0	long	ne.	clear	
Alliance.																			
Boston, Mass	30.05	763.3	29	— 1.7	69	w.	.....	.....	1	.....	2	.....	.....	0	0	.....	.....	foggy	
Ashuelot,																			
Tientsin, China	30.38	771.6	32	0.0	89	e.	.....	.....	2	.....	2	.....	calm	.....	.....	.....	.....	clear	
Brooklyn,																			
S. 42° 43′, W. 60° 00′	29.61	752.1	65	18.3	94	nne.	6	2.7	.....	.....	10	.....	calm	0.75	19.1	mod.	nw.	cloudy	
Colorado,																			
New York, N. Y	30.08	764.0	32	0.0	79	calm	0	0	.....	.....	10	.....	.....	0.30	7.6	.....	.....	cloudy	
Enterprise,																			
Norfolk, Va*	29.94	760.5	56	13.3	87	sse.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Essex,																			
Madeira I'd, Africa	30.34	770.6	64	17.8	58	wnw.	.....	.....	2	.....	2	.....	nw.	.....	.....	sm'h	sw.	clear	
Franklin,																			
Norfolk, Va	30.00	762.0	57	13.9	81	sse.	3	1.3	.....	.....	10	.....	calm	0.01	0.3	.....	.....	cloudy	
Galena.																			
N. 38° 38′, E. 0° 30′	30.45	773.4	57	13.9	94	ne.	.....	.....	1	.....	5	.....	.....	.....	.....	sm'h	.....	fair	
Independence,																			
N. Yard, Mare I'd, Cal	30.05	763.3	48	8.9	85	calm	0	0	.....	.....	8	.....	.....	0	0	.....	.....	cloudy	
Kearsarge.																			
New Orleans, La	30.00	762.0	53	11.7	73	w.	.....	.....	4	.....	10	.....	w.	.....	.....	.....	.....	cloudy	
Lackawanna.																			
Valparaiso, Chili*	29.87	758.7	67	19.4	95	n.	.....	.....	1	.....	2	.....	n.	.....	.....	.....	.....	clear	
Lancaster,																			
N. 37° 48′, E. 15° 50′	30.23	767.8	56	13.3	63	n.	.....	.....	1	.....	5	.....	n.	.....	.....	sm'h	.....	fair	
Marion,																			
S. 30° 23,′ E. 43° 06′	29.86	758.4	78	25.6	86	e.	.....	.....	3	.....	8	.....	calm	sh'rs	sh'rs	long	ene.	fair	
Michigan,																			
Erie, Pa	29.64	752.8	29	—1.7	78	e.	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	hazy	
Minnesota,																			
Newport, R. I	30.08	764.0	33	0.6	100	calm	0	0	.....	.....	8	.....	wnw.	.....	.....	.....	.....	cloudy	
Monocacy,																			
Yokohama, Japan	29.88	758.9	45	7.2	76	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Nipsic,																			
Malaga, Spain	30.47	773.9	61	16.1	66	sse.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Onward,																			
Callao, Peru†	30.08	764.0	68	20.0	100	sse.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	cloudy	
Palos,																			
Hong Kong, China	30.17	766.3	62	16.7	83	ene.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	overcast	
Passaic,																			
Washington, D. C	29.99	761.7	35	1.7	70	ne.	.....	.....	3	.....	10	.....	ne.	.....	.....	.....	.....	rainy	
Pensacola.																			
Valparaiso, Chili	30.00	762.0	70	21.1	70	nnw.	1	0.4	.....	.....	0	.....	.....	0	0	sm'h	.....	clear	
Powhatan.																			
N. 32° 10′, W. 69° 58′	30.25	768.3	68	20.0	84	s.	.....	.....	3	.....	8	.....	s.	.....	.....	mod.	ssw.	cloudy	
Quinnebaug,																			
N. 34° 13′, E. 17° 49′	30.23	767.8	56	13.3	63	n.	.....	.....	4	.....	5	.....	n.	.....	.....	sm'h	.....	fair	
Ranger.																			
N. 19° 57′, W. 105° 30′*	29.91	759.7	67	19.4	89	nne.	.....	.....	2	.....	0	.....	.....	0	0	light	ne.	clear	
Richmond.																			
N. 19° 41′, E. 161° 03′*	29.90	759.4	77	25.0	86	ssw.	.....	.....	2	.....	2	.....	ssw.	0	0	sm'h	ssw.	clear	
Shenandoah,																			
S. 32° 02′, W. 44° 41′*	30.07	763.8	70	21.1	75	se.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
St. Louis,																			
League Island, Pa	30.29	769.4	34	1.1	90	nne.	10	4.5	.....	.....	10	.....	.....	0.02	0.5	.....	.....	raining	
Swatara.																			
Kobe, Japan*	30.06	763.5	44	6.7	60	wsw.	.....	.....	2	.....	10	.....	calm	.....	.....	sm'h	.....	drizzling	
Tennessee,																			
N. 37° 41′, W. 74° 35′	30.00	762.0	50	10.0	100	s.	10	4.5	.....	.....	10	.....	s.	0.05	1.3	gr'd	se.	drizzling	
Vandalia,																			
Cartagena, U. S. Col*†	30.05	763.3	76	24.4	86	e.	.....	.....	2	.....	1	.....	e.	.....	.....	.....	.....	clear	
Wabash,																			
Boston, Mass	30.11	764.8	22	— 5.6	.....	wsw.	2	0.9	.....	.....	.....	.....	.....	0	0	.....	.....	clear	
Wachusetts.																			
N. 43° 51′, W. 124° 42′	29.48	748.8	48	8.9	92	ssw.	.....	.....	.....	.....	10	.....	.....	.....	.....	mod.	nw.	squally	
Wyoming,																			
Port Royal, S. C	29.88	758.9	60	15.6	100	ssw.	12	5.4	.....	.....	10	.....	ssw.	0.03	0.8	.....	.....	overcast	
Yantic,																			
Aspinwall, Panama*	29.92	760.0	78	25.6	91	n.	.....	.....	3	.....	5	.....	n.	.....	.....	.....	.....	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith, N. 47° 16′, W. 47° 30′	29.47	748.5	29	—1.7	.....	one.	6	.....	10	.....	ese.	6 h'r	snow	3–4	se.	snowing	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, Glasgow, Scotland*	30.08	764.0	42	5.6	.....	se.	2	.....	9	.....	.....	.....	.....	.....	.....	foggy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Moville, Ireland*	30.00	762.0	50	10.0	.....	s.	3	.....	8	.....	ssw.	1 h'r	1 h'r	.....	.....	cloudy	.....
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. British Crown, Capt. E. H. Freeth,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Liverpool, England	30.15	765.8	48	8.9	77	sse.	3	.....	8	.....	sse.	.....	.....	.....	.....	fair	Chauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 50° 14′, W. 22° 50′†	29.55	750.6	53	11.7	60	sw.	6	.....	5	.....	sw.	h'vy	h'vy	mod.	sw.	raining	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, Philadelphia, Penn.†*	29.79	756.7	38	3.3	90	w.	3	.....	3	.....	w.	.....	.....	.....	.....	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
S. S. Devonia, Capt. H. Young, N. 40° 50′ W. 67° 20′*†	30.11	764.8	40	4.4	.....	s.	1	.....	5	.....	sw.	.....	.....	light	wsw.	fine	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Daw, 3d officer.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Santa Marta, U. S. C*†	29.85	758.2	77	25.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Maracaibo, Venezula, S. A.	.....	.....	.....	.....	.....	ne.	2	.....	.....	.....	.....	.....	.....	.....	.....	fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 18° —′, W. 74° —′	29.79	756.7	.....	.....	.....	se.	6	.....	2	.....	se.	o	o	r'gh	se.	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 60° 12′, W. 65° 13′	29.18	741.2	44	6.7	.....	nw.	4	.....	4	.....	.....	.....	.....	.....	.....	blue sky	.....
Baroda, Capt. C. J. Russell, N. 1° 08′, W. 27° 02′	29.93	760.2	80.9	27.2	86	s.	1	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Caldew, Capt. W. Peterson S. 52° 50′, W. 53° 39′	29.64	752.8	48	8.9	.....	n.	7	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Cipero, Capt. W. N. Lailey Georgetown, British Guiana, S. A.	30.04	763.0	78.5	25.8	90	nne.	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. City of Agra, Capt. Thos. Young. N. 38° 49′, W. 34° 42′	30.19	766.8	56.0	13.3	.....	w.	5	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Coppename, Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, S. 15° 40′, E. 89° 28′	29.93	760.2	81	27.2	78	ese.	5	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hope, Capt. James Campbell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 32° 45′, E. 16° 34′	30.03	762.7	71	21.7	80	sse.	6	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 56° 28′, W. 64° 23′	29.39	746.5	50	10.0	78	wsw.	4	.....	3	.....	.....	.....	.....	.....	.....	misty	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	29.84	757.9	78.3	25.7	82	s.	5	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. J. Smith, N. 26° 47′, W. 51° 35′	30.43	772.9	68.3	20.2	84	ne.	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry. S. 28° 21′, E. 79° 35′	30.09	764.3	77	25.0	57	ese.	3	.....	2	.....	.....	.....	.....	.....	.....	blue sky	.....
S. S. Strathleven, Capt. C. W. Pearson, N. 50° 10′, W. 5° 55′	30.19	766.8	50.5	10.3	93	wsw.	5	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. Superb, Capt. Berridge, N. 42° 13′, W. 26° 18′	29.96	761.0	52.4	11.3	93	nw.	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham, N. 47° 58′, W. 38° 20′*†	29.60	751.8	.....	.....	.....	wsw.	6	.....	8	.....	w.	o	o	long	nw.	fine	Wm. Fitt.
CROMWELL LINE. *Clark & Seaman, Agents, New York.*																	
S. S. Hudson, Capt. H. R. Freeman, N. 27° 15′, W. 86° 45′*†	30.13	765.3	73	22.8	.....	wsw.	5	.....	5?	.....	sw.	o	o	con.	w.	cloudy?	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. P. C. Halsey.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Bothnia, Capt. W. McMickan, N. 51° 06′, W. 11° 48′	29.87	758.7	.....	.....	.....	w.	3	.....	.....	.....	ssw	1 h'r	light	r'gh	ssw.	cloudy	E. F. Stembridge, 3d off.
S. S. Gallia, Capt. W. H. P. Hains, N. 47° 05′, W. 38° 39′*	29.42	747.3	44	6.7	84	sw.	7–8	.....	10	.....	.....	light	light	mod.	nw.	squally.	J. H. Mills, 3d officer.

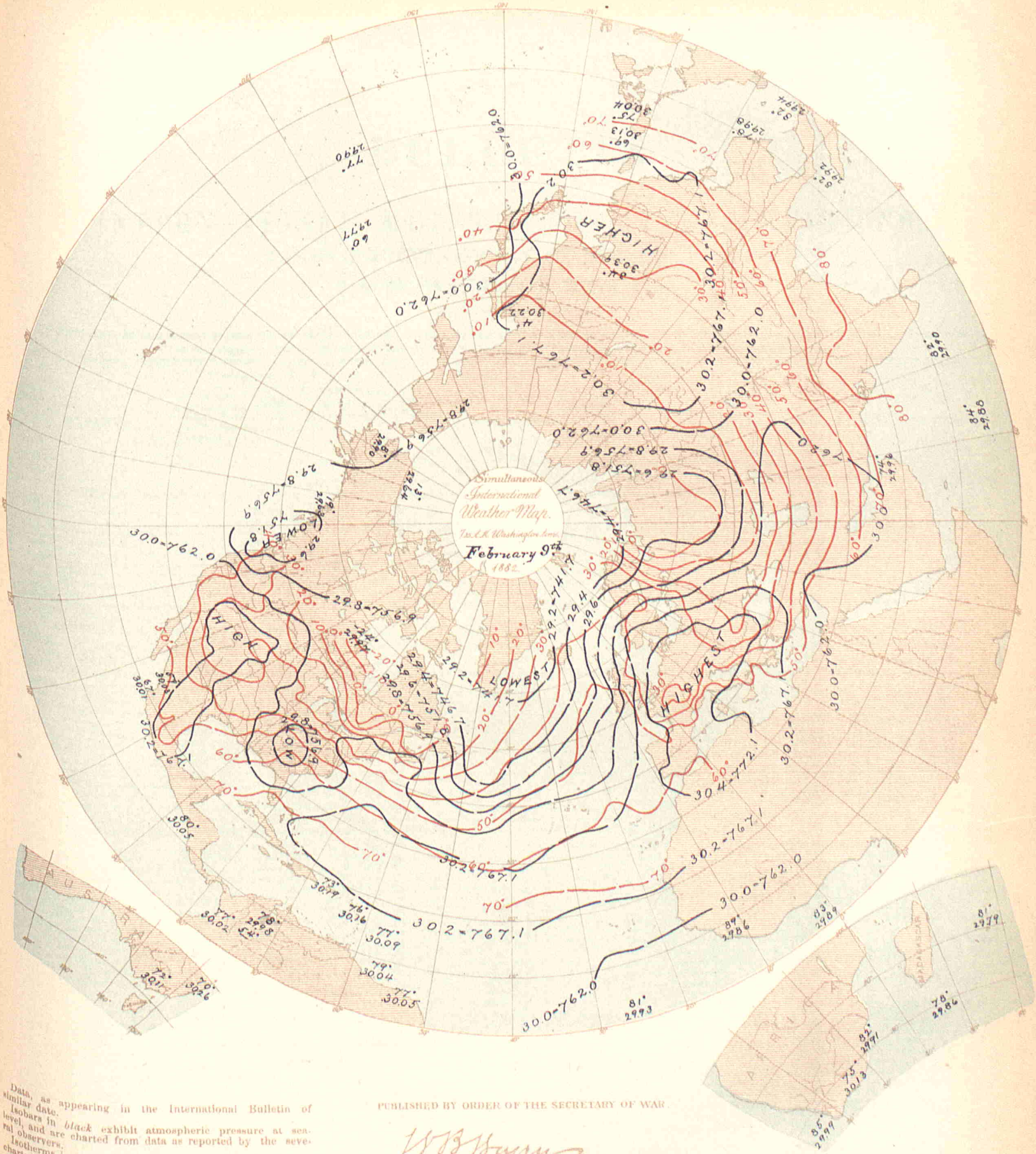
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, N. 48° 23′, W. 40° 00′	29.40	746.7	39.2	4.0	.....	sw.	4	.....	8	.....	w.	4 h'r	4 h'r	hv'y	w; wnw.	cloudy	.....
S. S. France, Capt. Périer d'Hauterive, N. 41° 09′, W. 65° 03′*†	30.28	769.0	33.8	1.0	.....	sse.	2	c	o	n.	.....	o	o	.....	w.	clear	.....
S. S. St. Laurent, Capt. A. Sérvan, N. 41° —′, W. 66° 40′*†	30.00	762.0	37.4	3.0	.....	se.	5	.....	.....	.....	.....	light	light	.....	se.	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Silesia, Capt. A. Albers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, Argentine Rep. S. A†*.	30.05	763.3	76	24.4	.....	nw.	1	.....	2	.....	w.	0	0	.....	.....	clear	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 50° 37′, W. 24° 40′	.....	.....	.....	.....	.....	ssw.	6	.....	.....	.....	wsw.	6 h'r	6 h'r	high	wsw.	.....	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 39° 34′, W. 74° 00′*†	30.11	764.8	39	3.9	.....	e.	4	.....	9	.....	e.	5 h'r	sleet	long	se.	hazy	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, Cienfuegos, Cuba, W. I†	30.16	766.1	69	20.6	.....	calm	0	.....	0	.....	.....	0	0	.....	.....	clear.	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 10° 06′, W. 77° 32′† [man	29.95	760.7	80	26.7	.....	nne.	4	.....	.....	.....	.....	.....	.....	.....	nne.	.....	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Elbe, Capt. W. Willigerod [nolds N. 49° 20′, W. 80° 19′*	30.03	762.7	53.6	12.0	.....	sse.	5–6	.....	.....	.....	.....	.....	.....	mod.	.....	misty	.....
S. S. Lessing, Capt. B. Voss, N. 49° 28, W. 33° 23′*†	29.42	747.3	44	6.7	.....	nw.	6	.....	.....	.....	.....	.....	.....	7	w.	stormy	.....
S. S. Maas, Capt. T. H. Bonjer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke N. 44° 46′, W. 42° 30′*†	29.45	748.0	51	10.6	.....	wsw.	6–7	.....	.....	.....	.....	.....	.....	.....	nw; wsw.	gloomy	.....
S. S. P. Caland, Capt. E. Deddes, N. 49° 44′, W. 22° 38′	29.56	750.8	50.0	10.0	.....	wsw.	6	.....	.....	.....	.....	.....	.....	7	wsw.	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 45° 51′, W. 45° 00′	29.26	743.2	33	0.6	.....	sw.	10	.....	.....	.....	.....	.....	.....	.....	w.	stormy.	.....
S. S. Scythia, Capt. M. Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sander & Walter.
S. S. Main, Capt. Julius Barre, Weser river, Germany*	30.46	773.7	33.8	1.0	.....	sse.	4	.....	10	.....	sse.	0	0	.....	.....	dense fog	.....
S. S. Mosel, Capt. F. Hesse, N. 44° 46′, W. 52° 34′	29.68	753.9	29.8	−1.2	.....	wnw.	9	.....	10	.....	wnw.	1 ½ snow	hour &hail	r'gh	wnw.	squally	J. Hesse.
S. S. Neckar, Capt. R. Bussius,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, S. 15° 58′, W. 33° 40′*	30.02	762.5	84.2	29.0	75	calm	0	.....	1	.....	.....	0	0	.....	.....	fair	.....
S. S. Oder, Capt. C. Undeutsch, N. 46° 09′, W. 45° 37′*	29.28	743.7	35.4	1.9	.....	nnw.	6	.....	9	.....	w.	2 h'r	snow	r'gh	sw.	snowing	Montz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, N. 37° 12′, W. 28° 47′	30.28	769.1	.....	.....	.....	nw.	7	.....	5	.....	nw.	6 h'r	6 h'r	very high	nw.	.....	Hattenauer & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 06′, E. 165° 24′†	29.77	756.1	60	15.6	82	s.	5	.....	2	.....	ssw.	0	0	mod.	s.	clear	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, San Francisco, Cal *†	30.34	770.6	53	11.7	100	se.	1	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Oceanic, Capt. J. Metcalfe, N. 27° 54′, E. 126° 30*′	30.26	768.6	58	14.4	74	nne.	3	.....	0	.....	.....	.....	.....	2	nne.	clear	.....
OCEAN S. S. CO. *George Young, Agent. New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.80	756.9	.....	.....	.....	ne.	2	.....	10	.....	ne.	.....	.....	.....	.....	hazy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Boston, Mass†	30.02	762.5	50	10.0	.....	wnw.	1	.....	5	.....	sw.	0	0	.....	.....	fair	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO.																	
John L. Howard, Agent, San Francisco.																	
S. S. Mississippi, Capt. E. W. Holmes, N. 48° 17′, W. 123° 55′.†	29.67	753.6	39	3.9	81	ne.	4	.....	10	.....	ne.	.....	.....	.....	.....	cloudy	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO.																	
K. Van Oterendorp, Agent, San Francisco.																	
S. S. City of Chester, Capt. G. Reichmann Off Fillamoth Rock.†	29.44	747.8	42	5.6	91	se.	6	.....	10	.....	sse.	rain	rain	mod.	s.	rainy	A. C. James, 2d off.
S. S. Columbia, Capt. Fred. Bolles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.53	750.0	38	3.3	90	calm	0	.....	10	.....	sw.	.....	.....	.....	.....	heavy rain	G. Boese.
PACIFIC COAST S. S. CO.																	
Goodal, Perkins & Co., Agents, San Francisco.																	
S. S. Ancon, Capt. J. N. Ingalls, N. 33° 41′. W. 118° 15′†	30.02	762.5	46	7.8	85	n.	1	.....	5	.....	.....	.....	.....	.....	.....	fair	.....
S. S. Geo. W. Elder, Capt. H. G. Morse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Idaho, Capt. H. M. Hayward, Seattle, Wash. Ter †	29.92	760.0	39	3.9	100	n.	2	.....	10	.....	nw.	.....	.....	.....	.....	snowing	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.14	765.5	40	4.4	82	nw.	1	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. State of California, Capt. G. Debney, N. 41° 00′, W. 124° 30′†	29.85	758.2	49	9.4	100	sse.	6	.....	10	.....	s.	8 h'r	8 h'r	short	s.	raining	.....
S. S. Victoria, Capt. W. E. Plummer, Nanaimo, Vancouver I'd†	29.74	755.5	32	0.0	79	calm	0	.....	8	.....	.....	.....	.....	.....	.....	cloudy	J. C. Hunter.
PACIFIC MAIL S. S. CO.																	
Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.																	
S. S. Australia, Capt. A. N. M. Tulloh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of New York, Capt. W. B. Cobb, S. 1° 10′, W. 166° 50′†	29.93	760.2	80	26.7	91	ene.	3	.....	5	.....	ne.	0	0	mod.	ne.	fair	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, S. 33° 54′. E. 159° 30′†	30.25	768.3	69	20.6	65	se.	3	.....	5	.....	se.	0	0	mod.	sw.	cloudy	E. Le Salk.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	30.14	765.5	61	16.1	82	ese.	2	.....	0	.....	.....	0	0	.....	.....	clear	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Grenada, Capt. M. Connolley, Panama, Panama†	29.95	760.7	74	23.3	90	nw.	3	.....	2	.....	nw.	0	0	.....	.....	clear	.....
S. S. South Carolina, Capt. W J. Russell, N. 11° 34′, W. 87° 29′†	30.05	763.3	80	26.7	74	ne.	5	.....	0	.....	.....	0	0	mod.	e.	hazy	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.26	768.6	70	21.1	71	ne.	2	.....	2	.....	ne.	.....	.....	.....	.....	fine	.....
QUEBEC S. S. CO.																	
E. A. Outerbridge & Co., Agents, New York.																	
S. S. Burmuda, Capt. F. M. Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes, N. 44° 39′, W. 43° 44′*†	29.43	747.5	45	7.2	.....	w.	8	.....	9	.....	w.	6 h'r	6 h'r	h'vy	w.	stormy	.....
S. S. Nederland, Capt. J. Uberweg, N. 49° 18′, W. 28° 16′*†	30.17	766.3	46	7.8	.....	wsw.	3	.....	5	.....	wsw.	0	0	long	wsw.	fair	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Jersey City, N. J *	30.12	765.0	35	1.7	70	nne.	1	.....	10	.....	nne.	0	0	.....	.....	dull	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon N. 45° 00′. W. 51° 04′*†	29.24	742.7	32	0.0	100	wsw.	10	.....	10	.....	wsw.	0	0	very high	wsw.	overcast	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, Antwerp, Belgium*	30.33	770.4	39	3.9	.....	e.	1	.....	10	.....	e.	0	0	.....	.....	clearing	Olsen & Assfeld.
ROTTERDAM LINE.																	
Fundh, Edye, & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 40° 43′. W 66° 28′*	30.13	765.3	47.0	8.3	77	w.	2	.....	1	.....	w.	0	0	mod.	sw.	.....	.....
THINGVALLA LINE.																	
Funch, Edye, & Co., Agents, New York.																	
S. S. Thingvalla, Capt. S. T. Laub, N. 58° 25′, E. 13° 42′†	29.52	749.8	50.0	10.0	.....	s.	6	.....	6†	.....	ssw.	0	0	very h'vy	ssw.	covered?	J. T. Elberling.
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agents, New York.																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell, N. 42° 23′, W. 57° 35′*†	29.88	758.9	32	0.0	69	nw.	4	.....	2	.....	wnw.	0	0	high	wnw.	clear	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy, N. 45° 29′, W. 38° 44′*†	29.82	757.4	45	7.2	.....	wsw.	4	.....	10	.....	w.	snow	snow	cross	nw to sw.	snowing	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell, Cromer, Eng.*	30.32	770.1	39	3.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	foggy	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.00	762.0	55	12.8	73	wsw.	4	0	8 s		w.	0.38	9.7			cloudy	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey,																	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 25° 35′, W. 23° 20′.*†	30.31	769.9	68	20.0		ne.	4		9		ne.	0	0	long	nw.	cloudy	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby,																	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. Ponce, Porto Rico, W. I.†*	30.16	766.1	78	25.6		ne.	1		2		ne.	0	0			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 12° 53′ W. 27° 58′*†	30.00	762.0	74	23.3		ene.	6		0			0	0	mod.	ene.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia.,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 46° 06′, W. 31° 45′*†.	29.52	749.8				wnw.	4		8		nw.	12 hours rain & hail		mod	nnw.	squally	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill. S. 40° 39′, W. 52° 08′†	30.00	762.0				n.	2		0			0	0	sm'h	ssw.	clear	A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	30.46	773.7				sw.	1		10		sw.	0	0			hazy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.,																	J. C. Andersen, Jr.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.03	762.7	38	3.3	80	ne.	1		10		calm	0.06	1.5			cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison, S. 27° 06′, W. 80° 34′†	30.20	767.1	73	22.8		se.	2		8		se.	0	0	mod.	wsw.	fair	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 31° 31′, W. 21° 36′			68	20.0		ssw.	3		5		ssw.	0	0	sm'h		fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 5° 15′, W. 44° 33′*†	29.06	738.1				ne.	6		5		ne.	light	light	long	ne.	hazy	
Bk. Geo. Booth, Capt. D. Williams, N. 25° 40′, W. 39° 30′*†	30.20	767.1	64	17.8		ene.	4					shr's	shr's		nnw.	squally	D. Williams.
Bk. Granville, Capt. R. Bonney,																	
Schr Henry Denison, Capt. Jno. Fehring,																	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt, S 41° 57′, E. 25° 40′*	29.98	761.5				wnw.	2		2		wnw.	0	0	mod.	wsw.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte.																	G. T. Lecompte.
Bk. New York, Capt. J. E. Sorensen, Off Cape Sacratif, Spain*†	30.62	777.7				s.	1					0	0	sm'h		fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 41° 37′ W. 16° 38′*†	30.25	768.3	58	14.4	100	ssw.	6		10		sw.			r'gh	sw.	raining	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.36	771.1	55	12.8	62	ne.	4		0							clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 14° 45′, W. 32° 14′*†	30.00	762.0				e.					e.	0	0			clear	J. Connolly.
Schr. S. B. Hubbard, N. 39° 25′, W. 74° 19′*†	30.01	762.2	45	7.2		e.	1		10		e.	rain	rain	long	se.	rainy	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 8° 14′, W. 32° 15′*	29.87	758.7	79.7	26.5	92	se.	3		4		se.			mod.	se.	d. clouds	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 35° 29′. W. 21° 00′*†	30.16	766.1	63	17.2	100	sw.	7		10		w.	3 h'r	mod.	r'gh	sw.	rainy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 34° 24′, W. 11° 44′*†	30.20	767.1				sw.	3		2		sw.	0	0	h'vy	sw.		
S. Wm. Woodbury Capt. H. T. Schmidt, N. 40° 04′, W. 41° 09′*†	29.75	755.6	59	15.0	81	sw.	9				w.			cross	wsw.	covered	H. T. Schmidt.
Bk. Winifred, Capt. N P. Dutton, N. 0° 45′, W. 28° 15′*†	30.10	764.5				n to e					ne.			light	nne.	rainy	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Chief Signal Officer. U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 10, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.26	768.5	66.6	19.4	79	ne.			1		0			0	0	clear	Moiroud.
Algiers			30.19	766.7	56.5	13.6	84	w.			1		0			0	0	clear	Nicolas.
La Calle			30.24	768.0	65.8	18.8	77	nnw.			1		3			0.118	3.0	pretty fair	Foufrède.
Tunis			30.28	769.0															Jacques.
Sfax																			Gau.
Saida			30.30	769.7	53.6	12.0	39	wsw.			3		1			0	0	very fair	Dumas.
Tebessa			30.31	769.8	47.5	8.6	63	nw.			1		5			0	0	cloudy	Derché.
Geriville					46.8	8.2	52	nnw.			5		4			0	0	cloudy	Lonchamp.
Laghouat			30.43	773.0	51.8	11.0	54	e.			1		1			0	0	very fair	Herbin.
Biskra			30.38	771.6	60.8	16.0	43	se.			2		3			0	0	pretty fair	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.04	763.0	30.13	765.3	61.7	16.5	80	sse.	4	1.8			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.91	759.8	30.49	774.4	41.0	5.0	55	s.			1		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.62	752.3	30.42	772.6	38.5	3.6	67	w.	8.7	3.9			3			0	0		Dr. Wiersbiski.
Eperies	29.47	748.5	30.40	772.2	32.0	0.0	66	se.			2		0			0	0		Julius Mikolik.
Gratz	29.17	740.9	30.46	774.1	39.7	4.3	38	s.			2		0			0	0		Andreas Rospini.
Hermannstadt	28.94	735.0	30.48	774.1	25.9	— 3.4	95	wnw.			3		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.06	738.0	30.47	774.0	34.0	1.1	83	ne.			1		0			0	0	clear	The Staff.
Lemberg	29.28	743.6	30.32	770.1	30.9	— 0.6	85	nw.			2		10			0.110	2.8		Dr. T. Stanecki.
Pola	30.39	772.0	30.51	775.0	45.5	7.5	73	wnw.			3		0			0	0		I. R. Hydrographic Office.
Szathmar	29.95	760.6	30.41	772.5	29.3	— 1.5	66	w.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	30.15	765.8	30.45	773.3	39.6	4.2	62	sw.			1		6			0	0		Karl Stancel.
Trieste	30.44	773.1	30.54	775.7	44.2	6.8	63	calm			0		0			0	0		Rieder.
Vienna	29.73	755.1	30.48	774.1	39.6	4.2	65	calm			0		0			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.76	755.9	29.86	758.4	45.2	7.3	88	s.	7	3.1			10			0.065	1.6	misty	W. Boswell.
Armagh, Observatory	29.62	752.3	29.86	758.4	49.8	9.9	94	ssw.	7	3.1			10					raining	S. Call.
Bidston, Liverpool Obs'y			30.02	762.5	45.0	7.2	84	se.	22	9.8			10					overcast	John Hartnup.
Bolton, Sharples	29.52	749.8	30.07	763.8	40.5	4.7	94	sse.	6	2.7			10					gloomy	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.66	753.4	30.05	763.3	50.5	10.3	78	sw.			1		10			0	0	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	79.0	26.1	73	ne.			3		6					gloomy	Corpl. J. Surgenor, A. H. C.
Cardington			30.18	766.6	41.6	5.3	87	sw.			0.6		5					blue sky	John McLaren.
Chatham, School M. E.	30.15	765.8	30.28	769.1	41.8	5.4	79	s.			1		5					d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	29.86	758.4	30.09	764.3	49.6	9.8	84	s.			4		5					misty	The Staff.
Fort Napier, Natal	27.71	703.8	29.93	760.2	87.2	30.7	34	calm			0		0					blue sky	Pvt. E. K. Annis, A. H. C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	87.0	30.6	58	nw.			1		3						Sergt. John Robinson.
Galway, Queen's College			29.77	756.1	50	10.0	85	sw.			2		10					overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.34	770.6	30.40	772.1	58.8	14.9	87	ne.			3		6					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	29.64	752.8	29.85	758.2	47.3	8.5	91	ssw.			3		10					raining	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.06	763.5	30.24	768.1	42.5	5.8	79	s.			1		3					blue sky	The Staff.
Guernsey	29.90	759.4	30.20	767.1	41.0	5.0	91	sse.			2		0					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.20	767.1	30.24	768.1	42.2	5.7	79	s.	11	4.9			4					misty	The Staff.
Leicester, Museum	29.89	759.2	30.15	765.8	42.8	6.0	83	s.			1		8					d. clouds	J. C. Smith.
Malta, Mediterranean	30.34	770.6	30.41	772.4	55.4	13.0	65	ne.			3		4					d. clouds	Corpl. A. King, A. H. C
Nassau, Bahamas	30.12	765.0	30.17	766.3	75.2	24.0	95	sw.			2		10 n					overcast	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	29.96	761.0	30.19	766.8	42.7	5.9	82	sse.			3		0					misty	The Staff.
Plymouth	30.06	763.5	30.14	765.5	48.8	9.3	85	se.			2		7					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.72	754.9	48	8.9	89	sw.	11	4.9			10					misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.29	769.4	30.36	771.1	32.7	0.4	89	w.			1		8			blank	blank	d. clouds	W. H. Lyne.
Sheffield	29.82	757.4	30.11	764.8	44.0	6.7	84	sw.			2		8			0	0	overcast	W. F. Cooper.
Stilloth Rectory	29.89	759.2	29.92	760.0	47.7	8.7	82	ssw.			5		10			0.120	3.0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.07	763.8	42.2	5.7	83	s.	8	3.6			10					foggy	I. New.
Stratfield Turgiss	29.99	761.7	30.21	767.3	43.7	6.5	78	sw.			1.0		5					d. clouds	Rev. O. H. Griffiths, F.M.S.
Truro, Royal Institution	30.01	762.2	30.07	763.8	53	11.7	79	s.			4		10					gloomy	W. Newcombe.
Valencia, Observatory	29.83	757.7	29.85	758.2	50.1	10.1	96	se.	6	2.7			10			blank	blank	misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.00	762.0	30.03	762.7	75.0	23.9	94	e.	15.8	7.1		0	0			0	0	hazy	John Duthie.
Cape Town, O. G. H. Obs'y	29.86	758.4	29.89	759.2	101.0	38.3	34	s.	8	3.6		0	0			0	0		The Staff, for D. Gill.
Worcester†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.66	753.4	29.70	754.4	23	— 5.0	100	ne.	7	3.1			10 n			0	0	threatening.	H. J Cundall, C. E.
Chatham, N. B*.	29.73	755.1	29.79	756.7	13	—10.6	76	ne.	12	5.4			10 s		ne.	0	0	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.83	757.7	29.85	758.2	9	—12.8	91	ne.	25	11.2			10 s		calm	0	0	threatening.	J. McWilliams.
Fort Garry, Manitoba*	29.18	741.2	30.09	764.3	4	—15.6	100	se.	15	6.7			10 n			0.072	1.8	threatening.	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*.	29.42	747.3	29.55	750.6	28	— 2.2	100	ne.	16	7.2			10 n			0.04	1.0	light snow	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.30	744.2	29.66	753.4	29	— 1.7	88	w.	19	8.5			10 n		nw.	inap.	inap.	snowing	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.37	746.0	29.59	751.6	23	— 5.0	92	n.	9	4.0			10 s			0	0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.08	738.6	29.81	757.2	28	— 2.2	88	nw.	28	12.5		2 k	2 ks	nw.	nw.	0.02	0.5	fair	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.19	741.4	29.91	759.7	34	1.1	79	nw.	14	6.3		8 k	0	nw.		0	0	fair	H. Morgan.
Port Stanley, Ontario	29.31	744.5	29.98	761.5	34	1.1	82	w.	24	10.7			8 k		nw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.31	744.5	29.66	753.4	16	— 8.9	100	e.			8		10 ks		e.	0.10	2.5	threatening.	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.19	741.4	29.67	753.6	23	— 5.0	88	w.	4	1.8			8 s			inap.	inap.	lightsnow	W. H. McIntyre.
Saugeen, Ontario*	29.22	742.2	29.98	761.5	22	— 5.6	96	nw.	45	20.1			10 ks		nw.	0	0	cloudy	
St. Andrews, N .B.	29.48	748.8	29.53	750.0	30	— 1.1	98	e.	7	3.1			10 n			0.05	1.3	heavy snow	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.72	754.9	29.78	756.4	22	— 5.6	100	e.	1	0.4			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.41	747.0	29.81	757.2	33	0.6	88	nw.	24	10.7			10 ks		nw.	0	0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*.	29.29	744.0	29.36	745.7	30	— 1.1	85	e.	16	7.2			10 n			0.65	16.5	heavy snow	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.80	756.9	30.07	763.8	25	— 3.9		ne.	1	0.4		10 k	10 s			0	0	fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.23	767 8	30.52	775.2	44.4	6.9	84	ene.			2		0			0	0		N. Titoushkin.
Sung-shu-chwang†	24.56	623.9			32.9	0.5		calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.29	769.4	30.32	770.0	43.7	6.5	86	ene.	4.3	1.9			10			0	0	covered	M. Marc Dechevrens, S. J
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.25	768.4	30.30	769.6	34.7	1.5	89	sw.	13	6			10					foggy	Oversergent Fischer.
Fanöe	30.25	768.4	30.27	768.9	36.1	2.3	91	wsw.			4		10					snowing	Overloerer Lauridsen.
Godthaab, Greenland	29.32	744.8	29.37	745.9	2.7	—16.3	90	nne.			7		0						S. Kleinschmidt.
Stykkisholm, Iceland	28.71	729.1	28.75	730.2	29.8	— 1.2		se.			4		10					snowing	A. O. Thorlacius.
Thorshavn	29.37	745.9	29.40	746.8	45.9	7.7	77	sw.	27	12			7					raining	Overloerer Bergh.
Vestervig	30.08	764.1	30.17	766.4	39.4	4.1	92	ssw.			5		10						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.24	742.7	30.28	769.2	60.4	15.8	50	sse.			2	0	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.80	756.8	30.35	770.8	33.8	1	93	s.			3		k		ne.	0	0		M. Nicot, Director.
Arras, Engineer School	30.04	763.1	30.32	770.0	31.8	—0.1	96	sw.			2	c	0			0	0		M. Klein, Commandant.
Avignon, Normal School	30.43	772.8	30.50	774.8	50.0	10	50	ne.			1		5			0	0	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.80	756.8	30.37	771.5	41.0	5.0	69	s.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.09	764.3	30.37	771.5	30.7	—0.7	80	sse.			1		0			0	0	clear.	M. Frère Eugène Marié
Besançon, Normal School			30.41	772.5	32.0	0	95	s.			3		10 n		s.	0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	29.98	761.4	30.24	768.2	51.6	10.9	54	se.			2		0			0	0	clear	M. Rayet, Director.
Bourges, Normal School	29.75	755.7	30.33	770.3	40.1	4.5	90	ne.			1		0			0	0	clear	M. Postel, Director.
Brest, Naval Observatory	29.91	759.8	30.16	766.0	43.9	6.6	91	se.			1		8		se.	0	0		M. de Kennaree, Dir.
Caen, Normal School	30.16	766.1	30.24	768.1	40.6	4.8	83	se.			1		0			0	0	clear	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.00	762.1	30.34	770.6	36.1	2.3	75	calm			0		0			0	0	clear	M. Jadot, Director.
Charleville, Normal School.	29.87	758.6	30.41	772.4	34.9	1.6	56	s.			1		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.93	734.9	30.30	769.6	54.7	12.6	17	s.			2	0	0			0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.51	749.6	30.41	772.3	45.0	7.2	53	s.			4		0			0	0	clear	M. de Villemontée, Dir.
Commercy, Normal School.	29.52	749.8	30.44	773.2	39.4	4.1	65	se.			1	1	1	se.	se.	0	0	clear	Dr. Coulet, Director.
Gap, Normal School	27.87	707.8	30.47	773.8	47.1	8.4	20	nw.			1					0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.32	744.8	30.48	774.1	52.3	11.3	54	s.			2		8		se.	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.66	753.3	30.46	773.7	41.0	5	63	ese.			1	0	0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.69	728.6	30.30	769.5	52.7	11.5	24	sw.			1	0	0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	29.91	759.8	30.20	767.0	42.1	5.6	75	ese.			2		1		ese.	0	0	clear	M. Ollitrault, Director.
Lescar, Normal School	29.64	752.9	30.21	767.2	66.2	19	45	n.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.12	765.1	30.22	767.7	44.6	7.0	71	se.			2		8			0	0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.35	745 5	30.43	773.0	44.8	7.1	61	s.			2		0			0	0	clear	M. André, Director.
Mans, Normal School	30.02	762.6	30.35	771.0	31.5	—0.3	87	se.			3		0			0	0	clear	M. Piboen, Director.
Marseille, Observatory	30.21	767.4	30.49	774.4	52.5	11.4	66	wsw.			1		6		ese.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.00	635.0	29.84	758.0	37.0	2.8	54	sw.	15.0	6.7			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.35	770.9	30.47	773.8	52.9	11.6	61	e.			3		2		s.	0	0	slightly cl'dy.	M. Galzin, Director.
Nancy, Normal School	29.60	751.9	30.39	771.9	37.4	3	60	sw.			1	0	0			0	0	clear	M. Hasse, Director
Nantes, Observatory	30.12	765.1	30.28	769.2	42.8	6	68	e.			0–1	0	0			0	0	clear	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.27	768.9	30.38	771.7	51.4	10.8	62	sw.	11.2	5.0			0			0	0	foggy	Dr. Fines, Director.
Pic-du-Midi, Summit	21.31	541.2			23.0	—5.0		wsw.			2		1		wsw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.38	746.3	30.50	774.7	48.2	9	81	s.			3		5			0	0	cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.35	643.9			39.0	3.9	35	s.			2		0			0	0	clear	M. Allnard, Director.
Rochefort, Naval Obs'y	30.25	768.4	30.28	769.2	48.2	9.0	61	sse.			1		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.00	762.0	30.22	767.6	43.9	6.6	67	se.			2		0			0	0	clear	M. Monillot, Director.
Rodez, Normal School	28.17	715.5	30.38	771.6	44.2	6.8	67	e.			4		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.30	769.6	30.35	770.8	31.3	—0.4	92	ese.			3		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.11	764.9	30.23	767.9	41.2	5.1	81	s.			1		0			0	0	clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.08	764.1	30.37	771.3	35.1	1.7	75	e.			1		0			0	0	clear	M. Renou, Director.
Toulouse, Observatory	29.61	752.1	30.34	770.6	54.1	12.3	61	sse.			6		1		w.	0	0	clear	M. Bailliand, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.84	757.9	30.33	770.4	35.2	1.8	67	s.			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.09	764.2	30.38	771.6	34.7	1.5	76	sse.			1		0			0	0	misty	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.58	751.2	30.44	773.2	35.6	2.0	52	se.			2		0			0	0		Prof. Dr. Hoh.
Berlin	30.21	767.2	30.39	771.9	34.5	1.4	85	sw.			1		0			0	0	foggy	Prof. Dr. Arndt.
Breslau	29.89	759.2	30.43	772.9	33.8	1.0	80	calm			0		0			0	0	foggy	Royal University Obs'y.
Carlsruhe	30.00	762.0	30.48	774.1	27.7	— 2.4	100	s.			1		10			0	0	foggy	Albert Senz.
Cassel	29.60	751.9	30.32	770.0	38.8	3.8	65	s.			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	30.06	763.6	30.45	773.5	30.4	— 0.9	92	ssw.			1		10			0	0		Physical Society.
Friedrichshafen	29.00	736.5	30.53	775.5	28.4	— 2.0	84	sw.			2		10			0	0	hazy	Wilhelm, Chief Tel.
Hamburg	30.28	769.0	30.37	771.4	30.6	— 0.8	96	ssw.			2		10			0	0	foggy	E. Preller.
Kiel	30.33	770.3	30.34	770.7	33.3	0.7	89	sw.			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.97	761.1	30.40	772.2	40.3	4.6	71	s.			2		0			0	0		H. Leppig, Asst.
Magdeburg	30.18	766.6	30.38	771.7	41.4	5.2	71	e.			1		0			0	0		Dr. Assmann.
Memel	30.22	767.7	30.27	768.9	36.1	2.3	85	nw.			5		10 ks						Issermann.
Munich	28.55	725.2	30.44	773.2	38.3	3.5	46	se.			1		0			0	0		Central Station.
Neufahrwasser	30.43	770.3	30.34	770.7	35.8	2.1	89	wnw.			2		10			0	0		A. Lothes.
Neustadt, Palatinate	29.88	758.9	30.41	772.4	30.6	— 0.8		w.			2		10			0	0		Dicknether.
Stuttgart	29.45	747.9	30.38	771.6	40.1	4.5	71	n.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.35	770.8	30.37	771.5	34.0	1.1	98	sw.			2		10			0	0		Profs. Brandes & Reimer.
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.01	762.3	30.43	772.8	36.5	2.5		ne.			1.0		10			0.004	0.1	rainy	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.83	757.8	29.88	759.0	76.5	24.7	65	wsw.	38	17.0			1			0	0	d. clouds	
Deesa	29.35	745.4	29.82	757.4	83.6	28.7	34	wsw.	9.2	4.1			0			0	0	blue sky	
Bombay	29.82	757.4	29.86	758.3	81.9	27.7	68	nw.	17	7.6			0			0	0	blue sky	
Poona, Yarrowda.	27.98	710.6	29.80	756.8	89.8	32.1	27	w.	18	8.0			3	sw.		0	0	d. clouds	
Belgaum	27.32	693.9	29.81	757.1	87.0	30.6	18	ese.	5	2.2			0			0	0	blue sky	
Lahore	28.99	736.3	29.76	755.8	61.6	16.4	83	e.	3.1	1.4			6			0.33	8.4	hailing	
Roorkee	28.87	733.2	29.78	756.4	71.2	21.8	57	se.	4.7	2.1			8			0	0		
Agra	29.22	742.0	29.78	756.4	78.2	25.7	40	nw.	4.8	2.2			4		w.	0	0		
Nagpur	28.77	730.8	29.80	756.8	90.0	32.2	23	sw.	3.5	1.6			4	w.		0	0	d. clouds	
Jubbulpore	28.55	725.2	29.94	760.5	68.2	20.1	27	w.	2.6	1.2			0			0	0	blue sky	
Lucknow	29.44	747.8	29.82	757.4	80.2	26.8	33	ene.	0.8	0.4			5	ene.		0	0	d. clouds	
Allahabad	29.48	748.7	29.79	756.6	80.7	27.1	40	calm	0.7	0.3			3	w.		0	0	d. clouds	
Patna	29.67	753.5	29.86	758.3	74.1	23.4	52	calm	2.7	1.2			4			0	0	d. clouds	
Hazaribagh	27.85	707.4	29.88	758.9	74.8	23.8	28	nnw.	5.3	2.4			2			0	0		
Cuttack	29.77	756.1	29.85	758.2	83.0	28.3	40	nw.	0.4	0.2			0			0	0	blue sky	
Calcutta, Alipore	29.85	758.1	29.87	758.6	76.5	24.7	49	wnw.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.75	755.6	29.87	758.8	72.1	22.3	63	calm	2.6	1.2			3		nw.	0	0	d. clouds	
Chittagong	29.86	758.5	29.96	760.8	72.4	22.4	76	w.	2.4	1.1			1			0	0	blue sky	
Sibsagar	29.58	751.4	29.93	760.3	73.9	17.7	84	ne.	2.9	1.3			8	w.	w.	0	0	d. clouds	
Jeypore	28.33	719.7	29.78	756.4	78.4	25.8	29	w.	5.6	2.5			6	w.		0	0	d. clouds	
Zanzibar, Africa	29.78	756.4			87.3	30.7	67	n.	8.8	3.9			4			0	0	d. clouds	
Trichinopoly	29.63	752.6			85.3	29.6	37	ene.	1	0.4			2			0	0	d. clouds	
Bellary	28.38	720.8			90.0	32.2	22	ese.	3.5	1.6			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	30.09	764.3	30.52	775.1	44.1	6.7	55	calm	0	0			1			0	0		Prof. Giovanni Clodig.
Milan	29.99	761.8	30.50	774.8	41.5	5.3	65	sw.	2.5	1.1			1			0.016	0.4		Prof. Schiaparelli.
Padua	30.40	772.1	30.51	775.0	43.0	6.1	69	sse.	1.3	0.6			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.58	751.2	30.53	775.4	41.7	5.4	66	ene.	2.5	1.1			0			0	0		Prof. P. F. Denza.
Genoa	30.31	769.8	30.51	774.9	53.2	11.8	52	sw.	1.3	0.6			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.52	724.3	30.54	775.8	40.6	4.8	46	nne.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.46	773.6	30.51	774.9	42.3	5.7	72	n.	9.4	4.2			0			0	0		Prof. Luigi Guidi.
Florence	30.24	768.2	30.51	775.0	46.4	8.0	42	w.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.59	776.9	30.68	779.2	51.6	10.9	32	ene.	4.3	1.9			0			0	0		Prof. P. Monte.
Rome	30.30	769.7	30.48	774.3	52.5	11.4	53	wsw.	0	0			2			0	0		Prof. P. S. Ferrari.
Lecce	30.18	766.5	30.44	773.1	50.0	10.0	46	nnw.	13.6	6.1			1			0	0		Prof. C. de Giorgi.
Cosenza	29.53	750.0	30.46	773.6	46.8	8.2	72	wnw.	3.8	1.7			2	nw.		0	0		Prof. D. Conti.
Cagliari	30.26	768.5	30.45	773.5	55.0	12.8	46	w.			2		0			0	0		Prof. A. Pacinotti.
Palermo	30.23	767.8	30.49	774.4	55.0	12.8	43	ne.	6.9	3.1			3			0	0		Prof. G. Ciacciatore.
Syracuse	30.36	771.2	30.41	772.4	51.4	10.8	54	e.	9.8	4.4			8	nw.		0.039	1.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.92	759.9	30.46	773.7	51.3	10.7	51	e.	0.7	0.3			1	nne.		0	0		Prof. T. Brioschi.
Stelvio	22.35	567.6			22.1	— 5.5	46	s.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.39	568.8			26.6	— 3.0	43	nw.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.08	764.0	30.12	765.0	35.0	1.7	72	w.	10.1	4.5			10 n			0.006	0.2	light snow	
Hakodate	30.04	763.0	30.05	763.3	35.0	1.7	66	nw.	12.0	5.4			10		n.	0	0	overcast	
Hiroshima, I. M. Obs'y	30.25	768.3	30.27	768.8	39.1	3.9	79	ne.	3.5	1.6		0	0			0	0	clear	K. Sasaki.
Kanazawa	30.20	767.1	30.31	769.9	38.5	3.6	88	ese.	4.1	1.8		ck:cs	9 ks		n.	inap.	inap.	overcast	S. Endo.
Kioto	30.10	764.5	30.28	769.1	39.0	3.9	79	nw.	0.2	0.1			10 s			0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.07	763.8	30.28	769.1	43.4	6.3	73	ene.	3.8	1.7		0	0			0	0	clear	S. Takehayashi.
Niigata	30.22	767.6	30.25	768.3	40.2	4.6	65	w.	12.2	5.4		0	0			0.005	0.1	clear	
Nobiru	30.09	764.3	30.10	764.5	39.5	4.2	69	nw.	15.8	7.1		0	2s;ks			0	0	fair	H. Midzushina.
Sapporo	29.94	760.5	30.01	762.2	30.3	— 0.9	95	nw.	6.0	2.7			3			0.005	0.1	clear	
Tokei Obs'y, Yeddo	30.08	764.0	30.15	765.8	40.3	4.6	61	nnw.	8.2	3.7		0	0			0	0	clear	The Staff.
Wakayama	30.22	767.6	30.28	769.1	39.9	4.4	71	e.	3.0	1.3		0	0			0	0	clear	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.46	621.1	30.26	768.6	50.4	10.2	75	nnw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.81	757.2	30.08	763.9	61.5	16.4	100	e.	0.9	0.4		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.15	588.2	30.31	769.9	49.1	9.5	72	calm	0	0		0	0			0	0		The Staff.
Morelia	24.30	617.3	30.52	775.2	52.7	11.5	72	ese.			5	0	1 k		s.	0	0	foggy	M. Tena, M. D.
Pabellon, Aguascalientes	24.00	609.6	30.12	764.9	44.6	7.0	53									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.45	595.6	30.30	769.6	46.4	8.0	80	calm	0	0		0	0			0	0	very fine	Prof. P. Spina.
San Luis Potosi	24.22	615.2	30.48	774.2	44.3	6.8	72	ese.			1	1	3	w.	e.	0	0		G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.60	574.1	30.33	770.5	48.5	9.1	60	sw.	5.2	2.3		0	0			0	0	fine	J. A. Bonilla, M. E.

Stations.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Amount and kind. Lo'er 0—10	Direction. Upper. From.	Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.69	754.1	29.88	758.9	81.0	27.2	72	nw.	5.5	2.5	.....	6 c,cs	1 k	w.	nnw.	0	0	fair	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.35	770.8	30.35	770.8	32.4	0.2	.....	s.	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Groningen	30.28	769.1	30.34	770.5	32.7	0.4	.....	ssw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Helder	30.31	769.9	30.31	769.9	33.4	0.8	.....	ssw.	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Helleveotsluis	30.32	770.1	30.32	770.1	32.9	0.5	86	s.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Utrecht	30.31	769.8	30.35	771.0	32.2	0.1	82	s.	.....	.....	2	.....	8	.....	.....	0	0	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.87	758.6	29.93	760.2	41.7	— 5.4	94	sse.	29	13	.....	.....	10	.....	.....	1.346	34.2	raining	
Brono	29.62	752.3	29.66	753.3	42.1	5.6	64	ssw.	27	12	.....	.....	9	.....	.....	0.315	8.0	.....	
Christiania	29.96	760.9	30.11	764.9	21.4	— 5.9	98	sw.	0	0	.....	.....	10	.....	.....	0	0	foggy	
Gjæsvær	29.19	741.5	29.22	742.1	33.8	1.0	.....	ssw.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.38	746.3	29.43	747.5	38.7	3.7	90	sw	.....	.....	7	.....	10	.....	.....	0.949	24.1	raining	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	59.0	15.0	80	w.	23.7	10.6	.....	.....	6	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.20	741.7	30.22	767.7	51.8	11.0	85	s.	12.5	5.6	.....	.....	7	.....	.....	0.071	1.8	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.36	771.2	30.45	773.5	64.2	17.9	54	sw.	2.5	1.1	.....	.....	1	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.83	757.6	30.19	766.9	55.9	13.3	83	sw.	26.2	11.7	.....	.....	10	.....	.....	0.480	12.2	.....	The Staff.
Ponta Delgada, Azores	30.27	768.8	30.34	770.6	60.1	15.6	66	wsw.	23.0	10.3	.....	.....	3	.....	.....	0	0	.....	
Saint Paul de Loando	29.71	754.7	29.91	759.8	83.3	28.5	66	n.	0.7	0.3	.....	.....	6	s.	.....	c	0	.....	
Serra da Estrella	25.30	642.6	30.13	765.2	39.9	4.4	100	se.	23.0	10.3	.....	.....	10	.....	.....	.....	.....	rain & fog	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.91	734.4	30.13	765.3	— 4.9	—20.5	.....	sw.	16	7	.....	0	0	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	29.47	748.5	29.49	749.0	12.7	—10.7	80	sse.	4	2	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	30.31	769.8	30.22	767.7	10.6	—11.9	71	wsw.	11	5	.....	0	0	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	29.60	751.7	30.13	765.3	20.7	— 6.3	95	sw.	2	1	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	29.71	754.6	29.96	761.0	38.1	3.4	70	w.	9	4	.....	0	0	.....	.....	0	0	.....	Observatory.
Ekaterinburg	28.63	727.3	29.70	754.4	— 6.2	—21.2	66	w.	9	4	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Kasan	29.61	752.1	29.92	759.9	—11.4	—24.1	64	wnw.	2	1	.....	.....	0	.....	.....	0	0	.....	Observatory.
Kertch	30.15	765.8	30.17	766.3	21.4	— 5.9	72	sse.	2	1	.....	.....	10 n	.....	.....	0	0	light clouds.	Lagorio & Sastyrez.
Kieff	29.32	744.7	29.98	761.5	34.7	1.5	74	nw.	9	4	.....	.....	10ks;n	.....	.....	0.028	0.7	.....	Observatory.
Lugan	29.89	759.1	30.11	764.8	15.8	— 9.0	75	wsw.	13	6	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Moscow	29.21	741.8	29.72	754.8	16.9	— 8.4	79	sw.	7.8	3.5	.....	0	8 ks	.....	.....	0.031	0.8	snowing	Meteorological Obs'y.
Nikolaiev	30.07	763.7	30.14	765.5	29.5	— 1.4	86	sw.	9	4	.....	.....	10 n	.....	.....	0.016	0.4	.....	Capt. Kurdukow.
Nikolaievsk, on the Amoor	30.14	765.6	30.23	767.8	6.8	—14.0	85	calm	0	0	.....	.....	3	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	30.42	772.7	30.56	776.3	29.5	— 1.4	36	calm	0	0	.....	0	1 k	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.76	756.0	29.78	756.4	30.0	— 1.1	88	wnw.	11	5	.....	0	2 ks	.....	.....	0	0	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.49	723.7	30.14	765.6	33.8	1.0	92	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.75	730.2	30.26	768.7	26.6	— 3.0	49	n.	22	10	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	30.32	770.2	30.39	771.9	14.9	— 9.5	60	n.	4	2	.....	1 cs	0	.....	.....	0	0	.....	
Warsaw	29.91	759.8	30.36	771.2	33.4	0.8	82	wnw.	13	6	.....	.....	10 ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.71	754.7	30.15	765.8	35.1	1.7	82	w.	4	2	.....	.....	10	.....	.....	0.039	1.0	.....	Berg, Assistant.
Yeniseisk	29.90	759.4	30.21	767.2	16.0	— 8.9	88	e.	4	2	.....	.....	10	.....	.....	0.051	1.3	snowing	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.73	755.1	50	10.0	93	ssw.	.....	.....	3	3	0	sso.	.....	0.2	5.	clear	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burner.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.31	769.8	30.42	772.6	54.5	12.5	80	s.	0.7	0.3	.....	.....	8	.....	.....	0.008	0.2	misty	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.17	766.4	30.23	767.9	55.4	13.0	52	s.	5.6	2.5	.....	6	4	s	.....	0	0	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.25	692.2	30.25	768.3	53.6	12.0	33	se.	3.1	1.4	.....	0	6	.....	.....	0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.07	713.0	30.36	771.1	49.5	9.7	59	e.	6.3	2.8	.....	0	8	.....	.....	0	0	almost cov'd	The Staff.
Murcia, Met. Obs'y	30.29	769.4	30.45	773.5	47.7	8.7	98	n.	0.7	0.3	.....	5	5	.....	.....	0	0	foggy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.09	738.8	29.99	761.7	55.9	13.3	45	se.	10.5	4.7	.....	.....	9	.....	.....	0	0	almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.07	763.7	30.13	765.4	71.3	21.8	86	ssw.	2.7	1.2	.....	1 ck	6 k;n	wnw.	nw.	0.020	0.5	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.96	761.0	30.02	762.5	75.5	24.2	69	n.	2.2	1.0	.....	0	ks	.....	.....	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.27	768.8	30.37	771.4	62.1	16.7	42	se.	8.6	3.9	.....	0	2	.....	se.	0.405	10.3	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.07	763.7	30.16	766.0	73.4	23.0	92	se.	1.8	0.8	.....	2 s	3 kn	se.	se.	0	0	.....	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.91	759.7	30.04	763.0	73.4	23.0	79	s.	3.3	1.5	.....	0	2 ks	.....	sw	0.01	0.3	fair	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.67	753.7	29.71	754.7	32.4	0.2	74	sw.	.....	.....	2	.....	8	.....	.....	0	0	.....	
Umea	29.80	757.0	29.85	758.3	41.0	5.0	72	nw.	.....	.....	2	.....	7	.....	.....	0	0	.....	
Hernosand	29.85	758.1	29.90	759.4	40.5	4.7	60	calm	.....	.....	0	.....	3	.....	.....	0	0	.....	
Stockholm	29.92	759.9	30.10	764.4	35.4	1.9	67	w.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Wisby	30.15	765.8	30.21	767.3	37.0	2.8	79	w.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Sub Series.																			
Upsala	29.98	761.4	30.06	763.6	33.1	0.6	83	w.	8.3	3.7	.....	.....	10	.....	w.	0.008	0.2	.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.03	737.4	30.54	775.7	27.9	— 2.3	92	n.	.....	.....	1	.....	.....	.....	.....	0	0	foggy	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.41	772.4	30.9	— 0.6	96	nw.	8	3.5	.....	.....	9	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.43	772.8	46.8	8.2	.....	nw.	.....	.....	1	.....	2	.....	.....	0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.93	760.1	52.5	11.4	81	sw.	.....	.....	4	0	6 n	.....	sw.	0.83	21.1	.....	Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	29.56	750.8	29.64	752.8	38	3.3	72	nw.	3	1.3			10 s		nw.	0.17	4.3	cloudy	
Alpena, Michigan	29.45	748.0	30.16	766.1	26	— 3.3	76	nw.	25	11.2		3 k	4 s	nw.	nw.	0	0	fair	
Atlanta, Georgia	29.03	737.3	30.25	768.3	42.5	5.8	82	nw.	11	4.9		0	0			0.02	0.5	clear	
Atlantic City, New Jersey	29.80	756.9	29.80	756.9	36.8	2.7	72	nw.	15	6.7		0	0			0.98	24.9	clear	
Augusta, Georgia	30.03	762.7	30.23	767.8	46.7	8.2	86	nw.	2	0.9		0	0			0.06	1.5	clear	
Baltimore, Maryland	29.88	758.9	29.93	760.2	41	5.0	48	nw.	11	4.9		0	fg.			0.55	14.0	clear	
Barnegat, New Jersey	29.74	755.4	29.76	755.9	37.2	2.9	79	nw.	18	8.0		0	0			2.10	53.3	clear	
Bismarck, Dakota	27.91	708.9	29.89	759.2	28	— 2.2	67	e.	4	1.8		4 c	0	calm		0	0	fair	
Block Island, Rhode Island																			
Boise City, Idaho	26.97	685.0	29.93	760.2	34	1.1	89	w.	2	0.9			10 s		calm	0.15	3.8	cloudy	
Boston, Massachusetts	29.33	745.0	29.49	749.0	32.0	0.0	100	nw.	9	4.0			10 n			1.17	29.7	light snow	
Brownsville, Texas	30.10	764.5	30.15	765.8	56	13.3	100	calm	0	0		0	fg.			0	0	clear	
Buffalo, New York	29.09	738.9	29.89	759.2	33.2	0.7	76	w.	23	10.3		0	3 ks		w.	0	0	clear	
Burlington, Vermont	29.26	743.2	29.56	750.8	26.0	— 3.3	96	n.	7	3.1		2 ck	8 s	w.	n.	0.04	1.0	cloudy	
Cairo, Illinois	29.90	759.4	30.32	770.1	41.5	5.3	90	w.	1	0.4		0	sk.			inap.	inap.	clear	
Campo, California																			
Camp Thomas, Arizona	27.22	691.4	30.05	763.3	36.5	2.5	94	se.			1		10 s			0	0	cloudy	
Cape Henry, Virginia	29.98	761.5	30.00	762.0	42	5.6	83	sw.	14	6.3		0	0			1.07	27.2	clear	
Cape May, New Jersey	29.83	757.7	29.86	758.4	39	3.9	82	w.	31	13.9		0	0			0.69	17.5	clear	
Castroville, Texas	29.35	745.5	30.19	766.8	46	7.8	83	nw.	1	0.4		10 ck	0	nw.		0	0	cloudy	
Cedar Keys, Florida	30.15	765.8	30.17	766.3	55	12.8	80	nw.	4	1.8		0	0			0.84	21.3	clear	
Champaign, Illinois	29.42	747.3	30.29	769.4	33.3	0.7	60	ne.	8	3.6		0	1 s		n.	0	0	clear	
Charleston, S. Carolina	30.07	763.8	30.13	765.3	50	10.0	77	nw.	10	4 5		0	0			0.42	10.7	clear	
Charlotte, N. Carolina	29.28	743.7	30.17	766.3	46.0	7.8	54	nw.	12	5.4		0	0			0.53	13.5	clear	
Chattanooga, Tennessee	29.45	748.0	30.31	769.9	42.0	5.6	73	n.	2	0.9		0	0			0.18	4.6	clear	
Cheyenne, Wyoming	23.88	606.5	30.13	765.3	29.3	— 1.5	54	w.	5	2.2		7 c	0	w.		0	0	fair	
Chicago, Illinois	29.52	749.8	30.27	768.8	31.6	— 0.2	76	nw.	3	1.3		3 c	0			0	0	clear	
Chincoteague, Virginia	29.90	759.4	29.92	760.0	41	5.0	61	nw.	31	13.9		0	hz.			0.79	20.1	clear	
Cincinnati, Ohio	29.58	751.3	30.27	768.8	40.1	4.5	57	w.	4	1.8		0	0			0.14	3.6	clear	
Cleveland, Ohio	29.34	745.2	30.13	765.3	34	1.1	72	w.	18	8.0		0	2 s		w.	0	0	clear	
Coleman City, Texas	28.26	717.8	30.14	765.5	43	6.1	93	s.	4	1.8			10 s		s.	0	0	cloudy	
Columbus, Ohio	29.32	744.7	30.22	767.6	36	2.2	53	w.	10	4.5		0	0			0.05	1.3	clear	
Concho, Texas	28.09	713.5	30.11	764.8	47	8.3	86	s.	4	1.8		9 ck	0			0	0	cloudy	
Davenport, Iowa	29.57	751.1	30.27	768.8	34	1.1	61	ne.	2	0.9		4 k	sk.	nw.	calm	0	0	fair	
Dayton, Washington T'y	28.04	712.2	29.86	758.4	30.8	— 0.7	82	sw.	6	2.7		0	4 s			0.14	3.6	fair	
Deadwood, Dakota	25.09	637.3	30.01	762.2	41	5.0	40	s.	6	2.7		4 c	0	w.		0	0	fair	
Decatur, Texas					50	10.0	58	s.	9	4.0			10 s			0	0	cloudy	
Delaware Breakwater, Del.	29.86	758.4	29.88	758.9	39	3.9	89	w.	20	8.9		0	0			0.87	22.1	clear	
Denison, Texas	29.31	744.5	30.15	765.8	47.8	8.8	77	s.	8	3.6		0	0			0	0	clear	
Denver, Colorado	24.60	624.8	30.12	765.0	38.3	3.5	43	s.	6	2.7		6 c	0	calm		0	0	fair	
Des Moines, Iowa	29.23	742.4	30.20	767.1	32	0.0	68	se.	6	2.7		3 c	0	w.		0	0	clear	
Detroit, Michigan	29.40	746.7	30.14	765.5	33.5	0.8	69	w.	13	5.8		0	9 s		w.	0	0	cloudy	
Dodge City, Kansas	27.29	693.2	30.03	762.7	36	2.2	85	calm	0	0		0	3 s			0	0	clear	
Dubuque, Iowa	29.49	749.0	30.25	768.3	26.5	— 3.1	51	w.	1	0.4		2cs;ck	0			0	0	clear	
Duluth, Minnesota	29.49	749.0	30.25	768.3	19	— 7.2	70	sw.	1	0.4		0	0			0	0	clear	
Eagle Pass, Texas	29.33	745.0	30.17	766.3	52.1	11.2	86	se.	6	2.7		3 ck	1 s			0	0	fair	
Eagle Rock, Idaho	24.98	634.5	29.88	758.9	32	0.0	81	sw.	14	6.3		4 cs	0			0	0	fair	
Eastport, Maine	29.44	747.8	29.51	749.5	30	— 1.1	100	ne.	30	13.4			10 n			0.03	0.8	light snow	
El Paso, Texas	26.27	667.2	30.15	765.8	43.7	6.5	65	nw.	2	0.9		10 cs	0	calm		0	0	cloudy	
Erie, Pennsylvania	29.24	742.7	30.01	762.2	34	1.1	78	nw.	19	8.5			10 ks		nw.	0	0	cloudy	
Escanaba, Michigan	29.52	749.8	30.24	768.1	22	— 5.6	73	w.	6	2.7		0	0			inap.	inap.	clear	
Fort Apache, Arizona	25.08	637.0	30.18	766.6	27	— 2.8	61	ne.	3	1.3		0	0			0	0	clear	
Fort Assinnaboine, Montana	26.76	679.7	29.80	756.9	32	0.0	52	sw.	15	6.7		0	4 k		sw.	0	0	fair	
Fort Bennett, Dakota	28.12	714.2	29.85	758.2	28	— 2.2	67	w.	2	0.9		0	0			0	0	clear	
Fort Benton, Montana	26.83	681.5	29.83	757.7	32	0.0	71	calm	0	0			10 ks		calm	0	0	cloudy	
Fort Buford, Dakota	27.65	702.3	29.83	757.7	29	— 1.7	67	e.	3	1.3		7 cs	0	calm		0	0	fair	
Fort Custer, Montana	26.45	671.8	29.81	757.2	30	— 1.1	71	se.	4	1.8		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.15	638.8	30.11	764.8	42	5.6	86	calm	0	0		0	0			0	0	clear	
Fort Elliott, Texas	27.19	690.6	30.09	764.3	37	2.8	64	s.	4	1.8			10 s		s.	0	0	cloudy	
Fort Gibson, Indian T'y	29.52	749.8	30.12	765.0	48.5	9.2	63	e.	4	1.8		6 cs	0	s.		0	0	fair	
Fort Grant, Arizona	25.14	638.5	30.00	762.0	45	7.2	71	ne.	4	1.8			10 s			0	0	cloudy	
Fort Griffin, Texas	28.79	731.3	30.16	766.1	44	6.7	83	s.	1	0.4		10 ck	0	sw.		0	0	cloudy	
Fort Keogh, Montana	27.09	688 1	29.77	756.1	35	1.7	65	se.	4	1.8		3 c	0			0	0	clear	
Fort Macon, North Carolina	30.04	763.0	30.05	763.3	51	10.6	80	n.	15	6.7		0	0			0.46	11.7	clear	
Fort McKavett, Texas	27.84	707.1	30.22	767.6	48.5	9.2	80	sw.	8	3.6		0	0			0	0	clear	
Fort Missoula, Montana	26.40	670.5	29.83	757.7	28	— 2.2	88	nw.	4	1.8			10 n		ne.	0.08	2.0	light snow	
Fort St. Michaels, Alaska	29.98	761.5	30.02	762.5	—23	—30.6	100	ne.	8	3.6			10 s			inap.	inap.	cloudy	
Fort Shaw, Montana	25.97	659.6	29.82	757.4	30	— 1.1	70	w.	17	7.6		4 cs	0			0	0	fair	
Fort Sill, Indian Territory	28.82	732.0	30.13	765.3	41.3	5.2	81	calm	0	0		3 c	0			0	0	clear	
Fort Stevenson, Dakota	27.81	706.4	29.83	757.7	27	— 2.8	88	se.	6	2.7			10 s		calm	0	0	cloudy	
Fort Verde, Arizona					30	— 1.1	59	nw.			1	0	0			0	0	clear	
Fredericksburg, Texas	28.36	720.3	30.16	766.1	49	9.4	71	calm	0	0		10 ck	0	nw.		0	0	cloudy	
Galveston, Texas	30.14	765.5	30.18	766.6	53	11.7	86	w.	1	0.4		0	0			0	0	clear	
Grand Haven, Michigan	29.53	750.0	30.24	768.1	34.0	1.1	60	nw.	11	4.9		0	0			0	0	clear	
Hatteras, North Carolina	30.00	762.0	30.02	762.5	49	9.4	86	nw.	16	7.2			9 s			0.19	4.8	cloudy	
Helena, Montana	25.39	644.9	29.79	756.7	30	— 1.1	78	sw.	4	1.8		0	0			0	0	clear	
Henrietta, Texas	29.13	739.9	30.18	766.6	45	7.2	93	s.	8	3.6		0	6 s			0.91	23.1	fair	
Huron, Dakota	28.41	721.6	29.93	760.2	33.8	1.0	71	se.	24	10.7		3 cs	0			0	0	clear	
Indianapolis, Indiana	29.41	747.0	30.26	768.6	34	1.1	72	n.	5	2.2		0	fg		calm	0	0	clear	
Indianola, Texas	30.14	765.5	30.18	766.6	58.0	14.4	93	e.	5	2.2		0	0			0	0	clear	
Jacksboro, Texas	28.92	734.0	30.16	766.1	45	7.2	83	s.	6	2.7		4 ck	2 s	sw.		0	0	fair	
Jacksonville, Florida	30.13	765.3	30.18	766.6	53	11.7	80	w.	6	2.7		0	0			1.00	25.4	clear	
Keokuk, Iowa	29.52	749.8	30.22	767.6	33.0	0.6	74	e.	7	3.1		0	0			0	0	clear	
Key West, Florida	30.12	765.0	30.15	765.8	70.8	21.6	73	n.	20	8.9		0	5 s			0.06	1.5	fair	
Kittyhawk, North Carolina	30.01	762.2	30.03	762 7	44	6.7	83	nw.	14	6.3		hz.	0			0.85	21.6	clear	
Knoxville, Tennessee	29.24	742.7	30.32	770.1	38.3	3.5	89	n.	3	1.3		0	fg.			0.18	4.6	clear	
La Crosse, Wisconsin	29.41	747.0	30.25	768.3	29	— 1.7	67	w.	2	0.9			10 s			0	0	cloudy	
La Mesilla, New Mexico	26.12	663.4	30.13	765.3	42.5	5.8	72	calm	0	0			10 s			0	0	cloudy	
Leavenworth, Kansas	29.20	741.7	30.15	765.8	34	1.1	60	calm	0	0		2 cs	sk.			0	0	clear	
Lewiston, Idaho	28.98	736.1	29.85	758.2	38	3 3	72	nw.	8	3.6			10 s		nw.	0.01	0.3	cloudy	
Little Rock, Arkansas	29.87	758.7	30.20	767.1	43	6.1	93	calm	0	0		3 cs	4 ks		se.	0	0	fair	
Los Angeles, California	29.64	752.8	30.04	763.0	42.1	5.6	83	ne.	5	2.2		0	3 s		calm	0	0	clear	
Louisville, Kentucky	29.67	753.6	30.26	768.6	42.0	5.6	74	w.	4	1.8		0	sk.		sw.	0.30	7.6	clear	
Lynchburg, Virginia	29.33	745.0	30.05	763.3	45.0	7.2	49	w.	1	0.4		0	0			0.43	10.9	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.20	741 7	30.29	769.4	29	— 1.7	77	n.	3	1.3		3 c	0	w.		0	0	fair	
Marquette, Michigan	29.44	747.8	30.22	767.6	23	— 5.0	73	w.	8	3.6		0	5 s		nw.	0.01	0.3	fair	
Mason, Texas	28.45	722.6	30.18	766.6	53	11.7	61	s.	5	2.2			10 ks		w.	0	0	cloudy	
Memphis, Tennessee	29.91	759.7	30.26	768.6	42	5.6	82	calm	0	0		1 c	sk.			0.02	0.5	clear	
Milwaukee, Wisconsin	29.46	748.3	30.26	768.6	29	— 1.7	88	nw.	4	1.8		8 ck	fg.	nw.		0	0	cloudy	
Mobile, Alabama	30.24	768.1	30.28	769.0	47.0	8.3	77	ne.	2	0.9		0	0			0	0	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	30.02	762.5	30.26	768.6	43	6.1	89	nw.	3	1.3		0	0			inap.	inap.	clear	
Moorhead, Minnesota	28.94	735.1	30.04	763.0	18.1	— 7.7	83	se.	12	5.4			10 s		se.	0	0	cloudy	
Morgantown, W. Virginia	29.09	738.9	30.16	766.1	40.0	4.4	73	w.	11	4.9		0	0			0.37	9.4	clear	
Mt. Washington, N. H.	23.15	588.0	29.77	756.1	21.0	— 6.1	91	w.	26	11.6			10n;fg		w.	0.31	7.9	light snow	
Nashville, Tennessee	29.74	755.4	30.30	769.6	38.0	3.3	86	w.	1	0.4		0	0			0.34	8.6	clear	
New Haven, Connecticut	29.50	749.3	29.62	752.3	37	2.8	89	nw.	5	2.2		0	8 n		nw.	0.70	17.8	light rain	
New London, Connecticut	29.52	749.8	29.57	751.1	37	2.8	89	n.	5	2.2			10 s		n.	0.81	20.6	cloudy	
New Orleans, Louisiana	30.19	766.8	30.25	768.3	52.5	11.4	69	ne.	4	1.8		0	hz			0	0	clear	
Newport, Rhode Island	29.47	748.5	29.52	749.8	34.4	1.3	94	nw.	12	5.4			10 n		nw.	1.10	27.9	light rain	
New River, N. Carolina																			
New Shoreham, Rhode I'd.	29.52	749.8	29.56	750.8	35.5	1.9	91	nw.	20	8.9			10 n		nw.	1.72	43.7	light rain	
New York, New York	29.53	750.0	29.72	754.9	37.5	3.1	45	w.	18	8.0		0	5 s			1.10	27.9	fair	
Norfolk, Virginia	29.97	761.2	30.00	762.0	46	7.8	76	nw.	4	1.8		0	hz			0.86	21.8	clear	
North Platte, Nebraska	26.95	684.5	30.05	763.3	28.6	— 1.9	86	s.	6	2.7		0	0			0	0	clear	
Olympia, Washington T'y	29.69	754.1	29.73	755.1	33.0	0.6	88	s.	4	1.8			10 n		calm	0.95	24.1	light snow	
Omaha, Nebraska	28.84	732.5	30.11	764.8	38.2	3.4	53	se.	8	3.6		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.56	750.8	29.58	751.3	—12.8	—24.9	65	ssw.	8	3.6		hz.	hz			0	0	dense haze.	
Oswego, New York	29.35	745.5	29.70	754.4	37.0	2.8	61	nw.	19	8.5			10 s		nw.	0	0	cloudy	
Palestine, Texas	29.64	752.8	30.22	767.6	51	10.6	52	s.	4	1.8		6 cs	0			0	0	fair	
Pensacola, Florida	30.23	767.8	30.26	768.6	48.0	8.9	77	n.	8	3.6		0	0			0	0	clear	
Philadelphia, Pa.	29.72	754.9	29.84	757.9	40	4.4	65	nw.	17	7.6		0	0			0.58	14.7	clear	
Pike's Peak, Colorado	17.57	446.3	30.29	769.4	9.5	—12.5	48	sw.	12	5.4		2 cs	0			0	0	clear	
Pioche, Nevada	23.92	607.6	30.08	764.0	30	— 1.1	54	s.	5	2.2		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.23	742.4	30.09	764.3	35.3	1.8	69	w.	12	5.4		0	0			0.01	0.3	clear	
Port Eads, Louisiana	30.24	768.1	30.26	768.6	54.5	12.5	80	ne.	9	4.0		0	hz			0	0	clear	
Port Huron, Michigan	29.40	746.7	30.13	765.3	32.2	0.1	78	nw.	23	10.3			10 ks		nw.	0	0	cloudy	
Portland, Maine	29.43	747.5	29.48	748.8	29.0	— 1.7	88	n.	13	5.8			10 n		calm	0.33	8.4	light snow	
Portland, Oregon	29.72	754.9	29.79	756.7	35.0	1.7	89	se.	3	1.3		0	8 ks		sw.	0.81	20.6	cloudy	
Portsmouth, N. Carolina					51	10.6	72	nw.	15	6.7		0	0			0.09	2.3	clear	
Prescott, Arizona	24.69	627.1	30.05	753.3	29	— 1.7	70	sw.	2	0.9		0	0			0	0	clear	
Punta Rassa, Florida	30.14	765.5	30.15	765.8	62.5	16.9	68	nw.	11	4.9		0	7 ks		nw.	0.03	0.8	fair	
Red Bluff, California	29.43	747.5	29.81	757.2	45.9	7.7	96	sw.	8	3.6			10 n			0.49	12.4	light rain	
Rio Grande City, Texas	29.94	760.5	30.19	766.8	59	15.0	93	se.	6	2.7			10 s		se.	0	0	cloudy	
Rochester, New York	29.07	738.4	29.78	756.4	34	1.1	79	w.	9	4.0			10 ks		w.	0	0	threatening.	
Roseburg, Oregon	29.30	744.2	29.87	758.7	29.4	— 1.4	86	calm	0	0			fg			0.95	24.1	dense fog	
Sacramento, California	29.78	756.4	29.86	758.4	46.5	8.1	83	se.	9	4.0			10 s			inap.	inap.	cloudy	
St. Louis, Missouri	29.65	753.1	30.29	769.4	38.0	3.3	82	n.	5	2.2		0	0			0	0	clear	
St. Paul, Minnesota	29.26	743.2	30.20	767.1	25.6	— 3.6	76	e.	7	3.1			10 s			0	0	cloudy	
St. Vincent, Minnesota	29.11	739.4	30.08	764.0	9	—12.8	100	se.	5	2.2			10 s		calm	0.03	0.8	cloudy	
Salt Lake City, Utah	25.43	645.9	29.99	761.7	40	4.4	43	se.	5	2.2		9 k	0	w.		0	0	cloudy	
San Antonio, Texas	29.46	748.3	30.18	766.6	47.6	8.7	77	calm	0	0		8 ck	0			0	0	fair	
San Diego, California	29.97	761.2	30.04	763.0	48.8	9.3	89	ne.	4	1.8		10 k	0	s.		0	0	cloudy	
Sandusky, Ohio	29.44	747.8	30.16	766.1	34	1.1	78	w.	24	10.7		0	0			0	0	clear	
Sandy Hook, New Jersey	29.68	753.9	29.72	754.9	37.0	2.8	82	w.	13	5.8		0	0			1.17	29.7	clear	
San Francisco, California	29.80	756.9	29.87	758.7	51	10.6	86	se.	19	8.5			10 s		sw.	0.03	0.8	threatening.	
Santa Fé, New Mexico	23.19	589.0	30.23	767.8	25	— 3.9	61	e.	2	0.9		5 c	0	w.		0	0	fair	
Savannah, Georgia	30.09	764.3	30.18	766.6	51	10.6	77	nw.	8	3.6		0	0			0.17	4.3	clear	
Shreveport, Louisiana	29.97	761.2	30.22	767.6	45	7.2	93	s.	3	1.3		0	2 s			0	0	clear	
Silver City, New Mexico	24.23	615.4	30.08	764.0	36	2.2	82	nw.	1	0.4		9 cs	0	calm		0	0	cloudy	
Sitka, Alaska	29.54	750.3	29.61	752.1	18.5	— 7.5	73	ne.	11	4.9			10 ks		calm	0	0	cloudy	
Smithville, North Carolina	30.04	763.0	30.08	764.0	50	10.0	86	nw.	10	4.5		0	0			0.08	2.0	clear	
Spokane Falls, Wash. Ter.	27.69	703.3	29.82	757.4	28	— 2.2	77	sw.	14	6.3		2 k	0	sw.		0.21	5.3	clear	
Springfield, Illinois	29.57	751.1	30.30	769.6	40	4.4	57	e.	6	2.7		0	0			0	0	clear	
Springfield, Massachusetts	29.46	748.3	29.60	751.8	36.6	2.6	66	w.	9	4.0		4 k	0	w.		0.65	16.5	fair	
Springfield, Mo.	28.70	729.0	30.27	768.8	43.5	6.4	63	se.	11	4.9		6 c	0			0	0	fair	
Stockton, Texas	26.99	685.5	30.12	765.0	49.0	9.4	71	sw.	4	1.8		8 cs	0	calm		0	0	cloudy	
Thatcher's Island, Mass.	29.41	747.0	29.47	748.5	33.0	0.6	100	n.	22	9.8			10 n			1.04	26.4	light snow	
Toledo, Ohio	29.44	747.8	30.18	766.6	34.2	1.2	63	w.	7	3.1		0	0			0	0	clear	
Tucson, Arizona	27.56	700.0	30.04	763.0	46	7.8	63	e.	3	1.3		9 cs	0			0	0	cloudy	
Umatilla, Oregon	29.50	749.3	29.88	758.9	34.8	1.6	66	sw.	4	1.8		0	0			0.03	0.8	clear	
Uvalde, Texas																			
Vicksburg, Mississippi	29.98	761.5	30.25	768.3	49	9.4	56	e.	11	4.9		5 cs	0	calm		0	0	fair	
Visalia, California	29.57	751.1	29.95	760.7	39.5	4.2	86	se.	2	0.9		0	4 ks			0	0	fair	
Washington, D. C.	29.86	758.4	29.98	761.5	39.5	4.2	56	nw.	8	3.6		0	0			0.85	21.6	clear	
West Los Animas, Colorado	25.91	658.1	30.04	763.0	19	— 7.2	80	nw.	6	2.7		0	3 s		w.	0	0	clear	
Wickenburg, Arizona					29	— 1.7	88	w.			1	0	1 k		w.	0	0	clear	
Williamsport, Pa.	29.22	742.2	29.85	758.2	34	1.1	71	w.	12	5.4		hz	1 ks		w.	0.30	7.6	dense haze	
Wilmington, N. Carolina	30.05	763.3	30.11	764.8	53	11.7	72	nw.	4	1.8		hz	sk	calm	calm	0.20	5.1	dense haze	
Winnemucca, Nevada	25.29	642.4	29.81	757.2	39	3.9	43	sw.	16	7.2		0	0			0	0	clear	
Wood's Holl, Mass.																			
Yankton, Dakota	28.57	725.7	29.99	761.7	35	1.7	69	s.	12	5.4		0	4 ks			0	0	fair	
Yuma, Arizona	29.80	756.9	29.95	760.7	44.7	7.1	75	sw.	4	1.8		1 cs	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1			51.5	10.8	84	calm	0	0		6 k	2 s			0.06	1.5	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.09	764.3	30.10	764.5	78	25.6	82	e.				5 k	5 ks	e.	e.	0.08	2.0	fair	J. A. Racker.
Buenaventura, U. S. C.	30.02	762.5	30.04	763.0	77	25.0	95	calm	0	0			10 ks		calm	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.02	762.5	30.04	763.0	75	23.9	86	e.				2 k	2 ks			0.039	1.0		B. Bigar.
Havana, Cuba, W. I.	30.14	765.5	30.19	766.8	76	24.4	88	se.	1.2	0.5		0	5 ks		calm	0.05	1.3	fair	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.13	765.3	30.14	765.5	70.0	21.1	78	n.	2	0.9		0	0			0.06	1.5		Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.07	763.8	30.07	763.8	76	24.4	91	e.			2		10 n	e.	e.	0.710	18.0	rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.53	750.0	29.99	761.7	83	28.3	80	calm			0	5 ck	4 s	calm	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua							96	ne.			4	0	2 ks		ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.11	764.8	30.13	765.3	75	23.9	76	calm	0	0		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.12	765.0	30.18	766.6	—14.0	—25.6	73	w.	8	3.6		0	0			0	0	clear	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Vigo, Spain	30.07	763.8	57	13.9	57	s.			2		5	ssw.				4	w.	d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 21° 10′, E. 113° 20′	30.12	765.0	64	17.8		nne.			3-4		3					4	ne	d. clouds	Capt. A. J. Errington.
H. M. S. Alert, N. 6° 15′, E. 92° 48′	29.88	758.9	81.2	27.3	78	nne.			3		8							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.46	773.7	57	13.9	69	nne.			4-5		6	nne.						squally	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 8° 49′, E. 68° 35′	29.95	760.7	81	27.2	82	n.			4		2	n.				2	n.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.85	758.2	77.5	25.3	71	ese.			1-2		0							blue sky	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	29.90	759.4	71	21.7	95	ese.			2		1							blue sky	Capt. A. T. Dale.
H. M. S. Dido, N. 12° 00′, W. 61° 45′	30.11	764.8	78	25.6		ene.			4-5		5	ne.						d. clouds	Capt. C. Domville.
H. M. Dock Yard, Bermuda, W. I.	30.02	762.5	67	19.4	86	sse.			5-6		2	sse.						d. clouds	Capt. T. Barnardiston. Capt. W. R. Kennedy.
H. M. S. Druid																			
H. M. S. Dwarf, S. 49° 36′, W. 57° 38′	29.83	757.7	54	12.2	90	nw.			1-2		0					1-2	nw.	blue sky	Capt. Sir W. Wiseman. Capt. E. St. J. Garforth.
H. M. S. Eclipse																			
H. M. S. Espiegle, S. 36° 25′, E. 9° 52′	30.39	771.9	65	18.3	89	n.			3		1					3	sw.	blue sky	Capt. C. A. G. Bridge. Capt. P. Aldrich.
H. M. S. Fawn																			
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.25	768.3	44	6.7	67	calm			0		6	n.						misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 12° 04′, W. 77° 11′	29.98	761.5	66.5	19.2	90	var.			0-1		6							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.77	756.1	54	12.2	73	wnw.			5		6							squally	Capt. L. F. Jones.
H. M. S. Inconstant, Hong Kong, China	30.14	765.5	62	16.7	83	ne.			1		8	n.						d. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.08	764.0	62	16.7	88	n.			1-2		4	ne.						d. clouds	Capt. R. E. Tracey. Lieut. C. F. Oldham.
H. M. S. Lark																			
H. M. S. Liffey, Coquimbo, Chili	29.95	760.7	65	18.3		calm			0		10							overcast	Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 36° 10′, E. 151° 59′	30.21	767.3	68	20.0	84	sse.			1		2	nw.				1	sse.	d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, N. 11° 08′, W. 78° 40′	29.98	761.5	77.5	25.3	86	nne.			3		3	ne.				4	nne.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, N. 2° 32′, E. 53° 21′	29.84	757.9	84.5	29.2	97	ne.			3		4					2	ne.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 24° 42′, W. 38° 44′	30.34	770.6	68	20.0	100	e.			4		10					4	ene; nnw.	raining	Capt. F. R. Dicken. Capt. H. H. Grenfell.
H. M. S. Phœnix																			
H. M. S. Rambler, N. 4° 39′, W. 1° 41′	29.93	760.2	82	27.8	95	wsw.			2		6	calm						hazy	Capt. A. Littleton.
H. M. S. Ready, Bussorah, Asiatic Turkey	30.09	764.3	63	17.2		calm			0		6							d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	29.69	754.1	35	1.7	90	wsw.			2		8							d. clouds	Lieut. V. B. Orlebar. Capt. E. T. Church.
H. M. S. Sea Gull																			
H. M. S. Thalia																			
H. M. S. Triumph, Callao Bay, Peru	30.01	762.2	67	19.4	94	calm			0		3	calm						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 9° 20′, E. 109° 05′	29.95	760.7	78	25.6	95	nne.			4-5		1					4	nne.	blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.10	764.5	74	23.3		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Muscat, Arabia	29.96	761.0	74.5	23.6	52	nw.			4-6		5	nw.				5	nw.	squally	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Brava, C. Verd Ids	30.07	763.7	71.6	22.0	81	ne.			2		0					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 13° 08′, W. 70° 33′	30.02	762.4	77.5	25.3	85	e.			4		0							gloomy	Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.26	768.6	50	10.0	72	wnw.	2	0.9	.....	.....	0	.....	.....	0	0	.....	.....	clear	
N. Yard, Portsmouth, N. H.	29.51	749.5	30	— 1.1	.....	nw.	6	2.7	.....	.....	10	.....	nw.	.....	.....	.....	.....	snowing	
Naval Hospital Yokohama, Japan	29.96	761.0	41.5	5.3	57	calm	.....	.....	0	.....	2	.....	w.	0	0	.....	.....	clear	
Adams. Callao, Peru	29.77	756.1	68	20.0	95	sse.	.....	.....	1	.....	8	.....	.....	0	0	gr'd	.....	cloudy	
Alaska. Valparaiso, Chili	29.87	758.7	65	18.3	73	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert. Singapore, India*	29.75	755.6	78	25.6	91	nnw.	.....	.....	2	.....	2	.....	calm	.....	.....	sm'h	.....	clear	
Alliance. N. 40° 49′, W. 68° 47′	29.18	741.2	42	5.6	91	w.	.....	.....	2	.....	10	.....	.....	light	light	sm'h	.....	rain & fog	
Ashuelot. Tientsin, China	30.59	777.0	30	— 1.1	100	sse.	.....	.....	1	.....	10	.....	calm	.....	.....	.....	.....	overcast	
Brooklyn, S. 44° 23′, W. 61° 47′	29.91	759.7	62	16.7	88	sw.	0	0	.....	.....	0	.....	.....	0	0	light	sw.	clear	
Colorado, New York, N. Y	29.69	754.1	38	3.3	63	nw.	15	6.7	.....	.....	2	.....	calm	0.54	13.7	.....	.....	hazy	
Enterprise, Norfolk, Va*	29.97	761.2	44	6.7	84	w.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Essex, Madeira I'd, Africa	30.45	773.4	62	16.7	72	wnw.	.....	.....	2	.....	2	.....	nw.	.....	.....	sm'h	sw.	clear	
Franklin, Norfolk, Va	30.00	762.0	43	6.1	92	w.	8	3.6	.....	.....	0	.....	.....	0.68	17.3	.....	.....	clear	
Galena, N. 41° 17′, E. 3° 26′	30.47	773.9	55	12.8	80	se.	.....	.....	3	.....	8	.....	se.	.....	.....	sm'h	.....	cloudy	
Independence, N. Yard, Mare I'd, Cal	29.79	756.7	50	10.0	79	ssw.	15.6	7.0	.....	.....	10	.....	sw.	0.16	4.1	.....	.....	overcast	
Kearsarge, New Orleans, La	30.23	767.8	51	10.6	79	ne.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Lackawanna, Valparaiso, Chili*	29.91	759.7	62	16.7	88	calm	.....	.....	0	.....	2	.....	n.	.....	.....	.....	.....	clear	
Lancaster, N. 36° 08′, E. 18° 23′	30.33	770.4	55	12.8	56	e.	.....	.....	2	.....	5	.....	.....	.....	.....	mod.	ne.	fair	
Marion, S. 30° 14,′ E. 41° 07′	29.90	759.4	77	25.0	82	se.	.....	.....	4	.....	5	.....	calm	.....	.....	long	ese.	fair	
Michigan, Erie, Pa	29.88	758.9	34	1.1	79	wnw.	.....	.....	6	.....	10	.....	wnw.	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I	29.54	750.3	36	2.2	100	nnw.	6	2.7	.....	.....	10	.....	calm	.....	.....	.....	.....	snowing	
Monocacy, Yokohama, Japan	30.15	765.8	45	7.2	76	nnw.	.....	.....	2	.....	2	.....	nnw.	.....	.....	.....	.....	fair	
Nipsic, Malaga, Spain	30.44	773.2	60	15.6	66	e.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Onward, Callao, Peru†	30.09	764.3	65	18.3	100	sse.	.....	.....	1	.....	5	.....	n.	.....	.....	long	w.	fair	
Palos, Hong Kong, China	30.11	764.8	60	15.6	94	ese.	.....	.....	1	.....	8	.....	w.	.....	.....	.....	.....	cloudy	
Passaic, Washington, D. C	29.95	760.7	35	1.7	.....	wnw.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear	
Pensacola. Valparaiso, Chili	30.01	762.2	62	16.7	61	w.	1	0.4	.....	.....	0	.....	.....	0	0	sm'h	.....	clear	
Powhatan, N. 30° 46′, W. 68° 00′	30.14	765.5	70	21.1	90	ssw.	.....	.....	4–5	.....	8	.....	ssw.	.....	.....	mod.	s;w.	cloudy	
Quinnebaug, N. 34° 08′, E. 19° 35′	30.40	772.1	51	10.6	79	ene.	.....	.....	3	.....	8	.....	ene.	.....	.....	long	.....	fair	
Ranger, N. 19° 40′, W. 105° 16′*	29.97	761.2	66	18.9	84	ese.	.....	.....	2	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, N. 20° 57′, E. 160° 16′*	29.92	760.0	75	23.9	81	w.	.....	.....	4	.....	2	.....	w.	0	0	sm'h	w.	fair	
Shenandoah, S. 30° 29′, W. 42° 20′*	30.14	765.5	75	23.9	57	e.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
St. Louis, League Island, Pa	29.97	761.2	37	2.8	62	nw.	18	8.0	.....	.....	0	.....	.....	0.64	16.3	.....	.....	clear	
Swatara, N. 33° 38′, E. 135° 12′*	30.11	764.8	48	8.9	63	ne.	.....	.....	5	.....	0	.....	.....	.....	.....	mod.	nne.	clear	
Tennessee, N. 37° 30′, W. 75° 12′	29.91	759.7	45	7.2	84	nw.	24	10.7	.....	.....	2	.....	.....	0	0	mod.	nw.	fair	
Vandalia, Cartagena, U. S. Col*†	30.03	762.7	77	25.0	91	ssw.	.....	.....	1	.....	5	.....	s.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass	29.47	748.5	32	0.0	100	nw.	3	1.3	.....	.....	10	.....	nw.	0.03	0.8	.....	.....	snowing	
Wachusetts, N. 45° 20′, W. 125° 00′	29.68	753.9	38	3.3	?	ssw.	.....	.....	6	.....	8	.....	sw.	.....	.....	r'gh	wsw.	cloudy	
Wyoming, Port Royal, S. C	30.12	765.0	49	9.4	93	nnw.	7	3.1	.....	.....	0	.....	.....	0.25	6.3	.....	.....	clear	
Yantic, Aspinwall, Panama*	29.97	761.2	78	25.6	91	n.	.....	.....	3	.....	5	.....	n.	.....	.....	.....	.....	fair	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 45° 35′, W. 53° 00′	30.13	765.3	30	—1.1	.....	s.	4	.....	10	.....	s.	3 h'r	snow	4	se.	overcast	C. Gapon, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, Boston, Mass*	29.37	746.0	30	—1.1	.....	ssw.	3	.....	10	.....	ssw.	20 h'r	snow	.....	.....	hazy	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen. Glasgow, Scotland*	29.82	757.4	49	9.4	.....	sw.	3	.....	10	.....	.....	.....	.....	.....	.....	raining	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 53° 04′, W. 11° 53′*	29.86	758.4	51	10.6	.....	ssw.	4	.....	2	.....	ssw.	2 h'r	2 h'r	mod.	w.	clear	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Liverpool, Eng	29.97	761.2	47	8.3	92	sse.	6	.....	10?	.....	sse.	.....	.....	.....	.....	clear.?	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 50° 57′, W. 14° 50′†	29.73	755.1	53	11.7	66	sw.	5	.....	5	.....	sw.	light	light	mod.	sw.	light rain	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, Philadelphia, Penn.*†	30.54	775.7	27	—2.8	77	nw.	6	.....	1	.....	wnw.	.....	.....	.....	.....	clear	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Savanilla, U. S. C.*†	29.87	758.7	73	22.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Maracaibo, Venezula, S. A	.....	.....	.....	.....	.....	ne.	3	.....	.....	.....	.....	.....	.....	.....	.....	fine	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 18° —′, W. 77° —′	29.81	757.2	.....	.....	.....	e.	4	.....	1	.....	e.	o	o	sm'h	e.	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICL OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 58° 29′, W. 60° 05′	29.21	741.9	46	7.8	.....	nw.	4	.....	4	.....	.....	.....	.....	.....	.....	blue sky	.....
Baroda, Capt. C. J. Russell, S. 0° 00′, W. 27° 27′	29.98	761.5	79.5	26.4	86	e.	1	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Caldew, Capt. W. Peterson, S. 52° 09′, W. 51° 16′	29.87	758.7	44	6.7	.....	calm	0	.....	10	.....	.....	.....	.....	.....	.....	foggy	.....
S. S. Cipero, Capt. W. N. Lailey, Georgetown, Demerara, S. A	30.04	763.0	78.2	25.7	90	ne.	2	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. City of Agra, Capt. Thos. Young, N. 41° 31′, W. 30° 52′	30.02	762.5	.....	.....	.....	w.	9	.....	5	.....	.....	.....	.....	.....	.....	squally	.....
Coppename. Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, S. 11° 00′, E. 89° 40′	29.86	758.4	82	27.8	83	ese.	4	.....	2	.....	.....	.....	.....	.....	.....	showery	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. S. G. Jones, S. 52° 23′, W. 56° 54′	29.80	756.9	48	8.9	92	nnw.	4	.....	6	.....	.....	.....	.....	...	.....	d. clouds	.....
Hope, Capt. James Campbell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 30° 24′, E. 13° 20′	29.99	761.7	70.6	21.4	79	sse.	4	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, S. 57° 20′, W. 67° 05′	28.94	735.1	50	10.0	78	nw.	9	.....	9	.....	.....	.....	.....	.....	.....	misty	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	30.01	762.2	67.8	19.9	70	s.	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Nalad, Capt. John Smith, N. 28° 33′, W. 51° 51′	30.45	773.4	68.5	20.3	90	ene.	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry, S. 25° 59′, E. 79° 42′	30.12	765.0	76	24.4	64	ese.	6	.....	7	.....	.....	.....	.....	.....	.....	showery	.....
S. S. Strathleven, Capt. C. W. Pearson, N. 50° 40′, W. 0° 45′	30.20	767.1	41.5	5.3	91	sw.	3	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Superb, Capt. Berridge N. 44° 59′, W. 22° 20′	29.64	752.8	55.6	13.1	68	sw.	6	.....	7	.....	.....	.....	.....	.....	.....	squally	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 47° 32′, W. 41° 00′*†	29.99	761.7	.....	.....	.....	w.	7	.....	7	.....	w.	o	o	high	w.	fine	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman, N. 24° 20′, W. 82° 45′*†	30.28	769.1	72	22.2	.....	n.	6	.....	7?	.....	n.	o	o	sm'h	sw.	clear.?	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Stembridge, 3d off.
S. S. Gallia, Capt. W. H. P. Hains, N. 45° 28′, W. 42° 45′*	30.03	762.7	38	3.3	80	wnw	7–8	.....	8	.....	w.	rain	hail	high	w.	stormy	J. H. Mills, 3d officer.

MERCHANT-MARINE SERIES.—Continued.

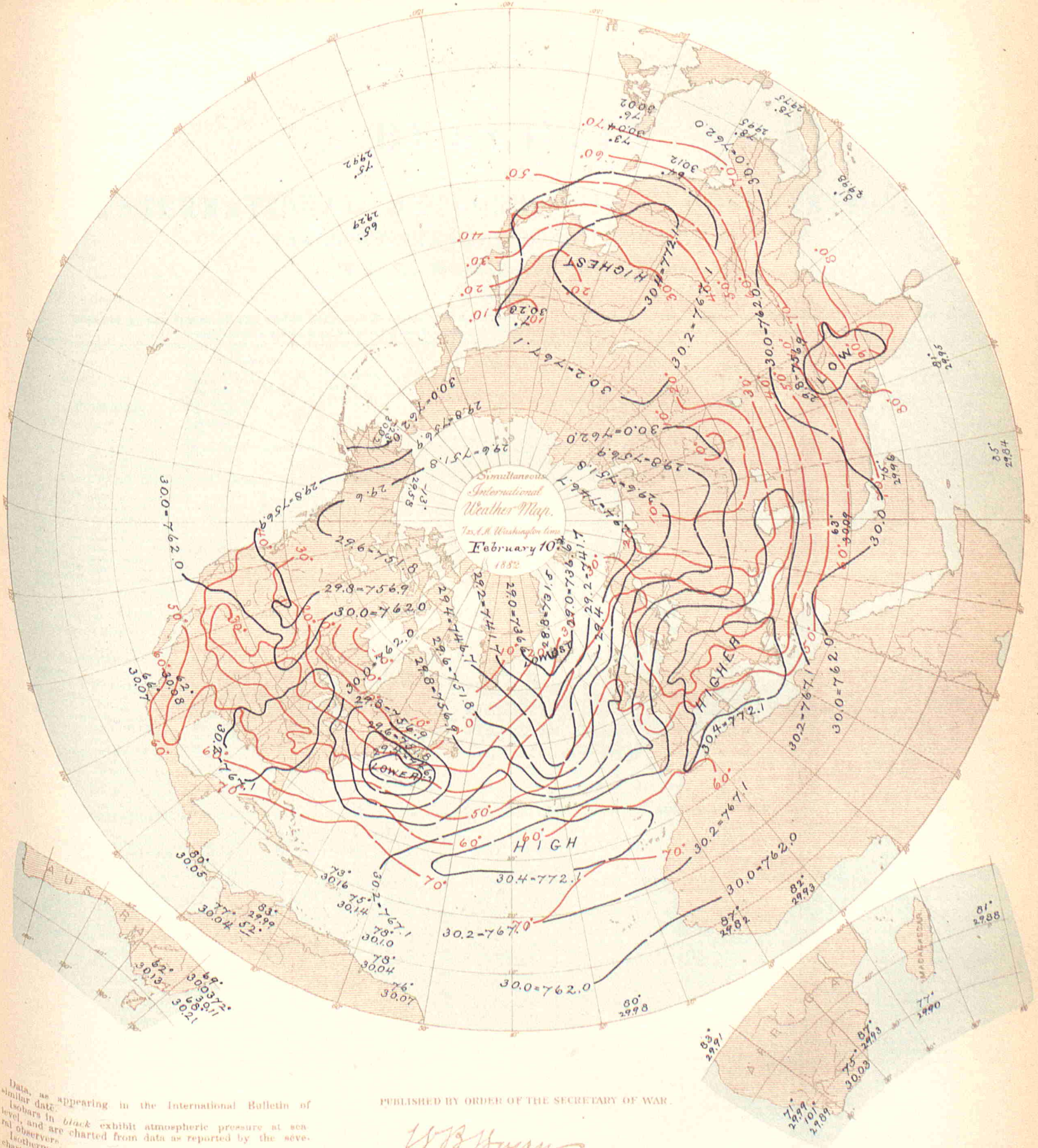
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. E. Frangeul, N. 46° 36′, W. 45° 04′	29.91	759.7	32.0	0.0	.....	wsw.	5	.....	7	.....	w.	3h'r	3h'r	very h'vy	w.; wsw.	cloudy	.....
S. S. France, Capt. Périer d'Hauterive, N. 40° 29′, W. 71° 34′*†	29.69	754.0	36.5	2.5	.....	w.	6	c	0	w.	.....	0	0	.....	w.	clear	.....
S. S. St. Laurent, Capt. A. Sérvan, N. 42° —′, W. 60° 40′*†	29.29	744.0	39.2	4.0	.....	w.	10	.....	.....	.....	.....	light	light	very h'vy	w.	.....	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York.																	
S. S. Gellert, Capt. W. Khlewein,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Silesia, Capt. A. Albers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. O. Hebich, N. 40° 48′, W. 69° 46′*	29.26	743.2	37	2.8	.....	wnw.	5	.....	10	.....	wnw.	19 h'r	19 h'r	4	wnw.	rainy	Jorgensen, Wolkowotz
JOHNSTON LINE.																	
Patterson, Ramsay & Co., Agents, Baltimore.																	
S. S. Thanemore, Capt. John Inch,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, La Plata, S. A*†	30.10	764.5	78	25.6	.....	sse.	1	.....	1	.....	sw.	0	0	.....	.....	clear	J. Carroll.
LEYLAND LINE.																	
Thayer & Lincoln, Agents, Boston.																	
S. S. Iberian, Capt. E. Parry, N. 51° 02′, W. 17° 05′	.....	.....	.....	.....	.....	sse	3	.....	5	.....	sse.	0	0	light	sse.	.....	E. Parry.
MALLORY LINE.																	
C. H. Mallory & Co., Agents, Nem York.																	
S. S. Colorado, Capt. M. B. Crowell, New York, N. Y*†	29.35	745.5	37	2.8	.....	wnw.	3	.....	0	.....	.....	18 h'r and	rain sleet	.....	.....	clear	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. Freja, Capt. A. C. Struckmann,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO.																	
Jas. E. Ward & Co., Agents, New York.																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d off.
S. S. Santiago, Capt. S. F. Phillips, Cienfuegos, Cuba†	30.16	766.1	72	22.2	.....	ne.	1	.....	0	.....	.....	0	0	.....	.....	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom N. 9° 22′, W. 79° 59′† [man	30.00	762.0	81	27.2	.....	nne.	2	.....	.....	.....	.....	.....	.....	.....	nne.	overcast	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey- N. 37° 38′, W. 74° 35′*† [nolds	29.70	754.4	50	10.0	.....	nw.	4	.....	.....	.....	.....	.....	.....	.....	se.	clear	.....
S. S. Elbe, Capt. W. Willigerod N. 49° 20′, W. 16° 47′*	29.62	752.3	52.7	11.5	.....	ssw.	6	.....	.....	.....	.....	.....	.....	r'gh	.....	cloudy	.....
S. S. Lessing, Capt. B. Voss, N. 47° 46′ W. 39° 40′*†	29.73	755.1	41	5.0	.....	nw.	6	.....	.....	.....	.....	.....	.....	7	wnw.	stormy	.....
S. S. Maas, Capt. T. H. Bonjer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke, N. 46° 00′, W. 38° 00′*†	29.95	760.7	49.5	9.7	.....	nw.	8–9	.....	.....	.....	.....	.....	.....	.....	nw; wsw.	snowy	.....
S. S. P. Caland, Capt. E Deddes, N. 49° 33′, W. 26° 57′	29.11	739.4	57.2	14.0	.....	wsw.	5	.....	.....	.....	.....	.....	.....	5	wsw.	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 44° 50′, W. 48′ 48′	29.94	760.5	32	0.0	.....	s.	5	.....	.....	.....	.....	.....	.....	.....	w.	cloudy	.....
S. S. Scythia, Capt. M. Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD.																	
A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.																	
S. S. Gen. Werder, Capt. H. Christoffers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d off.
S. S. Leipzig, Capt. F. Pfeiffer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sander & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	30.37	771.4	30.2	—1.0	.....	ssw.	4–5	.....	10	.....	s.	0	0	.....	.....	dense fog	.....
S. S. Mosel, Capt. F. Hesse, N. 43° 38′, W. 57° 47′	29.63	752.6	38.8	3.8	.....	ese.	6	.....	10	.....	.....	4 h'r	4h'r	r'gh	ese.	rainy	J. Hesse.
S. S. Neckar, Capt. R. Busslus	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, S. 19° 43′, W. 35° 28′*	30.02	762.5	84.2	29.0	79	n.	3	.....	5	.....	n.	0	0	2	n.	fair	.....
S. S. Oder, Capt. Undeutsch, N. 47° 39′, W. 38° 23′*	29.69	754.1	38.8	3.8	.....	wnw.	7	.....	10	.....	nw.	snow	snow	h'vy	nw.	snowing	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, N. 36° 00′, W. 32° 03′	30.44	773.2	.....	.....	.....	wsw.	5	.....	4	.....	wsw.	0	0	r'gh	wsw.	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO.																	
Leland Stanford, President, San Francisco.																	
S. S. Belgic, Capt. H. Davison, N. 32° 04′, E. 164° 04′†	29.29	744.0	65	18.3	83	sw.	7	.....	8	.....	w.	0	0	high	sw.	cloudy	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, San Francisco, Cal*†	30.09	764.3	52	11.1	86	s.	5	.....	5?	.....	se.	.....	.....	.....	.....	cloudy?	.....
S. S. Oceanic, Capt. J. Metcalfe, N. 30° 14′, E. 131° 05′..*	30.20	767.1	59	15.0	64	nw.	2	.....	7	.....	nw.	.....	.....	2	ne.	cloudy	.....
OCEAN S. S. CO.																	
George Young, Agent, New York.																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.38	746.2	.....	.....	.....	nw.	3	.....	0	.....	.....	.....	.....	.....	.....	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Boston, Mass..†	29.47	748.5	34	1.1	90	nw.	3	.....	.....	.....	nw.	12h'r and	rain snow	.....	.....	heavy snow	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 46 17′, W. 124° 50′†	29.67	753.6	38	3.3	80	w.	3	.....	5	.....	w.	.....	.....	mod	sw.	squally	E W. Holmes.
S. S. Willametta, Capt. L. Meyer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.75	755.6	36	2.2	90	calm	0	.....	8	.....	w.	.....	.....	.....	.....	fair	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 34° 31′, W. 120° 41′†	29.96	761.0	49	9.4	77	nnw.	3	.....	10	.....	nw.	.....	.....	mod	wnw.	cloudy	.....
S. S. G. W. Elder, Capt. H. G. Morse, San Francisco, Cal†	29.85	758.2	45	7.2	.....	w.	4	.....	4	.....	nw.	0	0	light	w.	clear	.....
S. S. Idaho, Capt. H. M. Hayward, Puget Sound, Washington Territory	29.67	753.6	38	3.3	91	e.	7	.....	2	.....	wsw.	.....	.....	.....	.....	clear	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, San Buena Ventura, California†	30.05	763.3	47	8.3	85	e.	2	.....	5†	.....	.....	0	0	.....	.....	clear†	.....
S. S. State of California, Capt. G. Debney, N. 45° 50′, W. 124° 15′†	29.65	753.1	32	0.0	89	sw.	5	.....	10	.....	wsw.	snow	snow	h'vy	wsw.	snowing	.....
S. S. Victoria, Capt. W. E. Plummer, N. 48° 58′, W. 123° 05′†	29.76	755.8	37	2.8	80	se.	3	.....	8	.....	.....	.....	.....	mod.	w.	cloudy	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of New York, Capt. W. B. Cobb, N. 0° 30′, W. 166° 40′†	29.95	760.7	80	26.7	86	ene.	3	.....	5	.....	ne.	0	0	mod.	ne.	fair	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, S. 33° 50′, E. 153° 26′†	30.11	764.8	72	22.2	71	ne.	3	.....	5	.....	n.	0	0	mod.	sw.	fair	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, Hong Kong, China†	30.19	766.8	60	15.6	66	ne.	2	.....	10	.....	e.	0	0	.....	.....	cloudy	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 35° 44′, W. 121° 48′†	29.90	759.4	53	11.7	73	se.	5	.....	10	.....	se.	0	0	mod.	se.	misty	.....
S. S. Grenada, Capt. M. Connolley, Panama, Panama†	29.96	761.0	73	22.8	100	nnw.	2	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. South Carolina, Capt. W. J. Russell, N. 9° 13′, W. 84° 40′†	30.05	763.3	80	26.7	70	ene.	4	.....	0	.....	.....	0	0	sm'h	.....	hazy	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.03	762.7	69	20.6	84	calm	0	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 45° 15′, W. 36° 26′*†	29.95	760.7	42	5.6	.....	w.	8	.....	10	.....	w.	5 h'r	rain hail	very h'vy	wnw.	stormy	.....
S. S. Nederland, Capt J. Ueberweg, N. 49° 42′, W. 22° 02′*†	29.98	761.5	51	10.6	.....	s.	4	.....	10	.....	s.	rain	rain	r'gh	sw.	misty	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Jersey City, N. J*	29.74	755.4	39	3.9	63	wnw.	2	.....	0	.....	.....	0	0	.....	.....	clear	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A Beynon, N. 44° 06′, W. 54° 15′*†	29.77	756.1	34	1.1	100	s.	4	.....	10	.....	.....	3 h'r	rain snow	mod	w.	overcast	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels. Antwerp, Belgium*	30.14	765.5	42	5.6	.....	sw.	4	.....	2	.....	.....	0	0	.....	.....	clear	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis. N. 40° 40′, W. 71° 50′*	29.36	745.7	51.2	10.7	78	nw.	5	.....	9	.....	wnw.	2 h'r	2 h'r	mod.	nw.	gloomy	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 57° 36′, W. 19° 21′†	29.58	751.3	45.5	7.5	.....	wsw.	4	.....	3	.....	wsw.	1 h'r	1 h'r	h'vy	wsw.	clear	J. T. Elberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell N. 41° 23′ W. 63° 58′*†	29.12	739.6	50	10.0	93	sse.	5	.....	10	.....	sw.	6 h'r	light	mod.	wnw.	foggy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 48° 07′ W. 30° 25′*†	29.25	742.9	47	8.3	.....	wnw.	4	.....	5	.....	w.	rain	rain	mod.	nw.	d. clouds	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving, N. 40° 37′, W. 68° 16′†	29.29	744.0	51	10.6	93	wsw.	2	.....	10	.....	.....	2 h'r	2 h'r	sm'h	s.	drizzling	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 49° 50′, W. 5° 30′*	30.06	763.5	50	10.0	.....	ssw.	6	.....	7	.....	sw.	0	0	r'gh con.	.....	foggy	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. Pensacola, Florida †	30.41	772.4	50	10.0	71	n.	2	0	0			0	0			clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, Off Cape Henry, Va*†	30.24	768.1				wnw.	4		0			0	0	light	ne.	clear	C. Bailey.
Bk. Alpha, Capt. O. Grönn N. 24° 19′, W. 25° 25′*†	30.31	769.9	74	23.3		ene.	5		2		ene.	0	0	mod.	ene.	fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby, N. 50° 50′ W. 0° 55′*†	30.35	770.9	46	7.8	76	s.	2		7		sw.	0	0	sm'h		hazy	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, Ponce, Porto Rico, W. I.*†	30.14	765.5	78	25.6		calm	0		2		e.	0	0			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 9° 44′, W. 26° 38′*†	30.00	762.0	78	25.6		ne.	6		3		ne.	0	0	mod.	ne.	fair	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 45° 39′, W. 31° 24′*†	29.24	742.7				nw.	7				nnw.	20 h'r	20 h'r	h'vy	nw.	rain & hail	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill, S. 41° 55′ W. 55° 12′†	29.90	759.4				sse.	2		8		s.	0	0	sm'h	sse.	cloudy	A. J. Pettengill.
S. Enoch Train, Capt. H. D. Chapman, Bremerhaven, Germany*	30.33	770.4				sw.	2		10		sw.	0	0			foggy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.																	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C†	30.05	763.3	40	4.4	73	w.	3		0			0.89	22.6			clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 29° 43′, W. 21° 51′			68	20.0		ne.	5		5		e.	0	0	long	wnw.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 7° 44′, W. 47° 29′*†	29.07	738.4				ne.	7		10		ne.	sl't	sl't	long h'vy	ne.	overcast	
Bk. Geo. Booth, Capt. D. Williams, N. 23° 00′, W. 38° 24′*†	30.20	767.1	66	18.9		ese.	4					0	0	cross		clear	D. Williams.
Bk. Granville, Capt. R. Bonney																	
Schr. Henry Denison, Capt Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt. S. 42° 05′. E. 29° 42′*	30.04	763.0				n.	3		0			0	0	mod.	w.	clear	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Brt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo T. L. Compte																	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen, Off Alboran Id, N. Africa*†	30.50	774.7				ese.	1					0	0	sm'h		fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 40° 03′, W. 15° 44′*†	30.40	772.1	54	12.2	86	nw.	6		2		nw.			r'gh.	nw.		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.38	771.6	56	13.3	57	ne.	2		0							clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 16° 00′, W. 31° 45′*†	30.00	762.0				e.					e.	0	0			clear	J. Connolly.
Schr. S. B. Hubbard, N. 37° 35′, W. 75° 14′*†	30.01	762.2	45	7.2		nw.	3		1		nw.	rain	rain	hv'y	nw.	fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 10° 20′, W. 32° 49′*	29.88	758.9	79.3	26.3	96	se.	2		3		se.			mod.	se.	d. clouds	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 33° 58′, W. 22° 18′*†	30.51	774.9	63	17.2	78	wnw.	1		8		w.	½ h'r	hv'y	h'vy	nw.	cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 34° 00′, E. 12° 35′*†	30.20	767.1				sw.	3		2		se.	0	0	h'vy	sw.		
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 41° 00′, W. 37° 52′*†	29.95	760.7	53	11.7	79	wnw.	9				wnw.			h'vy	nw.	cloudy	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, N. 0° 11′, W. 28° 20′*†	30.00	762.0				var.					ne. se.			light	nne.	rainy	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 11, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.15	765.8	66.2	19.0	77	w.			3		0			0.039	1.0	clear	Moiroud.
Algiers			30.09	764.3	58.6	14.8	85	w.			1		5			0	0	cloudy	Nicolas.
La Calle			30.11	764.8	62.2	16.8	68	wnw.			2		4			0	0	cloudy	Fonfrède.
Tunis			30.13	765.4															Jacques.
Sfax																			Gan.
Saida			30.17	766.2	54.0	12.2	63	nnw.			1		3			0	0	pretty fair	Dumas.
Tebessa			30.15	765.7	52.2	11.2	35	nw.			4		3			0	0	pretty fair	Derché.
Geriville					56.1	13.4	23	w.			3		3			0	0	pretty fair	Lonchamp.
Laghouat			30.24	768.1	59.0	15.0	30	s.			4		0			0	0	clear	Herbin.
Biskra			30.22	767.7	59.7	15.4	51	se.			3		0			0	0	clear	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	63.2	17.3	67	se.	5	2.2			0			0	0	dense haze	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.67	753.5	30.23	767.9	42.4	5.8	59	se.			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.50	749.3	30.31	769.9	32.0	0.0	92	e.	6.3	2.8			10			0	0		Dr. Wierzbiski.
Eperies	29.34	745.1	30.26	768.7	33.1	0.6	78	n.			3		10 s			0	0		Julius Mikolik.
Gratz	28.97	735.8	30.26	768.5	42.8	6.0	51	sw.			1		10			0	0		Andreas Rospini.
Hermannstadt	28.76	730.4	30.26	768.5	33.1	0.6	89	sw.			2		10			0.051	1.3	snowing	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.87	733.2	30.27	768.9	34.9	1.6	75	ne.			1		1			0	0	clear	The Staff.
Lemberg	29.22	742.2	30.26	768.6	31.3	— 0.4	72	e			1		10			0	0		Dr. T. Stanecki.
Pola	30.21	767.3	30.33	770.3	45.1	7.3	74	wnw.			1		0			0	0		I. R. Hydrographic Office.
Szathmar	29.76	755.9	30.22	767.6	33.4	0.8	75	s.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	29.95	760.6	30.24	768.0	41.5	5.3	66	sw.			1		4			0	0		Karl Stancel.
Trieste	30.23	767.8	30.33	770.4	45.0	7.2	66	calm			0		0			0	0		Rieder.
Vienna	29.52	749.9	30.26	768.5	43.9	6.6	47	n.			1		1			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.61	752.1	29.71	754.6	45.0	7.2	88	s.	16	7.2			7			blank	blank	misty	W. Boswell.
Armagh, Observatory	29.35	745.5	29.58	751.3	49.1	9.5	91	se.	21	9.4			10					squally	S. Call.
Bidston, Liverpool Obs'y			29.75	755.6	44.9	7.2	85	se.	28	12.5			7					d. clouds	John Hartnup.
Bolton, Sharples	29.26	743.2	29.80	756.9	42.9	6.1	87	sse.	6	2.7			9					d. clouds	Thomas Mackereth {A.S.
Bradford, Yorkshire	29.44	747.8	29.83	757.7	48.1	8.9	89	s.			1		0			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.03	702.7	30.06	763.5	80.0	26.7	71	ne			2		2					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			29.87	758.7	46.0	7.8	80	s.			0.6		7						John McLaren.
Chatham, School M. E.	29.84	757.9	29.97	761.2	50.1	10.1	73	s.			2		4					d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	29.54	750.3	29.76	755.9	49.4	9.7	93	s.			4		10					rain & fog	The Staff.
Fort Napier, Natal	27.61	701.3	29.83	757.7	86.2	30.1	47	se.			2		0					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	87.0	30.6	58	calm			0		3						Sergt. John Robinson.
Galway, Queen's College			29.44	747.8	50	10.1	93	s.			2		10					overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.30	769.6	30.36	771.1	58.3	14.6	87	sw.			3		7					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	29.47	748.5	29.68	753.9	47.9	8.8	81	sse.			3		7					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.76	755.9	29.93	760.2	50.3	10.2	65	sse.			1		4					d. clouds	The Staff.
Guernsey	29.55	750.6	29.85	758.2	44.0	6.7	95	s.			3		8					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	29.88	758.9	29.92	760.0	49.2	9.6	74	sse.	18	8.0			4					d. clouds	The Staff.
Leicester, Museum	29.58	751.3	29.84	757.9	50.0	10.0	78	sw.			1		8					d. clouds	J. C. Smith.
Malta, Mediterranean	30.26	768.6	30.33	770.4	57.0	13.9	69	nw.			2		2					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.28	769.1	30.33	770.4	73.0	22.8	85	ne.			3		8					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	29.65	753.1	29.88	758.9	45.7	9.3	74	sse.			5		5					misty	The Staff.
Plymouth	29.73	755.1	29.80	756.9	51.2	10.7	93	sse.			2		2					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.61	752.1	44	6.7	96	se.	14	6.3			10					foggy	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.19	766.8	30.26	768.6	38.0	3.3	80	sw.			1		10			blank	blank	d. clouds	W. H. Lyne
Sheffield	29.55	750.6	29.84	757.9	47.2	8.4	77	sw.			2		5			0	0	d. clouds	W. F. Cooper.
Silloth Rectory	29.68	753.9	29.71	754.6	53.0	11.7	64	ssw.			3		4			0.020	0.5	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.80	756.9	43.7	6.5	87	s.	9	4.0			7					d. clouds	I. New.
Stratfield Turgiss	29.68	753.9	29.90	759.4	48.4	9.1	81	s.			1.5		8					d. clouds	Rev. C. H. Griffiths. F. M. S.
Truro, Royal Institution	29.67	753.6	29.73	755.1	53	11.7	86	s.			6		10					raining	W. Newcombe.
Valencia, Observatory	29.47	748.5	29.49	749.0	51.6	10.9	75	s.	32	14.3			10					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.79	756.7	29.82	757.4	76.0	24.4	89	ne.	10.6	4.7		0	2 k			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.86	758.4	29.90	759.4	78.8	26.0	71	n.	16	7.2		0	0			0	0		The Staff, for D. Gill.
Worcester†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.87	758.7	29.92	760.0	11	—11.7	100	nw.	25	11.2		2 s	2 s			1.200	30.5	fair	H. J. Cundall, C. E.
Chatham, N. B*.	30.09	764.3	30.16	766.1	9	—12.8	80	w.	10	4.5		5 ck	0	w.		0.38	9.7	fair	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.36	771.1	30.39	771.9	— 9	—22.8	82	nw.	5	2.2		0	0			0.02	0.5	clear	J. McWilliams.
Fort Garry, Manitoba*	28.95	735.3	29.83	757.7	18	— 7.8	96	calm	0	0		5 ck	5 s	w.	w.	0	0	fair	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*.	29.81	757.2	29.95	760.7	14	—10.0	91	nw.	17	7.6			10 k		n.	0.56	14.2	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.25	768.3	30.62	777.7	11	—11.7	80	n.	2	0.9		0	0			0.01	0.3	clear	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.36	771.1	30.59	777.0	9	—12.8	63	nw.	12	5.4		0	0			0.01	0.3	clear	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.80	756.9	30.57	776.5	8	—13.3	100	se.	11	4.9		5 k	5 k	se.	se.	0	0	fair	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.78	756.4	30.54	775.7	20	— 6.7	98	calm	0	0		0	0			0	0	clear	H. Morgan.
Port Stanley, Ontario	29.82	757.4	30.52	775.2	27	— 2.8	80	e.	12	5.4		8 k	0	w.		0	0	cloudy	M. Payne.
Quebec, Quebec*	30.08	764.0	30.44	773.2	2	—16.7	72	nw.			5	0	0			0.20	5.1	clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.10	764.5	30.64	778.2	—14	—25.6	70	calm	0	0		5 ck	0	nw.		0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.70	754.4	30.48	774.2	16	— 8.9	87	se.	14	6.3			10 ks			0	0	cloudy	
St. Andrews, N .B.	30.15	765.8	30.21	767.3	8	—13.3	76	nw.	14	6.3		0	0			1.05	26.7	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.46	748.3	29.53	750.0	17	— 8.3	96	n.	34	15.2			10 n			0.90	22.9	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.20	767.1	30.62	777 7	17	— 8.3	73	n.	5	2.2		2 ck	2 ks	nw.		0	0		Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.09	764.3	30.16	766.1	17	— 8.3	70	n.	11	4.9		5 ck	8 k	nw.	n.	1.08	27.4	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.33	745.0	29.58	751.3	26	— 3.3		se.	1	0.4			10			0.20	5.1		John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow																			N. Titoushkin.
Sung-shu-chwang†	24.51	622.5			32.9	0.5		calm			0		10			0	0		A. Guoluy.
Zi-Ka-Wei, near Shanghai	30.43	772.8	30.45	773.5	36.5	2.5	82	ne.	1.8	0.8			0			0.27	6.9	clear	M. Marc Dechevrens, S. J
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.13	765.2	30.17	766.4	32.2	0.1	87	sw.	11	5			10						Oversergent Fischer.
Fanöe	30.09	764.2	30.11	764.7	34.0	1.1	96	s.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.54	750.4	29.59	751.5	3.0	—16.1	85	ene.			4		1						S. Kleinschmidt.
Stykkisholm, Iceland	28.95	735.3	28 99	736.4	30.2	— 1.0		e.			4		10					snowing	A. O. Thorlacius.
Thorshavn	29.46	748.3	29.50	749.2	45.3	7.4	82	sse.	16	7			9						Overloerer Bergh.
Vestervig	29.96	761.0	30.05	763.3	38.5	3.6	95	s.			4		3						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.44	747.8	30.10	764.6	52.9	11.6	61	sse.			1	0	2 k			0	0	slightly cl'dy	M. Labroue, Director.
Alençon, Normal School	29.47	748.6	30.02	762.6	37.0	2.8	89	s.			2	c	0	ne.		0	0		M. Nicot, Director.
Arras, Engineer School	29.74	755.4	30.01	762.2	42.4	5.8	71	se.			4	1 c	0			0	0	clear	M. Klein, Commandant.
Avignon, Normal School	30.19	766.8	30.27	768.8	50.0	10	62	ese.			2		10			0	0	covered	M. Giraud, Director.
Bar-sur-Seine	29.55	759.5	30.11	764.9	47.3	8.5	59	s.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	29.79	756.7	30.07	763.8	41.9	5.5	63	e.			1		0			0	0	clear	M. Frère Eugène Marié
Besançon, Normal School			30.13	765.3	45.5	7.5	51	sw.			3		2 n		s.	0	0	slightly cl'dy	M. Gobin, Director.
Bordeaux, Observatory	29.78	756.5	30.05	763.2	56.7	13.7	47	sw.			1		8		sw.	0	0	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.46	748.2	30.02	762.5	46.4	8	86	ne.			1		8		ne.	0	0		M. Postel, Director.
Brest, Naval Observatory	29.63	752.7	29.87	758.8	50.0	10.0	97	ssw.			2		9		ssw.	0	0		M. de Kennaree, Dir.
Caen, Normal School	29.90	759.5	29.98	761.5	47.3	8.5	72	se.			2		2		s.	0	0	slightly cl'dy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.72	755.0	30.06	763.4	48.7	9.3	76	s.			1		0			0	0	clear	M. Jadot, Director.
Charleville, Normal School	29.61	752.1	30.14	765.5	43.5	6.4	91	se.			1		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.70	729.0	30.06	763.5	54.3	12.4	43	sse.			3		5 ck	0		0	0	½ covered	M. Allnard, Director.
Cluny, Normal School	29.31	744.4	30.17	766.4	48.2	9	56	s.			6		0			0	0	clear	M. de Villemontée, Dir.
Commercy, Normal School	29.28	743 6	30.18	766.5	48.4	9.1	56	ssw.			1	1	1	ssw.	ssw.	0	0	clear	Dr. Coulet, Director.
Gap, Normal School	27.65	702.2	30.23	767.8	46.4	8	42					c	0			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.11	739.3	30.26	768.6	49.5	9.7	42	s.			2		8		s.	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.39	746.5	30.17	766.4	46.9	8.3	45	ese.			1	2 c	0			0	0	slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.44	722.4	30.03	762.7	55.0	12.8	38	sw.			3	ck	0	sw.		0	0		M. Rivoire, Director.
Lamballe, Normal School	29.61	752.2	29.93	760.1	48.2	9	79	s.			2		5		s.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.48	748.9	30.04	763.1	62.6	17	39	ne.			1	c	0	n.		0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.83	757.6	29.93	760.2	51.8	11.0	100	se.			3		10		s.	0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.14	740.1	30.21	767.4	49.1	9.5	55	s.			3		1k; kn	s.	s.	0	0	clear	M. André, Director.
Mans, Normal School	29.72	755 0	30.04	763.1	44.8	7.1	73	sw.			3		2		ssw.	0	0	slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	30.01	762.2	30.28	769.2	53.2	11.8	53	ese.			2		10		ese.	0	0		M. Stephan, Director.
Montlouis l'Institituteur	24.81	630.2	29.65	753.2	37.8	3.2	58	sw.	11.2	5.0			3		w.	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.10	764.4	30.21	767.2	48.9	9.4	100	se.			2		5		se.	0.20	5.	raining	M. Galzin, Director.
Nancy, Normal School	29.37	746.1	30.17	766.3	48 2	9	63	sse.			2	0	0			0	0	clear	M. Hasse, Director
Nantes, Observatory	29.82	757.5	29.98	761.6	55.4	13	68	s.			2–3	c	9 k		ssw.	0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.00	761.9	30.11	764.7	58.8	14.9	48	sw.	22.4	10.0			5	sw.		0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.15	537.2			23.9	—4.5		s.			1		1		s.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.17	740.9	30.28	769.1	42.8	6	91	s.			1		5			0	0	cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.17	639.2			39.2	4.0	64	s.			4	c	2 k			0	0	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.95	760.7	29.98	761.5	52.9	11.6	73	s.			1		10			0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.73	755.1	29.95	760.6	51.8	11	75	se.			2		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	27.97	710.3	30.13	765.3	46.0	7.8	72	e.			4		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	29.98	761.5	30.03	762.7	44.6	7	78	se.			1		0			0	0	clear	M. Platrier, Director.
Saint Lô, Normal School	29.92	759.9	30.08	763.9	46.0	7.8	75	s.			1		5		s.	0	0	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.90	759.5	30.07	763.7	46.4	8.0	60	sse.			1		0			0	0	clear	M. Renou, Director.
Toulouse, Observatory	29.41	747.1	30.14	765.5	54.0	12.2	67	sse.			3		2		w.	0	0	slightly cl'dy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.55	750.6	30.04	763.1	47.1	8.4	57	s.			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.79	756.6	30.08	764.0	46.2	7.9	62	se.			1		0			0	0	clear	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.39	746.5	30.25	768.4	37.4	3.0	66	se.			1		0			0	0		Prof. Dr. Hoh.
Berlin	30.01	762.3	30.20	767.0	37.0	2.8	66	se.			2		3			0	0	foggy	Prof. Dr. Arndt.
Breslau	29.72	755.0	30.26	768.6	40.8	4.9	62	se.			2		0			0	0		Royal University Obs'y.
Carlsruhe	29.80	756.8	30.26	768.6	31.6	— 0.2	92	sse.			2		0			0	0		Albert Senz.
Cassel	29.35	745.5	30.07	763.7	36.3	2.4	63	s.			1		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.87	758.8	30.26	768.7	31.5	— 0.3	89	ssw.			1		10			0	0		Physical Society.
Friedrichshafen	28.79	731.3	30.32	770.0	28.4	— 2.0	100	w.			1		10			0	0	dense fog	Wilhelm, Chief Tel.
Hamburg	30.08	764.1	30.18	766.5	29.8	— 1.2	94	sse.			3		10			0	0	foggy	E. Preller.
Kiel	30.15	765.8	30.17	766.2	32.0	0.0	92	s.			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.77	756.2	30.21	767.3	40.1	4.5	59	s.			2		7			0	0		H. Leppig, Asst.
Magdeburg	30.01	762.2	30.21	767.3	27.7	— 2.4	100	ne.			1		10			0	0		Dr. Assmann.
Memel	30.22	767.5	30.26	768.7	36.1	2.3	93	wsw			4		10					smoky	Issermann.
Munich	28.38	720.8	30.26	768.5	39.0	3.9	41	ne.			1		1			0	0		Central Station.
Neufahrwasser	30.24	768.1	30.26	768.5	37.6	3.1	81	s.			2		1			0	0		A. Lothes.
Neustadt, Palatinate	29.69	754.2	30.22	767.6	27.0	— 2.8		calm			0		10			0	0		Dicknether.
Stuttgart	29.22	742.3	30.15	765.7	42.8	6.0	63	e.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.17	766.2	30.19	766.9	33.4	0.8	96	se.			2		0			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.89	759.1	30.29	769.3	48.6	9.2		n.			0.5	10	0			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.79	756.6	29.84	758.0	76.1	24.5	44	wsw.	29	13.0			0			0	0	blue sky	
Deesa	29.27	743.3	29.74	755.4	79.6	26.4	29	w.	14.2	6.4			0			0	0	blue sky	
Bombay	29.80	757.0	29.84	757.9	78.7	25.9	72	nw.	13	5.8			0			0	0	blue sky	
Poona, Yarrowda	27.94	709.5	29.77	756.2	83.3	28.5	25	wnw.	25	11.2			0			0	0	blue sky	
Belgaum	27.28	692.9	29.79	756.7	80.4	26.9	42	wsw.	9	4.0			0			0	0	blue sky	
Lahore	28.92	734.6	29.70	754.3	55.6	13.1	75	calm	2.5	1.1			3			1.25	31.8	d. clouds	
Roorkee	28.73	729.8	29.66	753.3	61.8	16.6	74	se.	6.3	2.8			10			0.09	2.3		
Agra	29.09	739.0	29.67	753.5	73.2	22.9	63	w.	5.5	2.5			3		w.	0	0		
Nagpur	28.67	728.1	29.69	754.0	89.5	31.9	22	w.	5.3	2.4			0			0	0	blue sky	
Jubbulpore	28.48	723.4	29.85	758.1	76.1	24.5	53	w.	4.7	2.1			0			0	0	blue sky	
Lucknow	29.36	745.7	29.73	755.2	81.7	27.6	30	sse.	4.8	2.2			5			0	0	d. clouds	
Allahabad	29.33	744.9	29.64	752.8	78.8	26.0	46	calm	4.2	1.9			0			0	0	blue sky	
Patna	29.54	750.3	29.73	755.1	74.1	23.4	56	e.	7.8	3.5			4	e.	e.	0.02	0.5	d. clouds	
Hazaribagh	27.70	703.6	29.72	754.9	73.8	23.2	41	s.	8.1	3.6			8		s.	0	0	thunder	
Cuttack	29.68	753.9	29.76	756.0	82.2	27.9	47	wsw.	5.1	2.3			0			0	0	blue sky	
Calcutta, Alipore	29.76	756.0	29.79	756.6	78.5	25.8	63	nne.	11.0	4.9			7		w.	0	0	d. clouds	
Dhubri	29.70	754.3	29.82	757.5	65.9	18.8	87	ene.	3.6	1.6			6		w.	0.03	0.8	gloomy	
Chittagong	29.77	756.1	29.86	758.5	73.4	23.0	79	sw.	3.4	1.5			8			0	0	d. clouds	
Sibsagar	29.56	750.9	29.91	759.7	62.3	16.8	94	se.	2.6	1.2			10	w.	w.	0.05	1.3	overcast	
Jeypore	28.23	716.9	29.68	753.8	73.7	23.2	24	nw.	9.2	4.1			1		nw.	0	0	blue sky	
Zanzibar, Africa	29.87	758.7			75.7	24.3	84	wsw.	8.5	3.8			10			0.93	23.6	raining	
Trichinopoly	29.59	751.6			86.6	30.3	39	se.	2	0.9			0			0	0	blue sky	
Bellary	28.30	718.8			91.5	33.1	13	nw.	3.6	1.6			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.90	759.5	30.33	770.3	43.3	6.3	58	calm	0	0			0			0	0		Prof. Giovanni Clodig.
Milan	29.80	756.8	30.34	770.5	42.4	5.8	58	nw.	1.3	0.6			2			0	0		Prof. Schiaparelli.
Padua	30.22	767.5	30.33	770.4	35.8	2.1	95	e.	0.7	0.3			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.37	746.1	30.32	770.0	42.1	5.6	64	ne.	1.3	0.6			0			0	0		Prof. P. F. Denza.
Genoa	30.13	765.2	30.32	770.2	50.9	10.5	70	s.	3.1	1.4			6	sw.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.33	719.5	30.32	770.0	40.6	4.8	40	ne.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.27	768.8	30.32	770.1	42.6	5.9	71	ne.	4.3	1.9			0			0	0		Prof. Luigi Guidi.
Florence	30.08	764.0	30.34	770.7	46.8	8.2	46	nne.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.20	767.1	30.29	769.3	47.8	8.8	64	ne.	0.7	0.3			10			0	0		Prof. P. Monte.
Rome	30.16	766.1	30.34	770.7	52.5	11.4	57	nw.	0	0			3			0	0		Prof. P. S. Ferrari.
Lecce	30.02	762.6	30.28	769.2	54.7	12.6	22	wnw.	13.6	6.1			1			0	0		Prof. C. de Giorgi.
Cosenza	29.43	747.6	30.35	770.9	48.9	9.4	74	wnw.	3.8	1.7			0			0	0		Prof. D. Conti.
Cagliari	30.08	764.1	30.28	769.1	56.1	13.4	60	se.			2		3			0	0		Prof. A. Pacinotti.
Palermo	30.10	764.6	30.36	771.1	55.0	12.8	42	nw.	8.1	3.6			3	nw.		0	0		Prof. G. Ciacciatore.
Syracuse	30.31	769.8	30.35	771.0	54.0	12.2	65	wnw.	5.6	2.5			5	sw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.79	756.7	30.33	770.4	52.5	11.4	63	ssw.	0.7	0.3			1	sw.		0	0		Prof. T. Brioschi.
Stelvio	22.17	563.2			21.9	— 5.6	38	s.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.21	564.1			23.9	— 4.5	42	e.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.05	763.3	30.08	764.0	29.9	— 1.2	85	w.	11.1	5.0			10 n			0.077	2.0	light snow	
Hakodate	30.03	762.7	30.04	763.0	28.0	— 2.2	64	nw.	12.0	5.4			10		nw.	0	0	overcast	
Hiroshima, I. M. Obs'y	30.12	765.0	30.14	765.5	41.3	5.2	85	calm	0	0		ck	9 s			0	0	overcast	K. Sasaki.
Kanazawa	30.20	767.1	30.31	769.9	37.2	2.9	82	e.	3.0	1.3			10 s			0	0	overcast	S. Endo.
Kioto	29.97	761.2	30.16	766.0	40.7	4.8	82	nw.	2.1	0.9			10 s			0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.99	761.7	30.20	767.1	44.1	6.7	92	calm	0	0		0	8 s			0.070	1.8	cloudy	S. Takehayashi.
Niigata	30.12	765.0	30.15	765.8	36.5	2.5	91	wsw.	7.9	3.5		ck	10 n					light rain	
Nobiru	30.08	764.0	30.09	764.3	37.9	3.3	68	nw.	8.9	4.0			10 s			0	0	cloudy	H. Midzushina.
Sapporo					23.8	— 4.6	85	s.	3.0	1.3			4			0.045	1.1		
Tokei Obs'y, Yeddo	30.02	762.5	30.09	764.3	42.6	5.9	75	ene.	6.3	2.8			10 s			0.015	0.4	cloudy	The Staff.
Wakayama	30.10	764.5	30.15	765.8	43.0	6.1	76	ene.	3.6	1.6			10 n			0.020	0.5	light rain	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			
Mazatlan	24.52	622.8	30.27	768.8	52.2	11.2	76	nnw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mexico, Central Obs'y	29.84	758.0	30.11	764.8	62.0	16.7	88	e.	0.9	0.4		5 cs	0	sw.		0	0	½ cloudy	F. Quijano, C. E.
Morelia	23.19	589.1	30.36	771.3	48.2	9.0	66	calm	0	0		0	0			0	0	very fine	The Staff.
Pabellon, Aguascalientes	23.98	619.0	30.60	777.4	52.5	11.4	69	s.			5	2 c	0	s.		0	0		M. Tena, M. D.
Puebla, Catholic Institute	24.03	610.4	30.15	765.8	46.0	7.8	79									0	0		M. V de Leon, M. E.
San Luis Potosi	23.48	596.5	30.37	771.3	46.9	8.3	77	calm	0	0		0	0			0	0	very fine	Prof. P. Spina.
Tlacotalpam	24.25	616.0	30.38	771.8	51.6	10.9	64	s.			1	3	4	w.	e.	0	0	cloudy	G. Barroeta, M. D.
Vera Cruz																			Prof. M. Cházaro.
Zacatecas	22.66	575.5	30.40	772.2	49.5	9.7	73	s.	7.5	3.3		5 cs	0	sw.		0	0	½ cloudy	Prof. J. Rossell.
																			J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.70	754.4	29.89	759.2	82.3	27.9	73	ne.	15.5	6.9	.....	4ck;cs	6 n;ks	nne.	ne.	0	0	cloudy.....	Oliver & Figot.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.07	763.8	30.07	763.8	39.4	4.1	.....	s.	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Groningen	30.07	763.8	30.13	765.2	36.1	2.3	.....	s.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	30.06	763.6	30.06	763.6	36.0	2.2	.....	sse.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.08	763.9	30.08	763.9	39.4	4.1	67	sse.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Utrecht	30.06	763.6	30.11	764.8	39.7	4.3	71	sse.	.....	.....	2	.....	0	.....	.....	0	0	clear.....	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.80	756.9	29.86	758.5	43.2	6.2	91	sse.	18	8	.....	.....	10	.....	.....	0.472	12.0	raining	
Brono	29.67	753.7	29.71	754.7	39.4	4.1	79	w.	22	10	.....	.....	8	.....	.....	0.071	1.8	snowing.....	
Christiania	29.80	756.9	29.95	760.7	37.0	2.8	100	ssw.	0	0	.....	.....	10	.....	.....	0.016	0.4	rain & fog....	
Gjæsvær	28.87	733.2	28.89	733.8	25.9	— 3.4	.....	nw.	18	8	.....	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.32	744.6	29.36	745.8	31.5	— 0.3	81	wnw.	.....	.....	4	.....	10	.....	.....	0.055	1.4	snowing.....	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	58.3	14.6	76	w.	11.2	5.0	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.21	742.0	30.23	767.8	55.4	13.0	72	s.	16.1	7.2	.....	.....	10	.....	.....	0.028	0.7	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.42	772.6	30.50	774.8	61.9	16.6	52	sw.	3.8	1.7	.....	.....	5	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.88	759.0	30.25	768.3	55.9	13.3	81	sw.	28.6	12.8	.....	.....	10	.....	.....	0.091	2.3	.....	The Staff.
Ponta Delgada, Azores	30.36	771.2	30.43	773.0	60.8	16.0	66	wnw.	8.1	3.6	.....	.....	3	.....	.....	0	0	.....	
Saint Paul de Loando	29.70	754.3	29.89	759.3	85.1	29.5	68	n.	0.7	0.3	.....	.....	3	sse.	.....	0	0	.....	
Serra da Estrella	25.24	641.2	30.10	764.6	36.1	2.3	98	sw.	28.6	12.8	.....	.....	10	.....	.....	3.575	90.8	fog & sleet..	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.88	733.6	30.07	763.8	3.4	—15.9	.....	se.	9	4	.....	8 cs	0	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	29.17	741.0	29.19	741.5	30.2	— 1.0	88	wsw.	18	8	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	30.30	769.7	30.22	767.6	14.7	— 9.6	71	wsw.	9	4	.....	.....	10 k;s	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	29.80	757.0	30.36	771.1	6.1	—14.4	74	calm	0	0	.....	.....	4	.....	.....	0	0	light clouds	Meteorological Obs'y.
Dorpat	29.76	756.0	30.02	762.4	33.4	0.8	100	wsw.	11	5	.....	.....	10 n	.....	.....	0	0	light fog.....	Observatory.
Ekaterinburg	28.97	735.7	30.05	763.3	— 9.9	—23.3	65	w.	9	4	.....	.....	0	.....	.....	0	0	.....	Meteorological Obs'y.
Kasan	29.85	758.1	30.16	766.0	—13.5	—25.3	78	sse.	9	4	.....	.....	10	.....	.....	0.028	0.7	.....	Observatory.
Kertch	30.00	762.1	30.02	762.6	31.5	— 0.3	96	calm	0	0	.....	.....	10 n	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	29.46	748.2	30.12	765.1	32.7	0.4	92	n.	7	3	.....	.....	10ks;n	.....	.....	0.008	0.2	light snow...	Observatory.
Lugan	29.84	757.8	30.05	763.3	26.8	— 2.9	81	w.	2	1	.....	.....	10	.....	.....	0.004	0.1	.....	Meteorological Obs'y.
Moscow	29.40	746.8	29.90	759.5	30.9	— 0.6	90	ssw.	4	2	.....	.....	10 s	.....	.....	0.024	0.6	.....	Meteorological Obs'y.
Nikolaiev	30.05	763.6	30.13	765.4	34.9	1.6	85	nw.	4	2	.....	.....	10 n	.....	.....	0	0	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor.	29.95	760.6	30.03	762.8	8.6	—13.0	92	nw.	11	5	.....	.....	10	.....	.....	0.087	2.2	snowing	Lieut. Iwanow.
Pekin, China	30.40	772.2	30.54	775.8	33.8	1.0	43	calm	0	0	.....	.....	9 n	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.82	757.4	29.84	757.8	35.2	1.8	91	wnw.	20	9	.....	.....	10 n	.....	.....	0.012	0.3	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.45	722.6	30.08	764.1	36.5	2.5	82	calm	0	0	.....	.....	2	.....	.....	0.004	0.1	.....	Teich, A. M.
Tiflis	28.72	729.4	30.24	768.0	25.0	— 3.9	60	n.	4	2	.....	1 ck	0	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	30.28	769.0	30.34	770.7	8.4	—13.1	65	n.	4	2	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.87	758.7	30.32	770.1	32.7	0.4	89	sse.	2	1	.....	.....	10ks;n	.....	.....	.....	.....	light snow..	Astronomical Obs'y.
Wilna	29.82	757.4	30.26	768.6	34.2	1.2	77	w.	4	2	.....	.....	10	.....	.....	0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.04	762.9	30.35	770.8	18.0	— 7.8	76	calm	0	0	.....	.....	2	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.49	749.0	47	8.3	92	sse.	.....	.....	7	.....	10	.....	.....	0	0	cloudy	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burner.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.05	763.2	30.16	766.0	53.2	11.8	77	s.	2.9	1.3	.....	.....	10	.....	.....	0.043	1.1	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.00	762.0	30.06	763.5	59.2	15.1	55	se.	5.8	2.6	.....	2	1	nw.	.....	0	0	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.12	688.9	30.18	766.5	43.3	6.3	83	sw.	8.9	4.0	.....	.....	8	.....	.....	0.142	3.6	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.94	709.6	30.22	767.6	48.6	9.2	86	sw.	21.0	9.4	.....	.....	10	.....	.....	0.205	5.2	covered.....	The Staff.
Murcia, Met. Obs'y	30.06	763.4	30.21	767.3	55.2	12.9	74	sse.	2.7	1.2	.....	3	4	nnw.	.....	0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.98	736.0	29.89	759.1	47.8	8.8	93	sw.	7.4	3.3	.....	.....	10	.....	.....	0.717	18.2	raining.....	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.18	766.5	30.25	768.2	68.0	20.0	85	calm	0	0	.....	0	2 k	.....	ne.	0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.96	761.0	30.02	762.4	75.3	24.1	74	e.	8.8	3.9	.....	0	2 ks	.....	ene.	0	0	clear.....	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.31	769.8	30.41	772.4	59.2	15.1	67	w.	4.5	2.0	.....	3	6	sw.	w.	0.200	5.1	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.08	764.1	30.17	766.4	73.0	22.8	98	se.	1.1	0.5	.....	7 c	3 kn	se.	se.	0	0	d. clouds	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.93	760.2	30.06	763.5	75.0	23.9	75	nw.	1.6	0.7	.....	.....	10 kn	.....	wnw.	0	0	covered.....	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.34	745.2	29.38	746.2	37.8	3.2	70	sw.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	29.59	751.5	29.64	752.8	42.1	5.6	62	wsw.	.....	.....	2	.....	7	.....	.....	0	0	.....	
Hernosand	29.72	754.8	29.77	756.1	46.6	8.1	43	w.	.....	.....	4	.....	5	.....	.....	0	0	.....	
Stockholm	29.81	757.2	29.99	761.7	37.8	3.2	85	w.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Wisby	30.05	763.2	30.11	764.7	36.3	2.4	85	wsw.	.....	.....	4	.....	5	.....	.....	0	0	.....	
Sub Series.																			
Upsala	29.84	758.0	29.93	760.2	37.6	3.1	90	wsw.	11.0	4.9	.....	.....	10	.....	w.	0	0	.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.84	732.5	30.35	770.9	26.2	— 3.2	100	ssw.	.....	.....	1	.....	.....	.....	.....	0	0	foggy.....	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.30	769.5	38.3	3.5	72	w-w.	7	3.0	.....	.....	10	.....	n.	0.157	4.0	snowing.....	The Observatory.
Valona	.....	.....	30.25	768.3	54.5	12.5	.....	nw.	.....	.....	1	.....	2	.....	.....	0	0	slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.06	763.4	44.4	6.9	78	ne.	.....	.....	3	0	7 n	.....	sw.	0.71	18.0	.....	Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Albany, New York	30.49	774.4	30.58	776.7	25	— 3.9	73	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Alpena, Michigan	29.68	753.9	30.39	771.9	30	— 1.1	77	se.	24	10.7	.....	8 k	2 s	sw.	.....	inap.	inap.	cloudy	
Atlanta, Georgia	29.29	744.0	30.51	774.9	47.0	8.3	63	e.	10	4.5	.....	0	6 s	.....	calm	0	0	fair	
Atlantic City, New Jersey	30.58	776.7	30.59	777.0	29.1	— 1.6	67	nw.	9	4.0	.....	0	0	.....	.....	0	0	clear	
Augusta, Georgia	30.36	771.1	30.56	776.2	43.7	6.5	83	w.	1	0.4	.....	0	5 s;sk	.....	.....	0	0	fair	
Baltimore, Maryland	30.58	776.7	30.62	777.7	35	1.7	53	n.	1	0.4	.....	0	hz.	.....	.....	0	0	clear	
Barnegat, New Jersey	30.56	776.2	30.58	776.7	29.0	— 1.7	74	nw.	9	4.0	.....	0	0	.....	.....	0	0	clear	
Bismarck, Dakota	27.93	709.4	29.91	759.7	32	0.0	62	w.	4	1.8	.....	4 c	0	calm	.....	0	0	fair	
Block Island, Rhode Island	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Boise City, Idaho	26.92	683.8	29.88	758.9	28	— 2.2	96	nw.	1	0.4	.....	.....	10 s	.....	calm	0.12	3.0	cloudy	
Boston, Massachusetts	30.29	769.4	30.45	773.4	23.0	— 5.0	61	nw.	14	6.3	.....	0	0	.....	.....	0.09	2.3	clear	
Brownsville, Texas	30.05	763.3	30.10	764.5	65	18.3	100	s.	4	1.8	.....	.....	10 s	.....	s.	0	0	cloudy	
Buffalo, New York	29.82	757.4	30.62	777.7	23.9	— 4.5	78	w.	2	0.9	.....	.....	sk.	.....	.....	0	0	dense smoke	
Burlington, Vermont	30.26	769.1	30.59	777.0	11.0	—11.7	80	ne.	9	4.0	.....	0	0	.....	.....	0.01	0.3	clear	
Cairo, Illinois	29.90	759 4	30.32	770.1	53.5	11.9	57	s.	12	5.4	.....	.....	10 s	.....	s.	0	0	cloudy	
Campo, California	27.38	695.4	30.02	762.5	40.5	4.7	100	sw.	6	2.7	.....	.....	10 n	.....	sw.	0.44	11.2	heavy rain	
Camp Thomas, Arizona	27.26	692.4	30.09	764.3	39	3.9	96	calm	.....	.....	0	3 cs	c	w.	.....	0.01	0.3	clear	
Cape Henry, Virginia	30.60	777.2	30.62	777.7	40	4.4	65	nw.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Cape May, New Jersey	30.57	776.5	30.60	777.2	34	1.1	71	nw.	29	13.0	.....	0	0	.....	.....	0	0	clear	
Castroville, Texas	29.29	744.0	30.13	765.3	61	16.1	87	se.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	
Cedar Keys, Florida	30.35	770.9	30.37	771.4	56	13.3	80	ne.	4	1.8	.....	2 ck	0	.....	.....	0	0	clear	
Champaign, Illinois	29.36	745.7	30.23	767.8	44.0	6.7	68	s.	12	5.4	.....	.....	10 s	.....	s.	0	0	cloudy	
Charleston, S. Carolina	30.45	773.4	30.51	774.9	49	9.4	77	ne.	7	3.1	.....	5 cs	0	nw.	.....	0	0	fair	
Charlotte, N. Carolina	29.66	753 4	30.55	776.0	43.0	6.1	60	ne.	3	1.3	.....	5 cs	fg.	.....	.....	0	0	fair	
Chattanooga, Tennessee	29.64	752.8	30.50	774.7	43.5	6.4	78	ne.	3	1.3	.....	3 ck	sk.	sw.	calm	0	0	clear	
Cheyenne, Wyoming	23.80	604.5	30.04	763.0	28.4	— 2.0	51	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Chicago, Illinois	29.44	747.8	30.19	766.8	43.5	6.4	62	s.	10	4.5	.....	7 k	0	.....	.....	0	0	fair	
Chincoteague, Virginia	30.58	776.7	30.60	777.2	34	1.1	79	n.	17	7.6	.....	0	hz.	.....	.....	0	0	clear	
Cincinnati, Ohio	29.75	755.6	30.44	773.2	42	5.6	57	e.	2	0.9	.....	0	5 s	.....	.....	0	0	fair	
Cleveland, Ohio	29.72	754.9	30.50	774.7	29.6	— 1.3	79	se.	16	7.2	.....	9 k	0	sw.	.....	0	0	cloudy	
Coleman City, Texas	28.26	717.8	30.14	765.5	53	11.7	100	se.	2	0.9	.....	.....	10 n	.....	.....	inap.	inap.	light rain	
Columbus, Ohio	29.57	751.1	30.47	773.9	35	1.7	69	se.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Concho, Texas	28.15	715.0	30.17	766.3	52	11.1	93	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	
Davenport, Iowa	29.40	746.7	30.10	764.5	49	9.4	63	s.	20	8.9	.....	.....	10 ks	.....	s.	0	0	cloudy	
Dayton, Washington T'y	28.00	711.2	29.81	757.2	31.2	— 0.4	77	sw.	5	2.2	.....	.....	10 s	.....	sw.	0	0	cloudy	
Deadwood, Dakota	25.06	636.5	29.98	761 5	35	1.7	61	s.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Decatur, Texas	.....	.....	.....	.....	55	12.8	55	s.	12	5.4	.....	0	5 s	.....	s.	0	0	fair	
Delaware Breakwater, Del.	30.58	776.7	30.60	777.2	34	1.1	71	n.	30	13.4	.....	0	0	.....	.....	0	0	clear	
Denison, Texas	29.29	744 0	30.13	765.3	56.0	13.3	80	s.	12	5.4	.....	.....	10 s	.....	.....	0	0	cloudy	
Denver, Colorado	24.52	622.8	30.04	763.0	38.0	3.3	47	se.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Des Moines, Iowa	28.99	730.3	29.96	761.0	50	10.0	72	s.	14	6.3	.....	5 cs	0	w.	.....	0	0	fair	
Detroit, Michigan	29.70	754.4	30.45	773.4	39.2	4.0	82	e.	12	5.4	.....	0	2 s;hz	.....	calm	0	0	clear	
Dodge City, Kansas	27.14	689.3	29.88	758.9	34.2	1.2	84	sw.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Dubuque, Iowa	29.30	744.2	30.06	763.5	40.5	4.7	73	s.	4	1.8	.....	1 cs	2 s	sw.	calm	0	0	clear	
Duluth, Minnesota	29.19	741.4	29.94	760.5	33	0.6	78	ne.	70	31.2	.....	.....	10 s	.....	ne.	0	0	cloudy	
Eagle Pass, Texas	29.28	743.7	30.12	765.0	62.1	16.7	87	se.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	
Eagle Rock, Idaho	24.94	633.5	29.84	757.9	24	— 4.4	76	sw.	8	3.6	.....	.....	10 s	.....	.....	0	0	cloudy	
Eastport, Maine	30.15	765.8	30.22	767.6	10	—12.2	68	nw.	25	11.2	.....	0	0	.....	.....	0.62	15.7	clear	
El Paso, Texas	26.31	668.3	30.19	766.8	43	6.1	93	calm	0	0	.....	5 k	0	calm	.....	0.12	3.0	fair	
Erie, Pennsylvania	29.80	756.9	30.57	776.5	26	— 3.3	88	s.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Escanaba, Michigan	29.44	747.8	30.16	766.1	31	— 0.6	78	se.	9	4.0	.....	3 c	3 s	.....	.....	0	0	fair	
Fort Apache, Arizona	24.98	634.5	30.08	764.0	32	0.0	57	se.	4	1.8	.....	0	8 s	.....	s.	0	0	cloudy	
Fort Assinnaboine, Montana	26.90	683.2	29.94	760.5	26	— 3.3	56	ne.	3	1.3	.....	.....	10 s	.....	.....	0	0	cloudy	
Fort Bennett, Dakota	28.09	713.5	29.82	757.4	26	— 3.3	67	nw.	1	0.4	.....	4 k	4 s	w.	.....	0	0	cloudy	
Fort Benton, Montana	26.90	683.2	29.90	759.4	29	— 1.7	67	sw.	3	1.3	.....	.....	10 s	.....	calm	0	0	cloudy	
Fort Buford, Dakota	27.78	705.6	29.96	761.0	17	— 8.3	70	n.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Fort Custer, Montana	26.54	674.1	29.90	759.4	23	— 5.0	73	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Fort Davis, Texas	25.17	639.3	30.13	765.3	43	6.1	86	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Fort Elliott, Texas	27.12	688.8	30.02	762.5	45	7.2	65	s.	16	7.2	.....	0	0	.....	.....	0	0	clear	
Fort Gibson, Indian T'y	29.49	749.0	30.09	764.3	55.5	13.1	80	se.	14	6.3	.....	.....	10 s	.....	e.	0	0	cloudy	
Fort Grant, Arizona	25.24	641.1	30.10	764.5	38	3.3	67	ne.	4	1.8	.....	0	6 ks	.....	ne.	0.13	3.3	fair	
Fort Griffin, Texas	28.74	730.0	30.11	764.8	55	12.8	86	s.	14	6.3	.....	.....	10 s	.....	w.	0	0	cloudy	
Fort Keogh, Montana	27.20	692.4	29.94	760.5	24	— 4.4	64	ne.	1	0.4	.....	3 c	0	.....	.....	0	0	clear	
Fort Macon, North Carolina	30.57	776.5	30.58	776.7	43	6.1	74	ne.	13	5.8	.....	2 c;hz	0	calm	.....	0	0	clear	
Fort McKavett, Texas	27.81	706.4	30.19	766.8	57.1	13.9	93	s.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	
Fort Missoula, Montana	26.41	670.6	29.84	757.9	21	— 6.1	87	nw.	1	0.4	.....	.....	10 s	.....	.....	0.01	0.3	cloudy	
Fort St. Michaels, Alaska	29.83	757.7	29.86	758.4	—12	—24.4	100	s.	15	6.7	.....	0	8 s	.....	s.	0.17	4.3	fair	
Fort Shaw, Montana	26.03	661.2	29.88	758.9	24	— 4.4	88	e.	5	2.2	.....	.....	10 n	.....	.....	0.02	0.5	light snow	
Fort Sill, Indian Territory	28.76	730.5	30.07	763.8	54.3	12.4	82	s.	17	7.6	.....	0	9 s	.....	sw.	0	0	cloudy	
Fort Stevenson, Dakota	27.89	708.4	29.91	759.7	25	— 3.9	88	nw.	1	0.4	.....	0	5 s	.....	w.	0	0	fair	
Fort Verde, Arizona	.....	.....	.....	.....	35.4	1.9	72	sw.	.....	.....	1	.....	10 s	.....	sw.	0	0	cloudy	
Fredericksburg, Texas	28.32	719.3	30.12	765.0	59	15.0	87	s.	11	4.9	.....	.....	10 ks	.....	s.	0	0	cloudy	
Galveston, Texas	30.15	765.8	30.19	766.8	62	16.7	94	calm	0	0	.....	10 k	0	sw.	.....	0	0	cloudy	
Grand Haven, Michigan	29.52	749.8	30.23	767.8	37.5	3.1	61	e.	10	4.5	.....	0	0	.....	.....	0	0	clear	
Hatteras, North Carolina	30.57	776.5	30.59	777.0	45	7.2	53	ne.	16	7.2	.....	0	hz.	.....	.....	0	0	clear	
Helena, Montana	25.42	645 7	29.82	757.4	24	— 4.4	76	se.	3	1.3	.....	.....	10 s	.....	sw.	0.08	2.0	cloudy	
Henrietta, Texas	29.05	737.9	30.10	764.5	54	12.2	86	se.	16	7.2	.....	.....	10 s	.....	.....	0	0	cloudy	
Huron, Dakota	28.29	718.6	29.81	757.2	30	— 1.1	78	se.	8	3.6	.....	1 cs	0	.....	.....	0	0	clear	
Indianapolis, Indiana	29.49	749 0	30.34	770.6	45	7.2	60	se.	8	3.6	.....	6 c;cs	0	se.	.....	0	0	fair	
Indianola, Texas	30.12	765.0	30.15	765.8	62.4	16.9	93	se.	6	2.7	.....	0	6 s	.....	s.	0	0	fair	
Jacksboro, Texas	28.88	733.5	30.12	765.0	54	12.2	86	s.	5	2.2	.....	.....	10 ks	.....	s.	0	0	cloudy	
Jacksonville, Florida	30.38	771.0	30.44	773.2	58	14.4	86	ne.	7	3.1	.....	0	fg.	.....	.....	0	0	clear	
Keokuk, Iowa	29.38	746.2	30.08	764.0	50.0	10.0	64	s.	11	4.9	.....	.....	10 n	.....	s.	inap.	inap.	light rain	
Key West, Florida	30.25	768.3	30.28	769.1	69.0	20.6	78	ne.	8	3.6	.....	0	3 k	.....	ne.	0	0	clear	
Kittyhawk, North Carolina	30.58	776.7	30.60	777.2	43.5	6.4	64	ne.	30	13.4	.....	hz	0	.....	.....	0	0	dense haze	
Knoxville, Tennessee	29.43	747.5	30.51	774.9	38.7	3.7	88	ne.	2	0.9	.....	hz.	8 s	.....	.....	0	0	cloudy	
La Crosse, Wisconsin	29.13	739.9	29.97	761 2	41	5.0	65	s.	8	3.6	.....	0	0	.....	.....	0	0	clear	
La Mesilla, New Mexico	26.14	663.9	30.15	765.8	43.0	6.1	93	calm	0	0	.....	2 c	4 s	w.	.....	0.15	3.8	fair	
Leavenworth, Kansas	29 03	737.3	29.98	761.5	51	10.6	52	s.	14	6.3	.....	2 cs	0	sw.	.....	0	0	clear	
Lewiston, Idaho	28.98	736.1	29.84	757.9	24.6	— 4.1	58	e.	1	0.4	.....	0	1 s	.....	calm	0	0	clear	
Little Rock, Arkansas	29.89	759.2	30.22	767.6	54	12.2	62	se.	7	3.1	.....	.....	10 s	.....	.....	0	0	cloudy	
Los Angeles, California	29.55	750.6	29.95	760.7	46.3	7.9	89	ne.	1	0.4	.....	6 k	0	se.	.....	0.96	24.4	fair	
Louisville, Kentucky	29.77	756.1	30.36	771.1	48.0	8.9	56	se.	2	0.9	.....	hz.	0	.....	.....	0	0	dense haze	
Lynchburg, Virginia	29.86	758.4	30.58	776.7	38.0	3.3	72	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Mackinac City, Michigan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Madison, Wisconsin	29.02	737.1	30.12	765.0	37	2.8	82	se.	10	4.5	.....	6 cs	2 s	w.	w.	0	0	cloudy	
Marquette, Michigan	29.33	745.0	30.11	764.8	33	0.6	78	s.	19	8.5	.....	0	6 s	.....	sw.	0	0	fair	
Mason, Texas	28.45	722.6	30.18	766.6	59	15.0	87	sw.	6	2.7	.....	.....	10 s	.....	sw.	0	0	cloudy	
Memphis, Tennessee	29.97	761.2	30.32	770.1	53	11.7	66	se.	1	0.4	.....	.....	10 s;fg	.....	.....	0	0	cloudy	
Milwaukee, Wisconsin	29.36	745.7	30.16	766.1	38	3.3	82	s.	10	4.5	.....	8 cs	fg.	.....	.....	0	0	cloudy	
Mobile, Alabama	30.31	769.9	30.35	770.9	53.2	11.8	86	e.	5	2.2	.....	7 cs	0	.....	.....	0	0	fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	30.17	766.3	30.41	772.4	52	11.1	61	e.	6	2.7		2 ck	4ks;hz	w.		0	0	fair	
Moorhead, Minnesota	28.76	730.5	29.86	758.4	28	— 2.2	88	se.	8	3.6			10 s		s.	0	0	cloudy	
Morgantown, W. Virginia	29.53	750.0	30.60	777.2	29.5	— 1.4	86	calm	0	0		0	0			0	0	clear	
Mt. Washington, N. H	23.56	598.4	30.18	766.6	— 5.5	—20.8	89	nw.	78	34.8		0	0			0.76	19.3	clear	
Nashville, Tennessee	29.82	757.4	30.38	771.6	49.8	9.9	54	se.	1	0.4		8 cs	0	sw.		0	0	fair	
New Haven, Connecticut	30.40	772.1	30.52	775.2	27	— 2.8	59	n.	4	1.8		0	0			inap.	inap.	clear	
New London, Connecticut	30.51	774.9	30.56	776.2	30	— 1.1	67	n.	9	4.0		0	0			0	0	clear	
New Orleans, Louisiana	30.22	767.6	30.28	769.1	55.5	13.1	78	e.	7	3.1		0	0			0	0	clear	
Newport, Rhode Island	30.42	772.7	30.47	773.9	29.2	— 1.6	73	w.	10	4.5		0	0			0.02	0.5	clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd.	30.44	773.2	30.47	773.9	29.3	— 1.5	67	nw.	17	7.6		0	0			0.02	0.5	clear	
New York, New York	30.39	771.9	30.58	776.7	28.5	— 1.9	77	w.	11	4.9		0	0			inap.	inap.	clear	
Norfolk, Virginia	30.59	777.0	30.62	777.7	40	4.4	73	n.	2	0.9		0	0			0	0	clear	
North Platte, Nebraska	26.85	682.0	29.95	760.7	23.6	— 4.7	78	w.	11	4.9		0	0			0	0	clear	
Olympia, Washington T'y	29.69	754.1	29.73	755.1	34.5	1.4	88	nw.	1	0.4			10 n		calm	0.43	10.9	heavy snow	
Omaha, Nebraska	28.63	727.2	29.90	759.4	47.2	8.4	68	s.	10	4.5		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.92	760.0	29.94	760.5	—29.6	—34.2	79	wnw.	7	3.1		0	0			0	0	clear	
Oswego, New York	30.26	768.6	30.01	777.5	21.6	— 5.8	73	se.	4	1.8		0	0			0.01	0.3	clear	
Palestine, Texas	29.64	752.8	30.22	767.6	56	13.3	93	se.	4	1.8		0	8 ks			0	0	cloudy	
Pensacola, Florida	30.34	770.6	30.38	771.6	58.1	14.5	83	e.	12	5.4		0	7 s			0	0	fair	
Philadelphia, Pa	30.49	774.4	30.00	777.2	32	0.0	60	n.	12	5.4		0	0			0	0	clear	
Pike's Peak, Colorado	17.44	443.0	30.16	766.1	8	—13.3	63	sw.	48	21.5		0	0			0	0	clear	
Pioche, Nevada	23.79	604.3	29.95	760.7	30	— 1.1	88	s.	20	8.9			10 n		s.	inap.	inap.	light snow	
Pittsburg, Pennsylvania	29.78	756.4	30.04	778.2	31.0	— 0.6	78	ne.	4	1.8		0	fg			0	0	clear	
Port Eads, Louisiana	30.29	769.4	30.30	769.6	56.5	13.6	90	se.	8	3.6		hz.	2 s		se.	0	0	clear	
Port Huron, Michigan	29.73	755.1	30.46	773.7	28.6	— 1.9	77	se.	9	4.0		8 cs	0		sw.	0	0	cloudy	
Portland, Maine	30.34	770.6	30.39	771.9	20.0	— 6.7	56	nw.	19	8.5		0	0			0.50	12.7	clear	
Portland, Oregon	29.71	754.6	29.78	756.4	35.0	1.7	89	s.	14	6.3		0	1 s		s.	0.13	3.3	clear	
Portsmouth, N. Carolina					43	6.1	68	ne.	23	10.3		3 c	0	ne.		0	0	clear	
Prescott, Arizona	24.66	626.4	30.02	762.5	31	— 0.6	65	s.	12	5.4		0	0			0	0	clear	
Punta Rassa, Florida	30.30	769.6	30.31	769.9	61.5	16.4	86	ne.	8	3.6			10 ks		n.	0	0	threatening	
Red Bluff, California	29.58	751.3	29.96	761.0	40.0	4.4	92	w.	1	0.4		2 k	0	sw.		0.19	4.8	clear	
Rio Grande City, Texas	29.85	758.2	30.10	764.5	64	17.8	78	se.	6	2.7		4 c	4 s	calm	se.	0	0	cloudy	
Rochester, New York	29.91	759.7	30.02	777.7	21	— 6.1	84	calm	0	0		0	sk.			0.01	0.3	clear	
Roseburg, Oregon	29.34	745.2	29.91	759.7	33	0.6	92	s.	1	0.4		0	9 ks		sw.	0.10	2.5	cloudy	
Sacramento, California	29.91	759.7	29.99	761.7	37.2	2.9	89	s.	9	4.0		0	0			0.55	14.0	clear	
St. Louis, Missouri	29.55	750.6	30.19	766.8	50.1	10.1	59	se.	12	5.4			10 s		e.	0	0	cloudy	
St. Paul, Minnesota	28.93	734.8	29.87	758.7	36.0	2.2	79	e.	10	4.5		0	0			0	0	clear	
St. Vincent, Minnesota	28.91	734.3	29.88	758.9	17	— 8.3	83	n.	1	0.4		3 cs	6 s	calm	calm	0	0	cloudy	
Salt Lake City, Utah	25.32	643.1	29.88	758.9	40	4.4	43	se.	15	6.7			10 s			0	0	cloudy	
San Antonio, Texas	29.41	747.0	30.13	765.3	59.6	15.3	87	calm	0	0			10 ks		se.	0	0	cloudy	
San Diego, California	29.93	760.2	30.00	762.0	53.4	11.9	95	sw.	14	6.3			10 n			0.61	15.5	heavy rain	
Sandusky, Ohio	29.73	755.1	30.45	773.4	35	1.7	69	se.	12	5.4		0	0			0	0	clear	
Sandy Hook, New Jersey	30.53	775.4	30.57	776.5	30.0	— 1.1	78	nw.	26	11.6		0	0			0	0	clear	
San Francisco, California	29.96	761.0	30.02	762.5	43	6.1	74	nw.	6	2.7		0	0			0.82	20.8	clear	
Santa Fé, New Mexico	23.18	588.8	30.22	767.6	30.4	— 0.9	90	sw.	2	0.9			10 s			0	0	cloudy	
Savannah, Georgia	30.42	772.7	30.50	774.7	47	8.3	83	n.	3	1.3		8 ck	0			0	0	cloudy	
Shreveport, Louisiana	29.99	761.7	30.24	768.1	53	11.7	80	s.	2	0.9		0	9 s		s.	0	0	cloudy	
Silver City, New Mexico	24.25	615.9	30.10	764.5	32	0.0	74	w.	3	1.3		3 c	0	w.		0	0	clear	
Sitka, Alaska	29.62	752.3	29.69	754.1	25	— 3.9	88	calm	0	0			10 n			0.61	15.5	light snow	
Smithville, North Carolina	30.51	774.9	30.55	776.0	49	9.4	86	ne.	10	4.5		1 cs	0			0	0	clear	
Spokane Falls, Wash. Ter.	27.71	703.8	29.84	757.9	13	—10.6	83	ne	2	0.9			10 s			0	0	cloudy	
Springfield, Illinois	29.46	748.3	30.19	766.8	47	8.3	63	s.	13	5.8			10 s		s.	0	0	cloudy	
Springfield, Massachusetts	30.38	771.6	30.52	775.2	28.2	— 2.1	77	w.	2	0.9		0	0			inap.	inap.	clear	
Springfield, Mo	28.64	727.4	30.21	767.3	53	11.7	70	s.	12	5.4			10 n			inap.	inap.	light rain	
Stockton, Texas	27.02	686.3	30.15	765.8	45.2	7.3	100	calm	0	0		0	0			0	0	clear	
Thatcher's Island, Mass	30.34	770.6	30.40	772.1	24.0	— 4.4	94	nw.	35	15.6		0	0			0.10	2.5	clear	
Toledo, Ohio	29.66	753.4	30.40	772.1	35	1.7	69	se.	4	1.8		0	1 s			0	0	clear	
Tucson, Arizona	27.59	700.8	30.07	763.8	47	8.3	77	e.	7	3.1		0	4 ks			0	0	fair	
Umatilla, Oregon	29.46	748.3	29.84	757.9	33.2	0.7	78	sw.	2	0.9		8 cs	0	w.		0	0	cloudy	
Uvalde, Texas																			
Vicksburg, Mississippi	30.03	762.7	30.30	769.6	52	11.1	52	se.	2	0.9		8 cs	fg	s.	calm	0	0	cloudy	
Visalia, California	29.61	752.1	29.99	761.7	38	3.3	89	n.	1	0.4		0	0			0.58	14.7	clear	
Washington, D. C.	30.50	774.7	30.62	777.7	33.0	0.6	68	n.	2	0.9		0	0			0	0	clear	
West Los Animas, Colorado	25.83	656.1	29.96	761.0	25	— 3.9	76	w.	9	4.0		0	0			0	0	clear	
Wickenburg, Arizona					31	— 0.6	92	calm			0		10 k		s.	0	0	cloudy	
Williamsport, Pa	29.98	761.5	30.62	777.7	23.2	— 4.9	73	w.	5	2.2		0	hz			inap.	inap.	dense haze	
Wilmington, N. Carolina	30.51	774.9	30.57	776.5	43	6.1	68	ne.	4	1.8		5 c	sk	calm	calm	0	0	fair	
Winnemucca, Nevada	25.32	643.1	29.84	757.9	27	— 2.8	80	n.	9	4.0			10 ks		sw.	0.21	5.3	cloudy	
Wood's Holl, Mass																			
Yankton, Dakota	28.42	721.9	29.84	757.9	32	0.0	78	s.	3	1.3		0	0			0	0	clear	
Yuma, Arizona	29.82	757.4	29.97	761.2	47.8	8.8	75	se.	2	0.9		1 ck	0	sw.		0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1			51.0	10.6	87	calm	0	0		4 k; cs	5 s			0	0	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.14	765.5	30.15	765.8	78	25.6	82	e.				5 ck	5 ks	e.	e.	0.50	12.7	fair	J. A. Racker.
Buenaventura, U. S. C.	30.05	763.3	30.07	763.8	77	25.0	95	sw.	15	6.7			10 n		sw.	1.10	27.9	raining	J. I. Plume.
Guadeloupe, W. I.	30.05	763.3	30.07	763.8	76	24.4	90	e.				5 c	5 ks			0.039	1.0	cloudy	B. Bigar.
Havana, Cuba, W. I.	30.23	767.8	30.28	769.1	73	22.8	100	se.	1.2	0.5		0	5 ks		calm	0	0	fair	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.14	765.5	30.15	765.8	67.5	19.7	90	n.	1	0.4		0	0			0	0	fine	Robert Johnstone.
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.07	763.8	30.07	763.8	78	25.6	91	e.			2		8 ps	e.		0.320	8.1	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.55	750.6	30.01	762.2	82	27.8	80	calm			0	0	8 s		calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua							98	ne.			3	0	2 ks		ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.14	765.5	30.17	766.3	74	23.3	81	n.	3.6	1.6		0	1 n		n.	0.16	4.1	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.80	756.9	29.86	758.4	— 6.0	—21.1	100	se.	21	9.4			10 s		se.	0.02	0.5	snowing	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Vigo, Galicia, Spain	30.05	763.3	54	12.2	86	s.			2		7	ssw.				1	w.	d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 21° 10′, E. 113° 06′	30.17	766.3	66	18.9		ne.			4		10					3	n.	d. clouds	Capt. A. J. Errington.
H. M. S Alert, N. 6° 16′, E. 89° 58′	29.81	757.2	82.2	27.9	80	ne.			3		2							misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.39	771.9	57	13.9	69	wnw.			1		2	wnw.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 9° 27′, E. 66° 30′	29 83	757.7	82	27.8	78	n.			4-5		3	n.				3	n.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.86	758.4	76.5	24.7	69	calm			0		0							blue sky	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, Simon's Bay, Cape Colony	29.89	759.2	77	25.0	74	ssw.			2		1							blue sky	Capt. A. T. Dale.
H. M. S. Dido, N. 12° 00′, W. 61° 45′	30.16	766.1	78	25.6		e.			2-5		3	ne.						squally	Capt. C Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.28	769.1	61	16.1	66	wnw.			5-6		7	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 47° 41′, W. 57° 58′	29.94	760.5	52	11.1	90	nnw.			2-3		9					1-2	n.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 36° 04′, E. 12° 14′	30.00	762.0	67	19.4	94	nw.			2		7	wnw.				3	wsw.	d. clouds	Capt C. A. G. Bridge.
H. M. S. Fawn, Aden, Arabia	29.84	757.9	80	26.7	80	e.			2		5	se.						d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.25	768.3	44	6.7	67	calm			0		10							misty	Capt. R. F. Roskyn.
H. M. S. Gannet, S. 12° 04′, W. 77° 11′	30.02	762.5	68	20.0	90	sse.			1		8							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.91	759.7	51	10.6	93	nnw.			2		10							misty	Capt. L. F. Jones.
H. M. S. Inconstant, N. 21° 30′, E. 114° 00′	30.16	766.1	65	18.3	68	ene.			2		3	ne.				1	ne.	d. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 13′, E. 114° 14′	30.20	767.1	60	15.6	76	nnw.			3		1	nw.				2	s.	blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	30.02	762.5	66	18.0		calm			0		9								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 40° 00′, E. 150° 00′	30.05	763.3	67	19.4	79	sse.			5		5	nw.				3	sse.	d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, N. 9° 38′, W. 79° 40′	30.01	762.2	78	25.6	86	n.			4		4	ne.				3	ne.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 0° 45′, E. 55° 28′	29.84	757.9	82.5	28.1	92	n.			2		5					2	ne.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 27° 12′, W. 39° 33′	30.41	772.4	72	22.2	93	ene.			3		4					2	nw.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, Cape Coast Castle, Guinea	29.90	759.4	82	27.8	100	ssw.			2		4							hazy	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	29.96	761.0	68	20.0		nw.			1		5							d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	29.72	754.9	32	0.0	100	wsw.			2		5							hazy	Lieut. V. B. Orlebar.
H. M. S. Sea Gull																			Capt. E. T. Church.
H. M. S. Thalia																			
H. M. S. Triumph, Callao Bay, Peru	30.02	762.5	68	20.0	90	calm			0		2	calm						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 11° 18′ E. 110° 32′	30.02	762.5	77	25.0	90	nne.			3-5		8	nne.				4	nne.	d. clouds	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.09	764.3	74	23.3		nnw.			1		1							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Muscat, Arabia	29.92	760.0	73.5	23.1	46	nw.			4-6		0					5	nw.	squally	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Brava, Cape Verd Ids.	30.05	763.2	71.2	21.8	82	ne.			2		10					2	ne.	foggy	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 12° 38′, W. 72° 14′	30.04	763.1	74.3	23.5	94	ene.			2		3							d. clouds	Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.36	771.1	62	16.7	83	e.	10	4.5			2		se.	0	0			fair	
N. Yard, Portsmouth, N. H.	30.41	772.4	18	— 7.8		nw.	13	5.8			0			0	0			clear	
Naval Hospital Yokohama, Japan	29.97	761.2	44.5	6.9	64	n.			1		10		w.	0	0			overcast	
Adams, Callao, Peru	29.80	756.9	70	21.1	90	sse.			1		10			0	0	gr'd		cloudy	
Alaska, Valparaiso, Chili	29.94	760.5	62	16.7	66	calm			0		0			0	0	sm'h		clear	
Alert, Singapore, India*	29.77	756.1	81	27.2	78	ne.			2		8					sm'h		cloudy	
Alliance, N. 39° 55′, W. 70° 35′	30.39	771.9	38	3.3	72	nnw.			5		5			0	0	sm'h		fair	
Ashuelot, Tientsin, China	30.55	776.0	32	0.0	79	sse.			2		10		calm					overcast	
Brooklyn, S. 47° 07′, W. 64° 12′	29.81	757.2	60	15.6	100	nw.	1	0.4			2		nw.	0	0	light	nw.	fair	
Colorado, New York, N. Y	30.54	775.7	29	— 1.7		nnw.	6	2.7			0							hazy	
Enterprise, Norfolk, Va*	30.60	777.2	39	3.9	73	w.			1		0							clear	
Essex, N. 32° 20′, W. 16° 50′	30.51	774.9	63	17.2	62	wsw.			2		8		wsw.			sm'h	sw.	cloudy	
Franklin, Norfolk, Va	30.63	778.0	38	3.3	72	wnw.	4	1.8			0			0	0			clear	
Galena, N. 43° 22′, E. 7° 00′	30.32	770.1	54	12.2	80	ne.			2		8		ne.			sm'h		cloudy	
Independence, N. Yard, Mare I'd, Cal	29.90	759.4	41	5.0	82	calm	0	0			0			0	0			clear	
Kearsarge, New Orleans, La	30.27	768.8	53	11.7	86	calm			0		0							clear	
Lackawanna, Valparaiso, Chili*	29.96	761.0	63	17.2	89	calm			0		0							clear	
Lancaster, N. 35° 13′, E. 21° 11′	30.26	768.6	55	12.8	59	ne.			3		8		ne.			sm'h		light rain	
Marion, S. 30° 35′, E. 37° 52′	29.85	758.2	76	24.4	82	ese.			3		2		ese.			long	ene.	clear	
Michigan, Erie, Pa	30.15	765.8	26	— 3.3	86	sw.			2		0							clear	
Minnesota, Newport, R. I	30.45	773.4	29	— 1.7	100	nw.	6	2.7			0							clear	
Monocacy, Yokohama, Japan	30.12	765.0	45	7.2	92	ne.			2		10		calm					cloudy	
Nipsic, Malaga, Spain	30.36	771.1	64	17.8	52	n.			1		5					sm'h		fair	
Onward, Callao, Peru†	30.10	764.5	68	20.0	95	se.			2		10		n.			long	w.	cloudy	
Palos, Hong Kong, China	30.19	766.8	59	15.0	82	ne.			1		5		n; e					fair	
Passaic, Washington, D. C	30.63	778.0	32	0.0		ne.			2		2		ne.					clear	
Pensacola, Valparaiso, Chili	30.04	763.0	63	17.2	72	nnw.	1	0.4			0			0	0	sm'h		clear	
Powhatan, N. 28° 41′, W. 66° 10′	30.39	771.9	67	19.4	84	n.			4		10					mod.	n.	cloudy	
Quinnebaug, N. 34° 24′, E. 19° 50′	30.31	769.9	55	12.8	56	nw.			4		8		calm			sm'h		cloudy	
Ranger, N. 19° 34′, W. 105° 07′*	29.96	761.0	65	18.3	73	se.			1		0			0	0	sm'h		clear	
Richmond, N. 20° 49′, E. 159° 12′*	29.98	761.5	74	23.3	63	n.			4		5		n.	0	0	long	nw.	fair	
Shenandoah, S. 29° 08′, W. 40° 16′*	30.16	766.1	75	23.9	64	ese.			3		2		ese.			sm'h		clear	
St. Louis, League Island, Pa	30.77	781.5	29	— 1.7	100	nw.	14	6.3			0			0	0			clear	
Swatara, N. 34° 32′, E. 138° 52′*	29.89	759.2	55	12.8	68	w.			4		2		w.			mod.		fair	
Tennessee, Fort Monroe, Va	30.59	777.0	39	3.9	64	nw.	4	1.8			1			0	0			clear	
Vandalia, Cartagena, U. S. Col*†	30.08	764.0	75	23.9	90	ene.			1		2		calm					fair	
Wabash, Boston, Mass	30.41	772.4	22	— 5.6		nw.	8	3.6			0			0	0			clear	
Wachusetts, N. 48° 02′, W. 125° 01′	29.65	753.1	39	3.9	82	wsw.			3		2					sm'h		clear	
Wyoming, Port Royal, S. C	30.50	774.7	47	8.3	92	ne.	6	2.7			8		nw.	0	0			cloudy	
Yantic, Aspinwall, Panama*	30.00	762.0	77	25.0	91	n.			3		5		n.					fair	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.				Character.	Direction.		
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 45° 30′, W. 59° 30′	29.24	742.7	30	—1.1	100	nnw.	7	.....	10	.....	.....	14 h'r	snow	.....	.....	heavy snow	C. Gapon, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, Glasgow, Scotland*	29.55	750.6	49	9.4	.....	sw.	4	.....	9	.....	sw.	.....	.....	.....	.....	fair	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 54° 21′, W. 17° 22′*	29.47	748.5	50	10.0	.....	nw.	6	.....	8	.....	nw.	1 h'r	1 h'r	con.	w.	cloudy	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Liverpool, England	29.71	754.6	46	7.8	92	sse.	6	.....	8?	.....	sse.	.....	.....	.....	.....	clear.†	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, St. George's Channel, Eng†	29.64	752.8	49	9.4	85	sse.	4	.....	8	.....	se.	light	light	mod.	se.	cloudy	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, Philadelphia, Penn.†*	30.52	775.2	39	3.9	91	se.	4	.....	1	.....	e.	.....	.....	.....	.....	fine	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Daw, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Savanilla, U. S. C.	29.89	759.2	74	23.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Maracaibo, Venezula, S. A.	.....	.....	.....	.....	.....	ne.	3	.....	.....	.....	.....	.....	.....	.....	.....	fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 18° —′, W. 77° —′	29.78	756.4	.....	.....	.....	e.	4	.....	0	.....	.....	0	0	sm'h	.....	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Off Boston, Mass†	30.53	775.4	.....	.....	.....	nnw.	.....	.....	.....	.....	.....	.....	.....	high	ne.	clear	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 56° 34′, W. 56° 08′	29.80	756.9	45	7.2	.....	nnw.	3	.....	5	.....	.....	.....	.....	.....	.....	blue sky	.....
Baroda, Capt. C. J. Russell, S. 0° 49′, W. 27° 41′	29.97	761.2	80.8	27.1	86	se.	3	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Caldew, Capt. W. Peterson, S. 50° 43′, W. 49° 44′	30.10	764.5	45	7.2	.....	nnw.	3	.....	10	.....	.....	.....	.....	.....	.....	foggy	.....
S. S. Cipero, Capt. W. N. Lailey Georgetown, British Guiana, S. A.	30.05	763.3	78.8	26.0	90	nne.	3	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. City of Agra, Capt. Thos. Young, N. 43° 05′, W. 26° 20′	30.06	763.5	55.3	12.9	.....	sw.	5	.....	10	.....	.....	.....	.....	.....	.....	showery	.....
Coppename, Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, S. 8° 00′, E. 90° 02′	29.81	757.2	82	27.8	91	ese.	3-4	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
Hermine, Capt. S. G. Jones, S. 51° 21′, W. 53° 26′	30.02	762.5	45	7.2	100	nnw.	3	.....	6	.....	.....	.....	.....	.....	.....	foggy	.....
Hope, Capt. James Campbell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery, S. 6° 37′, W. 34° 29′	30.04	763.0	81.5	27.5	70	e.	2	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 28° 24′, E. 10° 42′	30.00	762.0	70	21.1	75	se.	3	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 57° 58′, W. 67° 42′	29.48	748.8	48.7	9.3	85	wnw.	5	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	30.06	763.5	67.4	19.7	90	s.	1	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
Naiad, Capt. J. Smith, N. 30° 00′, W. 49° 52′	30.37	771.4	70.3	21.3	84	ssw.	4	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry, S. 22° 27′, E. 79° 59′	29.96	761.0	77.6	25.3	69	e.	6	.....	7	.....	.....	.....	.....	.....	.....	showery	.....
S. S. Strathleven, Capt. C. W. Pearson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge, N. 46° 53′, W. 17° 00′	29.77	756.1	50.9	10.5	93	wnw.	6	.....	6	.....	.....	.....	.....	.....	.....	squally	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 47° 12′, W. 45° 10′*†	29.52	749.8	.....	.....	.....	wsw.	6	.....	8	.....	sw.	6 h'r	snow	high	con.	cloudy	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman, N. 27° 25′, W. 79° 45′*†	30.48	774.2	72	22.2	.....	ne.	4	.....	.....	.....	ne.	0	0	.....	.....	ntone fine	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Stembridge, 3d off.
S. S. Gallia, Capt. W. H. P. Hains, N. 43° 58′, W. 48° 06′*	29.37	746.0	42	5.6	100	wsw.	7	.....	8	.....	w.	8 h'r	8 h'r	high	w.	hazy	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, N. 44° 53′, W. 50° 44′	29.28	743.8	33.8	1.0	.....	wsw.	6	.....	8	.....	wsw.	6 h'r	6 h'r	hv'y	w.	cloudy	.....
S. S. France, Capt Périer d'Hauterive,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Sérvan, N. 44° —′, W. 53° 40′*†	29.53	750.0	37.4	3.0	.....	wnw.	9	.....	.....	.....	.....	light	light	very h'y	wnw.	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Silesia, Capt. A. Albers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich, N. 41° 35′, W. 63° 03′*	30.14	765.5	27	—2.8	.....	nw.	6	.....	10	.....	nw.	snow	sq'lls	7	nw.	.....	Jorgensen, Wolkowots
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt. Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Buenos Ayres, Argentine Rep. S. A†*.	30.24	768.1	72	22.2	.....	sse.	1	.....	2	.....	se.	0	0	.....	.....	clear	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 51° 15′, W. 10° 29′	.....	.....	.....	.....	.....	ssw.	3	.....	5	.....	sw.	4 h'r	4 h'r	mod.	sw.	.....	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, New York, N. Y.*†	30.70	779.8	28	—2.2	.....	nw.	2	.....	0	.....	.....	0	0	.....	.....	clear	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, Cienfuegos, Cuba, W. I†	30.24	768.1	71	21.7	.....	ene.	1	.....	0	.....	.....	2 h'r	hv'y	.....	.....	clear.	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Alisa, Capt. J. W. Sansom, N. 9° 22′, W. 79° 59′† [man	30.00	762.0	81	27.2	.....	nne.	4	.....	.....	.....	.....	.....	.....	.....	nne.	cloudy	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey- N. 32° 54′, W. 75° 35′*† [nolds	30.50	774.7	60	15.6	.....	var.	1	.....	.....	.....	.....	.....	.....	sm'h	.....	clear	.....
S. S. Elbe, Capt. W. Willigerod N. 49° 12′, W. 23° 46′*	29.69	754.1	43.7	6.5	.....	wnw.	7–8	.....	.....	.....	.....	.....	.....	h'vy	.....	stormy	.....
S. S. Lessing, Capt. B. Voss, N. 46° 42, W. 45° 01′*†	29.56	750.8	44	6.7	.....	sw.	5	.....	.....	.....	.....	.....	.....	5	wnw.	.....	.....
S. S. Maas, Capt. T. H. Bonjer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke N. 46° 50′, W. 35° 00′*†	29.62	752.3	53	11.7	.....	s.	5–6	.....	.....	.....	.....	.....	.....	.....	wsw.	drizzling	.....
S. S. P. Caland, Capt. E. Deddes, N. 49° 02′, W. 30° 25′	29.76	755.9	44.6	7.0	.....	wsw.	4	.....	.....	.....	.....	.....	.....	4	wsw.	showery	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 43° 51′, W. 52° 42′	29.14	740.1	33	0.6	.....	sw.	10	.....	.....	.....	.....	.....	.....	high	sw.	hailing	.....
S. S. Scythia, Capt. M. Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sander & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	30.31	769.9	33.8	1.0	.....	s.	3–4	.....	6	.....	s.	0	0	.....	.....	light fog	.....
S. S. Mosel, Capt. F. Hesse, N. 42° 26′, W. 61° 32′	29.68	753.9	27.5	—2.5	.....	wnw.	10	.....	9	.....	wnw.	7½ h'r snow	rain, &hail	very h'vy	wnw.	hailing	J. Hesse.
S. S. Neckar, Capt. R. Busslus,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, S. 22° 54′, W. 38° 14′*	29.99	761.7	77.0	25.0	100	ene.	4	.....	10	.....	.....	7 h'r	h'vy	3	e.	heavy rain	.....
S. S. Oder, Capt. C. Undeutsch, N. 48° 37′, W. 30° 50′*	29.79	756.7	45.5	7.5	.....	s.	4	.....	10	.....	sw.	rain	rain	mod.	s.	misty	Montz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, N. 34° 49′, W. 36° 02′	30.48	774.2	.....	.....	.....	sw.	4	.....	2	.....	sw.	0	0	mod.	w.	fair	Hattensaur & Raets.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 09′, E. 161° 11′†	29.87	758.7	60	15.6	82	wnw.	6	.....	8	.....	wnw.	sh'rs	sh'rs	high	nw.	cloudy	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, San Francisco, Cal *†	30.37	771.4	45	7.2	92	s.	3	.....	5?	.....	se.	.....	.....	.....	.....	cloudy?	.....
S. S. Oceanic, Capt. J. Metcalfe, N. 33° 15′, E. 135° 34′*	30.06	763.5	54	12.2	60	n	4	.....	2	.....	var.	.....	.....	2	ne.	fine	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	30.16	766.1	.....	.....	.....	nw.	4	.....	0	.....	.....	.....	.....	.....	.....	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 41° 03′ W. 71° 40′†	30.52	775.2	30	—1.1	78	nnw.	4	.....	0	.....	.....	4 h'r	snow	sm'h	wsw.	clear	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 43° 07′, W. 124° 42′†	29.90	759.4	41	5.0	83	wnw.	2	.....	5	.....	w.	.....	.....	mod.	wnw.	fair	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. Fred. Bolles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 44° 23′, W. 124° 22′†	29.84	757.9	40	4.4	63	sw.	3	.....	5	.....	sw.	.....	.....	mod.	wsw.	squally	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 37° 06′, W. 122° 20′†	29.96	761.0	47	8.3	54	nw.	6	.....	5	.....	nw.	.....	.....	mod.	wnw.	fair	.....
S. S. Geo. W. Elder, Capt. H. G. Morse, N. 40° 38′, W. 124° 40′†	29.98	761.5	44	6.7	.....	wnw.	4	.....	10?	.....	nw.	0	0	light	w.	clear?	.....
S. S. Idaho, Capt. H. M. Hayward, N. 46° 51′, W. 124° 48′†	30.25	768.3	48	8.9	92	nw.	6	.....	5	.....	nw.	.....	.....	.....	nw.	rainy	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 35° 09′, W. 120° 04′†	30.02	762.5	56	13.3	38	nw.	2	.....	1	.....	nw.	.....	.....	sm'h	ne.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace. N. 34° 42′, W. 120° 44′†	29.96	761.0	50	10.0	64	nw.	3	.....	10	.....	nw.	4 h'r	mod.	mod.	w.	sprinkling	.....
S. S. State of California, Capt. G. Debney, Portland, Oregon†	29.73	755.1	37	2.8	80	se.	2	.....	10	.....	se.	0	0	.....	.....	cloudy	.....
S. S. Victoria, Capt. W. E. Plummer, N. 46° 42′, W. 124° 40′†	29.78	756.5	47	8.3	85	sw.	6	.....	10	.....	n.	.....	.....	mod.	w.	snowy	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulteg, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of New York, Capt. W. B. Cobb, N. 4° 00′, W. 164° 50′†	29.93	760.2	79	26.1	82	ene.	3	.....	1	.....	ne.	0	0	mod.	ne.	clear	W. H. Hawes, 2d offl.
S. S. City of Rio de Janeiro, Capt. Cavarly.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, Sydney, N. S. W.†	30.14	765.5	73	22.8	76	ene.	3	.....	10	.....	n.	0	0	sm'h	.....	cloudy	E. Le Saik.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	30.20	767.1	61	16.1	61	ese.	5	.....	0	.....	.....	0	0	.....	.....	clear	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 32° 17′, W. 119° 52′†	30.02	762.5	55	12.8	80	nw.	5	.....	4	.....	wsw.	0.22	5.6	mod.	nw.	clear	.....
S. S. Grenada, Capt. M. Connolley, Panama, Panama†	30.00	762.0	74	23.3	95	nw.	3	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. South Carolina, Capt. W J. Russell, N. 7° 19′, W. 81° 46′†	30.07	763.8	81	27.2	70	e.	2	.....	0	.....	.....	0	0	sm'h	.....	fair	A. W. Hart, 2d offl.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.09	764.3	68	20.0	84	calm	0	.....	10	.....	s.	.....	.....	.....	.....	overcast	.....
QUEBEC S. S. CO. *E. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M. Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 38° 05′, W. 72° 00′	.....	.....	.....	.....	.....	nw.	4	.....	0	.....	.....	.....	.....	mod.	nw.	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes, N. 46° 30′, W. 29° 43′*†	29.86	758.4	48	8.9	.....	s.	7	.....	10	.....	w.	10 h'r	10 h'r	mod.	wsw.	drizzling	.....
S. S. Nederland, Capt. J. Uberweg, N. 49° 51′, W. 15° 37′*†	30.07	763.8	50	10.0	.....	w.	5	.....	8	.....	wsw.	rain	&hail	r'gh	wsw.	cloudy	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Jersey City, N. J *	30.58	776.7	28	—2.2	.....	wnw.	2	.....	0	.....	.....	0	0	.....	.....	clear	C. H. Grant, 2d offl.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon N. 42° 32′, W. 57° 42′*†	29.04	737.6	34	1.1	?	wsw.	10	.....	10	.....	.....	snow	sq'lls	very h'vy	sw.	overcast	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, New York, N. Y*	30.45	773.4	45.0	7.2	92	nw.	5	.....	2	.....	nw.	0	0	sm'h	.....	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 55° 52′, W. 25° 07′†	29.49	749.0	40.1	4.5	.....	w.	4	.....	3	.....	w.	7 h'r	7 h'r	cross	w.	clear	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 51° 22′, W. 12° 13′*†	29.29	744.0	51	10.6	.....	ssw.	6	.....	5	.....	sw.	0	0	r'gh	sw.	d. clouds	W. Brownless, 4th offl.
S. S. Celtic, Capt. Benjamin Gleadell, N. 40° 30′, W. 69° 18′*†	30.16	766.1	32	0.0	79	nnw.	5	.....	2	.....	n.	0	0	mod.	wnw.	fair	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy, N. 49° 44′, W. 21° 14′*†	29.84	757.9	47	8.3	.....	wnw.	6	.....	8	.....	wnw.	rain	rain	long	wnw.	raining	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving. N. 41° 13′, W. 61° 01′†	29.85	758.2	44	6.7	67	nw.	6	.....	10	.....	.....	3 h'r	snow	h'vy	wnw.	overcast	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 49° 37′, W. 11° 05′*	29.65	753.1	53	11.7	.....	sw.	3	.....	4	.....	w.	¼ h'r	¼ h'r	mod.	.....	fair	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, Pensacola, Florida†	30.45	773.4	61	16.1	82	ese.	3	5 cs	hz.	w.		o	o			fair	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 35° 50′, W. 72° 15′*†	30.65	778.5	62	16.7		n.	3		1		ne.	o	o	r'gh	ne.	clear	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 23° 00′, W. 28° 20′*†	30.28	769.1	75	23.9		ene.	6		3		ene.	o	o	r'gh	ene.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 50° 07′ W. 2° 38′*†	29.88	758.9	51	10.6	72	sse.	4		5		s.	o	o	mod.	sw.	hazy	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewis Ponce, Porto Rico, W. 1*†	30.16	766.1	77	25.0		ne.	1		5		e.	o	o			fair	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 7° 12′, W. 25° 50′*†	30.00	762.0	79	26.1		nne.	3		10		ne.	o	o	sm'h	ne.	cloudy	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 45° 52′, W. 31° 34′*†	29.62	752.3				sw.	6				wnw.	20 h'r	20 h'r	long h'vy	nw.	raining	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 42° 16′, W. 57° 30′†	29.90	759.4				s.	2		2		s.	mist	mist	sm'h	e.	light fog	A. J. Pettingill.
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	30.12	765.0				sw.	2		2		sw.	o	o			fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr																	J. C. Andreson, Jr.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.62	777.7	37	2.8	71	e.	1		3		nne.	o	o			fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison. S. 24° 31′, W. 83° 21′†	30.16	766.1	73	22.8		e.	3		10		e.	o	o	h'vy	ssw.	fair	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 27° 15′, W. 24° 20′			69	20.6		ne.	6		o			o	o	long	ne.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 9° 55′, W. 50° 21′*†	29.08	738.6				ne.	7		o			o	o	long h'vy	ne.	clear	
Bk. Geo. Booth, Capt. D. Williams N. 19° 50′, E. 37° 30′*†	30.10	764.5	70	21.1		ese.						sh's	sh's		se;e	clear	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 40° 40′, W. 67° 59′			48	8.9		wnw.	7				wnw.	snow	snow	r'gh	wnw.	snowy	
Schr. Henry Denison, Capt. Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 42° 16′, E. 33° 32′*	29.90	759.4				nne.	3		10			3 h'r	light	long	var.	rainy	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith																	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte,																	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen																	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 37° 47′, W. 15° 09′*†	30.45	773.4	54	12.2	93	wnw.	6		8		wnw.			r'gh	sw;n	raining	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.24	768.1	61	16.1	36	calm	o		o							clear	G. S. d'Ancona.
Bk Pilgrim, Capt. J. Connolly S. 17° 12′, W. 31° 20′*†	30.00	762.0				var.					e.	o	o			clear	J. Connolly.
Schr. S. B. Hubbard, N 35° 08′, W. 75° 21′*†	30.61	777.5	45	7.2		n.	3		o			o	o	long	n	fine	H. Mehaffey, 2d mate.
Bk. Stella, Capt. H. N. T. Sommer, S. 12° 28′, W. 33° 24′*	29.88	758.9	79.7	26.5	93	e.	3		4		se.			mod.	e.	d clouds	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 33° 06′, W. 22° 22′*†	30.51	774.9	64	17.8	78	wnw.	2		5		w.	o	o	long	nw.	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 33° 35′, E. 14° 25′ *†	30.10	764.5				se.	4		4		se.	o	o	light	sw.		
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 42° 14′, W. 34° 29′*†	29.85	758.2	62	16.7	83	wsw.	7				w.			mod.	wsw.	cloudy	H. T. Schmidt.
Bk. Winifried, Capt. N. P. Dutton. S. 0° 24′, W. 28° 30′*†	30.00	762.0				se;s					se.			light	se.	rainy	N. P. Dutton.

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W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 12, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.31	769.8	66.6	19.2	64	sw.			6		4			0.130	3.3	cloudy	Moiroud.
Algiers			30.28	769.0	55.8	13.2	82	w.			1		10			0.551	14.0	covered	Nicolas.
La Galle			30.27	768.9	62.2	16.8	68	ssw.			1		3			0	0	pretty fair	Foufréde.
Tunis			30.30	769.7															Jacques.
Sfax																			Gau.
Saida			30.27	768 9	46.4	8.0	64	nnw.			4		3			0.087	2.2	pretty fair	Dumas.
Tebessa			30.26	768.6	48.9	9.4	46	sw.			5		9			0	0	covered	Derché.
Geriville					53.6	12.0	45	w.			6		10			0.197	5.0	covered	Lonchamp.
Laghouat			30.29	769.3	52.5	11.4	41	s.			2		5			0.079	2.0	cloudy	Herbin.
Biskra			30.28	769 2	56.5	13.6	38	sse.			6		10			0	0	covered	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.98	761.5	30.07	763.8	66.9	19.4	82	w.	10	4.5			3			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.71	754.7	30.28	769.2	42.8	6.0	54	e.			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.53	750.0	30.33	770.4	35.6	2.0	64	e.	4.3	1.9			0			0	0		Dr. Wierzbiski.
Eperies	29.41	747.0	30.33	770.4	36.0	2.2	61	calm			0	0	0			0	0		Julius Mikolik.
Gratz	28.98	736.2	30.28	769.2	39.9	4.4	47	se.			3		0			0	0		Andreas Rospini.
Hermannstadt	28.83	732.2	30.33	770.4	35.8	2.1	67	se.			4		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.78	731.1	30.19	766.7	34.5	1.4	80	ne.			1		0			0	0	clear	The Staff.
Lemberg	29.30	744.2	30.34	770.6	34.9	1.6	63	se.			1		1			0	0		Dr. T. Stanecki.
Pola	30.11	764.8	30.22	767.7	49.1	9.5	74	wnw.			1		1			0	0		I. R. Hydrographic Office.
Szathmar	29.84	757.9	30.30	769.7	39.7	4.3	44	e.			3		3			0	0		Joseph Midlinszky, S. J.
Szegedin	30.02	762.5	30.31	769.9	39.6	4.2	74	calm			0		0			0	0		Karl Stancel.
Trieste	30.13	765.3	30.23	767.9	44.6	7.0	77	calm			0		0			0	0		Rieder.
Vienna	29.54	750.3	30.28	769.2	38.8	3.8	58	se.			3		3			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.61	752.1	29.71	754.6	48.5	9.2	60	sw.	13	5.8			3			0.050	1.3	blue sky	W. Boswell.
Armagh, Observatory	29.61	752.1	29.85	758.2	46.2	7.9	73	ssw.	16	7.2									S. Call.
Bidston, Liverpool Obs'y			29.91	759.7	48.1	8.9	81	wsw.	17	7.6			2					blue sky	John Hartnup.
Bolton, Sharples	29.36	745.7	29.90	759.4	46.0	7.8	90	sw.	12	5.4			8					d. clouds	Thomas Mackereth [A.S.
Bradford, Yorkshire																0	0		J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	80.0	26.7	66	ne.			1		3					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			29.96	761.0	50.4	10.2	83	s.			0.4		4					d. clouds	John McLaren.
Chatham, School M. E.	29.87	758.7	30.00	762.0	53.3	11.8	75	sw.			2		4					d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	29.83	757.7	30.06	763.5	49.6	9.8	74	wnw.			1		5					d. clouds	The Staff.
Fort Napier, Natal	27.50	698.5	29.71	754.6	88.2	31.2	35	ne.			1		0					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	88.0	31.1	69	nw.			1		5						Sergt. John Robinson.
Galway, Queen's College					46	7.8	92	s.			4		10					overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.26	768.6	30.32	770.1	61.3	16.3	77	w.			3		4					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	29.52	749.8	29.73	755.1	46.1	7.8	75	wsw.			5		5					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.83	757.7	30.00	762.0	49.5	9.7	79	wsw.			1		9					overcast	The Staff.
Guernsey	29.76	755.9	30.06	763.5	51.0	10.6	84	wsw.			1		1			blank	blank	blue sky	A. Collenette, F. M. S.
Kew, Observatory	29.97	761.2	30.01	762.2	51.1	10.6	72	w.	11	4.9			7					d. clouds	The Staff.
Leicester, Museum	29.67	753.6	29.92	760.0	52.0	11.1	66	sw.			1		2					d. clouds	J. C. Smith.
Malta, Mediterranean	30.14	765.5	30.21	767.3	58.0	14.4	59	sw.			2		2					blue sky	Corpl. A. King, A H. C
Nassau, Bahamas	30.37	771.4	30.41	772.4	71.0	21.7	87	ne.			3		10					overcast	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	29.76	755.9	29.99	761.7	49.8	9.9	71	s.			3		2					blue sky	The Staff.
Plymouth	29.95	760.7	30.03	762.7	50.0	10.0	91	sw.			1		5					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.49	749.0	43	6.1	79	wsw.	19	8.5			2					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.19	766.8	30.26	768.6	37.0	2.8	92	calm			0		9			blank	blank	misty	W. H. Lyne.
Sheffield	29.62	752.3	29.90	759.4	52.3	11.3	61	sw.			2		4			0.01	0.3	d. clouds	W. F. Cooper.
Stiloth Rectory	29.82	757.4	29.85	758.2	48.0	8.9	79	w.			3		0			0.553	14.0	blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.91	759.7	46.2	7.9	85	w.	13	5.8			10					foggy	I. New.
Stratfield Turgiss	29.81	757.2	30.02	762.5	53.3	11.8	72	w.			1–6		3					blue sky	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.99	761.7	30.04	763.0	55	12.8	62	w.			4		5					d. clouds	W. Newcombe.
Valencia, Observatory	29.85	758 2	29.87	758.7	47.9	8.8	65	s.	36	16.1			10					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.88	758.9	29.91	759.7	74.0	23.3	84	sw.	9.4	4.2		0	2 k			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.87	758.7	29.91	759.7	81.3	27.4	68	s.	29	13.0		0	0			0	0		The Staff, for D. Gill.
Worcester†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.												5 cs	2 c						Hon. J. Ferguson.
Charlottetown, P. E. Island	30.46	773.7	30.51	774.9	3	—16.1	100	s.	1	0.4						0	0	fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.35	770.9	30.41	772.4	10	—12.2	80	sw.	2	0.9			10 n		sw.	0	0	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.17	766.3	30.19	766.8	18	— 7.8	96	sw.	25	11.2			10 s		calm	0	0	threatening.	J. McWilliams.
Fort Garry, Manitoba*	28.96	735.6	29.86	758.4	10	—12.2	96	ne.	16	7.2		5 k	5 n	n.	n.	0	0	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.46	773.7	30.60	777.2	9	—12.8	100	w.	1	0.4		0	hz			0	0	hazy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.95	760.7	30.30	769.6	34	1.1	75	s.	16	7.2			10 ks		sw.	0	0	threatening.	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.08	764.0	30.31	769.9	19	— 7.2	84	s.	13	5.8			10 s			0.01	0.3	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.40	746.7	30.12	765.0	37	2.8	89	se.	8	3.6			10 n		sw.	0	0	cloudy	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.53	750.0	30.24	768.1	40	4.4	100	s.	3	1.3		5 k	5 n	s.	s.	0.01	0.3	threatening.	H. Morgan.
Port Stanley, Ontario	29.56	750.8	30.22	767.6	41	5.0	67	s.	6	2.7			10 ks		sw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.99	761.7	30.34	770.6	16	— 8.9	96	calm			0		10 n			0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.67	753.6	30.15	765.8	24	— 4.4	92	se.	5	2.2			10 s		sw.	inap.	inap.	light rain	W. H. McIntyre.
Saugeen, Ontario*	29.37	746.0	30.09	764.3	47	8.3	68	s.	16	7.2			10 ks			0.09	2.3	cloudy	
St. Andrews, N. B.	30.44	773.2	30.49	774.4	22	— 5.6	89	sw.	1	0.4			10 n			0	0	cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.43	772.9	30.50	774.7	5	—15.0	100	sw.	5	2.2		10 c	0	nw.		0	0	fair	T. C. Hill, C. E.
Toronto, Ontario*	29.83	757.7	30.23	767.8	37	2.8	89	se.	7	3.1			10 n		w.	0	0	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.53	775.4	30.60	777.2	29	— 1.7	84	sw.	3	1.3			8 k		w.	0	0	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.04	763.0	30.22	767.6	12	—11.1		w.	3	1.3		0	0			0.60	15.2	fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.23	767.8	30.52	775.2	46.1	7.8	80	e.			3		10			blank	blank	raining	N. Titoushkin.
Sung-shu-chwang†	24.47	621.4			28.4	—2.0		calm			0		10			0.04	1.		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	30.48	774.1	30.50	774.7	38.5	3.6	75	nne.	2.5	1.1			10			0	0	covered	M. Marc Dechevrens, S. J.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.10	764.4	30.14	765.6	35.4	1.9	91	s.	11	5			8						Oversergent Fischer.
Fanöe	30.02	762.6	30.04	763.1	37.4	3.0	88	s.			4		1						Overloerer Lauridsen.
Godthaab, Greenland	29.39	746.4	29.43	747.5	8.6	—13.0	80	ne.			4		7						S. Kleinschmidt.
Stykkisholm, Iceland	28.86	733.0	28.90	734.1	10.4	—12.0		ne.			8		8						A. O. Thorlacius.
Thorshavn	29.19	741.4	29.22	742.3	41.5	5.3	66	sw.	27	12			4						Overloerer Bergh.
Vestervig	29.87	758.8	29.97	761.1	37.9	3.3	87	sse.			4		4						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.46	748.3	30.12	765.1	55.0	12.8	77	calm			0		n;kn			0	0		M. Labroue, Director.
Alençon, Normal School	29.57	751.1	30.12	765.1	44.2	6.8	94	s.			2	c	0	ne.		0	0		M. Nicot, Director.
Arras, Engineer School	29.83	757.7	30.09	764.3	49.1	9.5	94	se.			2	1 c	0			0	0	clear	M. Klein, Commandant.
Avignon, Normal School	30.04	763.0	30.12	765.0	59.0	15	39	se.			3		5			0	0	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.54	750.3	30.10	764.6	50.0	10.0	45	s.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	29.83	757.6	30.10	764.6	45.1	7.3	77	se.			1		0			0.031	0.8	clear	M. Frère Eugène Marié
Besançon, Normal School			30.13	765.2	36.0	2.2	85	s.			1		10 n		s.	0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	29.80	756.9	30.06	763.6	48.9	9.4	89	se.			1		10			0.063	1.6	covered	M. Rayet, Director.
Bourges, Normal School	29.50	749.3	30.06	763.5	50.0	10	94	s.			1	c	0	s.		0	0		M. Postel, Director.
Brest, Naval Observatory	29.87	758.8	30.12	765.0	54.7	12.6	74	calm			0		4			0.059	1.5		M. de Kennaree, Dir.
Caen, Normal School	29.98	761.5	30.06	763.5	53.2	11.8	75	s.			1		5		n.	0	0	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.74	755.4	30.07	763.7	50.5	10.3	75	sse.			1		0			0	0	clear	M. Jadot, Director.
Charleville, Normal School.	29.61	752.1	30.13	765.3	49.6	9.8	50	sw.			1		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.72	729.5	30.08	764.1	53.1	11.7	55	se.			1		8			0	0	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.22	742.1	30.10	764.6	52.7	11.5	76	se.			1		0			0.04	1.	clear	M. de Villemontée, Dir.
Commercy, Normal School.	29.28	743.6	30.18	766.5	49.8	9.9	52	s.			1	1	1	s.	s	0	0	clear	Dr. Coulet, Director.
Gap, Normal School	27.50	698.6	30.06	763.6	51.4	10.8	44	nw.			2		1		n.	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.96	735.6	30.10	764.6	50.0	10.0	63	se.			3		8		se.	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.36	745.8	30.15	765.8	45.3	7.4	43	ese.			1	cs	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.50	724.0	30.10	764.6	50.9	10.5	15	sw.			1		kn		sw.	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.81	757.2	30.09	764.3	51.8	11	81	s.			1		8		s.	0.071	1.8	very cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.50	749.3	30.07	763.7	52.5	11.4	71	sw.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.30	769.6	30.12	765.1	57.2	14.0	78	n.			1		0			0.102	2.6	clear	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.08	738.6	30.15	765.9	48.4	9.1	55	nnw.			1		5 n		wsw.	0	0	fair	M. André, Director.
Mans, Normal School	29.81	757.2	30.13	765.2	45.7	7.6	84	se.			1		8		s.	0	0	very cloudy	M. Piboen, Director.
Marseille, Observatory	29.84	758.0	30.11	764.9	56.8	13.8	42	ese.			2		5		se.	0	0		M. Stephan, Director.
Montlouis l'instituteur	24.73	628.2	29.58	751.2	33.8	1.0	82	e.	9.4	4.2			7		se.	0.134	3.4		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.98	761.6	30.10	764.4	48.6	9.2	84	n.			2		5		se.	0.24	6.	raining	M. Galzin, Director.
Nancy, Normal School	29.37	746.1	30.17	766.4	44.6	7	60	wsw.			1	2 c	0			0	0	slightly cl'dy	M. Hasse, Director
Nantes, Observatory	29.95	760.6	30.11	764.7	50.5	10.3	76	ssw.			0-1	0	8 k			0	0		M. Larocque, Director.
Nice																			Capt. Bolssière, Director.
Perpignan, Observatory	29.95	760.7	30.06	763.6	49.1	9.5	92	ne.	11.2	5.0			10		n;ne.	0	0	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.08	535.3			22.1	— 5.5		ne.			1		10		ne.	0.091	2.3	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.04	737.7	30.14	765.6	48.6	9.2	76	s.			1		0			0.12	3.	clear	M. Taillen.
Puy de Dôme Obs'y, Summit	25.16	639.1			35.6	2.0	78	e.			1		8			0.008	0.2	¾ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.02	762.6	30.06	763.4	54.0	12.2	86	ssw.			1		10		s.	0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.82	757.5	30.04	763.0	52.5	11.4	68	se.			1		5		se.	0	0	cloudy	M. Moullot, Director.
Rodez, Normal School	27.93	709.4	30.11	764.9	45.7	7.6	64	e.			3		1		se.	0	0	clear	M. Serger, Director.
Rouen, Normal School	30.02	762.5	30.08	763.9	48.6	9.2	68	sse.			1		2			0	0	slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	30.00	762.0	30.16	766.0	53.2	11.8	78	sw.			1		5		sw.	0	0	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.94	760.4	30.10	764.6	49.8	9.9	59	s.			1		1		s.	0	0		M. Renou, Director.
Toulouse, Observatory	29.38	746.2	30.10	764.6	47.8	8.8	99	se.			1		1c		se.	0	0	covered	M. Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.61	752.0	30.10	764.5	48.6	9.2	69	s.			1					0.004	0.1		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.82	757.3	30.11	764.7	51.1	10.6	60	s.			1		3	wsw.		0.008	0.2	hazy	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.32	744.7	30.18	766.5	42.1	5.6	50	e.			1	0	18			0	0		Prof. Dr. Hoh.
Berlin	30.02	762.5	30.20	767.1	42.8	6.0	56	s.			1		0			0	0		Prof. Dr. Arndt.
Breslau	29.75	755.6	30.28	769.2	30.9	— 0.6	100	ese.			2		10			0	0	foggy	Royal University Obs'y.
Carlsruhe	29.75	755.7	30.22	767.5	33.6	0.9	70	sse.			1		0			0	0		Albert Senz.
Cassel	29.48	748.8	30.20	767.0	33.8	1.0	54	s.			1		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.82	757.3	30.20	767.0	39.0	3.9	65	sse.			1		0			0	0		Physical Society.
Friedrichshafen	28.73	729.8	30.25	768.3	30.2	— 1.0	90	w.			3		0			0	0		Wilhelm, Chief Tel.
Hamburg	30.04	763.0	30.13	765.4	40.6	4.8	74	se			2		0			0	0	hazy	E. Preller.
Kiel	30.09	764.2	30.10	764.6	38.8	3.8	77	s.			2		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.77	756.1	30.21	767.2	42.1	5.6	55	s.			1		0			0	0		H. Leppig, Asst.
Magdeburg	29.99	761.7	30.19	766.7	41.9	5.5	61	e.			2		0			0	0		Dr. Assmann.
Memel	30.28	769.0	30.32	770.2	32.7	0.4	92	sw.			3		10s						Issermann.
Munich	28.30	718.8	30.17	766.3	36.0	2.2	60	n.			1		1	n.		0	0		Central Station.
Neufahrwasser	30.30	769.5	30.31	769.9	33.3	0.7	89	s.			2		10			0	0		A. Lothes.
Neustadt, Palatinate	29.64	752.9	30.17	766.3	35.4	1.9		calm			0		0			0	0		Dicknether.
Stuttgart	29.21	742.0	30.14	765.5	41.0	5.0	51	n.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.15	765.8	30.18	766.5	41.4	5.2	94	sse.			3	0	5 s			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.83	757.6	30.23	767.8	52.0	11.1		n.			1.0		2 k			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.79	756.8	29.84	758.0	75.9	24.4	62	wsw.	23	10.3			0			0	0	misty	
Deesa	29.33	745.0	29.80	757.0	80.0	26.7	30	wsw.	8.1	3.6			0			0	0	blue sky	
Bombay	29.83	757.6	29.87	758.6	78.5	25.8	54	nw.	20	8.9			0			0	0	blue sky	
Poona, Yarrowda	27.96	710.2	29.80	756.8	84.0	28.9	21	wnw.	20	8.9			0			0	0	blue sky	
Belgaum	27.29	693.2	29.80	756.8	82.8	28.2	27	wsw.	12	5.4			0			0	0	blue sky	
Lahore	29.13	739.8	29.90	759.3	63.6	17.6	52	calm	1.7	0.8			0			0	0	blue sky	
Roorkee	28.91	734.3	29.84	757.8	65.2	18.4	40	nw.	1.8	0.8			2			0.01	0.3		
Agra	29.24	742.7	29.82	757.3	72.2	22.3	29	w.	2.5	1.1						0	0		
Nagpur	28.74	729.9	29.77	756.1	84.2	29.0	21	nw.	5.5	2.5			0			0	0	blue sky	
Jubbulpore	28.46	722.8	29.81	757.2	79.8	26.6	32	nw.	1.6	0.7			0			0	0	blue sky	
Lucknow	29.46	748.2	29.84	757.9	76.2	24.6	44	wnw.	3.0	1.3			0			0	0	blue sky	
Allahabad	29.50	749.3	29.82	757.4	72.8	22.7	35	calm	3.2	1.4			0			0	0	blue sky	
Patna	29.60	751.8	29.79	756.6	70.5	21.4	78	nw.	6.0	2.7			4	nw.	nw.	0	0	d. clouds	
Hazaribagh	27.75	704.9	29.79	756.6	71.6	22.0	32	w.	11.2	5.0			2			0	0		
Cuttack	29.70	754.4	29.78	756.5	82.0	27.8	58	wsw.	7.2	3.2			0			0	0	blue sky	
Calcutta, Alipore	29.73	755.1	29.75	755.7	73.8	23.2	89	wsw.	10.0	4.5			10		sw.	2.89	73.4	overcast	
Dhubri	29.62	752.2	29.74	755.4	64.4	18.0	89	ene.	12.1	5.4			9		w.	1.39	35.3	gloomy	
Chittagong	29.77	756.2	29.87	758.6	73.3	22.9	80	s.	6.7	3.0			10					drizzling	
Sibsagar	29.44	747.8	29.79	756.6	60.3	15.7	97	ne.	2.8	1.2			10	w.	w.	1.35	34.3	gloomy	
Jeypore	28.36	720.4	29.82	757.5	72.7	22.6	14	wnw.	5.9	2.6			0			0	0	blue sky	
Zanzibar, Africa	29.80	756.9			82.3	27.9	70	ne.	8.2	3.7			8			0	0	gloomy	
Trichinopoly	29.59	751.6			87.1	30.6	34	ene.	1	0.4			0			0	0	blue sky	
Bellary	28.34	719.8			90.5	32.5	21	nw.	4.2	1.9			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.82	757.5	30.25	768.3	48.9	9.4	44	se.	0.7	0.3			0			0	0		Prof. Giovanni Clodig.
Milan	29.74	755.5	30.28	769.2	45.1	7.3	65	ese.	0.7	0.3			2			0	0		Prof. Schiaparelli.
Padua	30.14	765.5	30.25	768.4	43.7	6.5	61	nnw.	3.1	1.4			2			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.33	744.9	30.27	768.8	41.7	5.4	68	ne.	1.3	0.6			2						Prof. P. F. Denza.
Genoa	30.02	762.6	30.22	767.6	50.4	10.2	55	n.	3.8	1.7			2	sw.		0.020	0.5		Prof. G. M. Garibaldi.
Mondovi	28.28	718.4	30.27	768.9	40.1	4.5	42	w.			2		2	s.		0	0		Prof. D. C. Bruno.
Pesaro	30.17	766.3	30.22	767.6	45.3	7.4	83	n.	9.8	4.4			7			0	0		Prof. Luigi Guidi.
Florence	29.96	761.0	30.22	767.7	47.8	8.8	59	nw.			2		3			0	0		Prof. Costantino Pitter.
Leghorn	30.05	763.3	30.14	765.5	50.9	10.5	52	ene.	3.1	1.4			4			0	0		Prof. P. Monte.
Rome	29.98	761.6	30.17	766.2	54.3	12.4	46	ne.	1.3	0.6			6			0	0		Prof. P. S. Ferrari.
Lecce	29.92	760.0	30.18	766.6	53.6	12.0	56	nnw.	7.6	3.3			2	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.31	744.4	30.22	767.7	50.4	10.2	72	se.	3.1	1.4			0			0	0		Prof. D. Conti.
Cagliari	29.82	757.3	30.01	762.3	57.0	13.9	73	se.			2		10	s.		0.394	10.0		Prof. A. Pacinotti.
Palermo	29.87	758.8	30.13	765.3	55.9	13.3	62	ese.	6.9	3.1			3	nw.		0	0		Prof. G. Ciacciatore.
Syracuse	30.15	765.9	30.20	767.1	55.6	13.1	70	wsw.	9.4	4.2			4	sw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.63	752.7	30.18	766.5	54.3	12.4	57	s.	0.7	0.3			4	n.		0	0		Prof. T. Brioschi.
Sielvio	22.10	561.2			19.0	— 7.2	40	se.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.16	562.8			21.9	— 5.6	54	e.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.84	757.9	29.88	758.9	21.7	— 5.7	80	s.	10.6	4.7			10 n			0.340	8.6	light snow	
Hakodate	29.78	756.4	29.80	756.9	22.9	— 5.1	60	nw.	24.0	10.7			4		nw.	0.120	3.0		
Hiroshima, I. M. Obs'y †	30.08	764.0	30.10	764.5	45.1	7.3	59	n.	4.3	1.9		ck	9 ks			0	0	very cloudy	K. Sasaki.
Kanazawa	30.20	767.1	30.31	769.9	34.0	1.1	89	nne.	9.0	4.0			10 n			0.240	6.1	snowing	S. Endo.
Kioto	29.82	757.4	30.00	762.0	36.2	2.3	88	w.	0.8	0.4		ck	9 s			0.016	0.4	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.03	762.7	30.24	768.1	42.0	5.6	76	ne.	0.8	0.4		0	0			0	0	clear	S. Takehayashi.
Niigata	29.97	761.2	30.01	762.2	31.4	— 0.3	86	sse.	4.9	2.2		10 ck	0			0.150	3.8	snowy	
Nobiru	29.94	760.5	29.96	761.0	29.3	— 1.5	80	nw	14.7	6.6		0	1 s			0	0	fair	H. Midzushina.
Sapporo					19.5	— 6.9	94	w.	8.4	3.8			10			0.005	0.1	snowing	
Tokei Obs'y, Yeddo	29.85	758.2	29.92	759.9	39.9	4.4	63	nnw.	7.3	3.3		ck	6 s		sw.	0	0	fair	The Staff.
Wakayama	29.98	761.5	30.03	762.7	41.1	5.1	87	se.	6.6	2.9		ck	5 ks		w.	0	0	fair	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	24.48	621.6	30.27	768.8	50.4	10.2	74	n.			1	0	0			0	0		
Mexico, Central Obs'y	29.87	758.6	30.13	765.4	62.0	16.7	94	nnw.	0.9	0.4		1 cs	0			0	0	clear	F. Quijano, C. E.
Morelia	23.19	589.0	30.37	771.4	47.3	8.5	61	calm	0	0		0	0			0	0	very fine	The Staff.
Pabellon, Aguascalientes	24.44	621.0	30.70	779.9	51.8	11.0	70	sse.			3	0	0			0	0	fine	M. Tena, M. D.
Puebla, Catholic Institute	24.03	610.3	30.15	765.7	49.6	9.8	69									0	0		M. V de Leon, M. E.
San Luis Potosi	23.49	596.6	30.37	771.2	47.6	8.6	71	calm	0	0		0	0			0	0		Prof. P. Spina.
Tlacotalpam	24.28	616.7	30.28	769.2	55.6	13.1	66	se.			1	0	5		e.	0	0	½ cloudy	G. Barroeta, M. D.
Vera Cruz																			Prof. M. Cházaro.
Zacatecas	22.63	574.8	30.36	771.1	49.8	9.9	59	wsw.	8.3	3.7		0	0			0	0	fine	Prof. J. Rossell.
																			J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.74	755.4	29.93	760.2	82.4	28.0	73	ene.	23.5	10.5		1 cs	6 n;k		e.	0.04	1.0	fair	Oliver & Figot.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.08	763.9	30.08	763.9	44.8	7.1		ssw.			3					0	0		
Groningen	30.02	762.5	30.08	763.9	42.3	5.7		ssw.			2					0	0		
Helder	30.03	762.7	30.03	762.7	40.6	4.8		s.			4					0	0		
Hellevoetsluis	30.65	763.3	30.05	763.3	44.4	6.9	83	s.			3					0	0		
Utrecht	30.05	763.2	30.10	764.4	43.3	6.3	79	s.			2		2			0	0	lightly cl'dy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.65	753.2	29.72	754.8	42.8	6.0	67	s.	34	15			10			0.394	10.0	raining	
Brono	29.40	746.8	29.44	747.8	45.0	7.2	55	ssw.	9	4			9			0.087	2.2		
Christiania	29.80	757.0	29.96	760.9	33.4	0.8	75	ssw.	13	6			10			0.063	1.6		
Gjæsvær	29.57	751.0	29.59	751.6	19.4	— 7.0		s.			2		8						
Lodingen	29.39	746.6	29.44	747.8	31.1	— 0.5	89	calm			0		10			0.240	6.1	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					60.1	15.6	81	w.	13.0	5.8			6			0	0		Dr. J. A. Sampaio.
Campo Major	29.22	742.3	30.25	768.3	51.8	11.0	71	wnw.	8.1	3.6			5			0.386	9.8		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.37	771.4	30.46	773.7	63.7	17.6	63	sw.	0.7	0.3			2			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.99	761.8	30.36	771.2	53.2	11.8	75	s.	1.8	0.8			10			0.354	9.0		The Staff.
Ponta Delgada, Azores	30.34	770.5	30.41	772.3	61.9	16.6	75	sw.	13.6	6.1			3	n.		0	0		
Saint Paul de Loando	29.66	753.4	29.86	758.5	81.0	27.2	77	wsw.	1.8	0.8			1	sse.		0	0		
Serra da Estrella	25.35	643.8	30.30	769.6	29.8	— 1.2	100	nw.					10			blank	blank	foggy	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Major K. Lasarew.
Archangel	29.79	756.7	29.81	757.2	20.5	— 6.4	82	w.	4	2			0			0	0		Capt. Sseliwerstow.
Astrakhan	30.41	772.5	30.33	770.4	17.4	— 8.1	65	calm	0	0			9 k;s			0.012	0.3		Capt. Wisganow.
Barnaul	29.52	749.9	30.07	763.7	10.0	—12.2	67	calm	0	0			5			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.97	761.2	30.22	767.7	33.8	1.0	98	w.	7	3			10 n			0	0		Observatory.
Ekaterinburg	28.64	727.4	29.69	754.2	0.1	—17.7	79	ssw.	7	3			10			0.028	0.7	snowing	Meteorological Obs'y.
Kasan	29.32	744.6	29.60	751.7	25.7	— 3.5	94	wsw.	2	1			10			0.043	1.1	snowing	Observatory.
Kertch	30.27	768.9	30.29	769.4	34.0	1.1	73	calm	0	0		0	0			0	0		Lagorio & Sastyrez.
Kieff	29.66	753.4	30.34	770.6	29.5	— 1.4	76	nnw.	7	3			10ks;n			0	0		Observatory.
Lugan	30.06	763.5	30.28	769.1	25.2	— 3.8	78	wsw.	4	2			10			0	0		Meteorological Obs'y.
Moscow	29.43	747.5	29.92	760.0	36.1	2.3	68	n.	7.8	3.5			10 s			0	0		Meteorological Obs'y.
Nikolaiev	30.35	770.8	30.42	772.6	32.7	0.4	78	calm	0	0			10 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor.	29.89	759.2	29.98	761.4	11.5	—11.4	90	nw.	16	7			10			0.157	4.0	snowing	Lieut. Iwanow.
Pekin, China	30.46	773.7	30.60	777.3	29.5	— 1.4	55	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	30.12	765.0	30.13	765.4	30.9	— 0.6	94	wnw.	13	6			10 n			0.016	0.4		Central Physical Obs'y.
Tashkend, Laboratory	28.52	724.3	30.19	766.9	25.5	— 3.6	95	calm	0	0			10			0	0		Teich, A. M.
Tiflis	28.85	732.7	30.35	771.0	30.0	— 1.1	50	calm	0	0		0	0			0	0		Physical Observatory.
Vladivostok	30.20	767.1	30.27	768.8	8.8	—12.9	59	n.	4	2		0	0			0	0		
Warsaw	29.90	759.5	30.35	770.9	33.6	0.9	68	se.	7	3		0	0						Astronomical Obs'y.
Wilna	29.91	759.8	30.35	771.0	34.2	1.2	78	wsw.	2	1			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.17?	766 4?	30.50?	774.6?	— 2.7	—19.3	72	calm	0	0			0			0	0		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.47	748.5	46	7.8	92	sw.			7		10			0.1	3.	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Ons'y	29.85	758.2	29.95	760.8	53.6	12.	78	e.	3.1	1.4			10			0.024	0.6		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.11	764.8	30.17	766.3	55.9	13.3	74	nw.	5.6	2.5		1	8	n.		0.228	5.8	almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.15	689.7	30.24	768.2	37.8	3.2	81	n.	9.2	4.1		0	6			0.299	7.6	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.84	707.1	30.11	764.8	47.7	8.7	60	nw.	15.4	6.9		0	2			0.287	7.3	lightly cl'dy	The Staff.
Murcia, Met. Obs'y	29.86	758.4	30.01	762.3	53.2	11.8	59	nw.	8.1	3.6		5	5	se.		0.091	2.3		Olayo Diaz, Director.
Santiago, Met. Obs'y	29.30	744.3	30.21	767.4	52.7	11.5	73	calm	0	0		0	3			0.512	13.0	cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.20	767.2	30.27	768 8	69.1	20.6	87	e.	0.9	0.4		0	3 k		ene.	0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.98	761.4	30.04	762.9	77.7	25.4	63	ene.	1.5	0.7		0	s			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.19	766.9	30.30	769.5	55.6	13.1	65	wnw.	15.5	6.9		0	5		nw.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.11	764.9	30.21	767.2	72.0	22.2	100	se.	4.0	1.8			10 kn		se.	0.087	2.2	raining	E. Gadea, Chief Engu'r.
Tuguegarao, Philippine Id's	29.94	760.5	30.07	763.8	73.8	23.2	79	nw.	4.5	2.0		0	3 ks		w.	0	0	fair	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. Hildebrandsson, Director of the Meteorological Observatory, of the Upsala University.																			
Haparanda	29.80	757.0	29.84	758.0	21.9	— 5.6	85	s.			2		8			0	0		
Umea	29.76	755.8	29.81	757.1	33.8	1.0	87	sw.			2		10			0	0		
Hernosand	29.75	755.7	29.80	757.0	36.5	2.5	84	ssw.			2		7			0	0		
Stockholm	29.87	758.7	30.05	763.2	34.2	1.2	92	w.			4		10			0	0	foggy	
Wisby	30.08	763.9	30.13	765.4	35.6	2.0	85	sw.			4		10			0	0		
Sub-Series.																			
Upsala	29.91	759.7	30.00	761.9	34.2	1.2	92	ssw.	8.1	3.6			10			0	0	foggy	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.76	730.5	30.26	768.5	31.6	— 0.2	100	ese.			1					0	0	foggy	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.30	769.7	36.5	2.5	93	ne.	0	0			10		n.	0.630	16.0	snowing	The Observatory.
Valona			30.05	763.2	53.1	11.7		w.			1		10			0	0	covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.20	767.1	50.9	10.5	63	n.			1	0	8 n		nw.	0	0		Prof. C. V. A. van Dyck.

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

Stations.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Albany, New York	30.47	773.9	30.56	776.2	36	2.2	69	s.	6	2.7		6 cs	0			0	0	fair	
Alpena, Michigan	29.34	745.2	30.05	763.3	35	1.7	89	se.	5	2.2		4 k	6 s	w.	w	0.03	0.8	cloudy	
Atlanta, Georgia	29.30	744.2	30.52	775.2	49.5	9.7	72	e.	10	4.5			10 s		calm	0	0	cloudy	
Atlantic City, New Jersey	30.64	778.2	30.65	778.5	39.2	4.0	89	s.	7	3.1		5 c	0	w.		0	0	fair	
Augusta, Georgia	30.38	771.6	30.58	776.7	53.7	12.1	74	e.	3	1.3			10 s			0	0	cloudy	
Baltimore, Maryland	30.59	777.0	30.64	778.2	38	3.3	82	calm	0	0			10s;fg			0	0	cloudy	
Barnegat, New Jersey	30.62	777.7	30.64	778.2	38.5	3.6	88	s.	10	4.5		8 cs	0			0	0	fair	
Bismarck, Dakota	27.84	707.1	29.82	757.4	23	— 5.0	88	nw.	10	4.5			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.25	692.1	30.21	767.3	22	— 5.6	92	ne.	4	1.8			10 s		calm	0.08	2.0	cloudy	
Boston, Massachusetts	30.45	773.4	30.61	777.5	27.0	— 2.8	77	s.	8	3.6		6 cs	0			0	0	fair	
Brownsville, Texas	30.05	763.3	30.10	764.5	69	20.6	100	se.	8	3.6		2 c	8 s		s.	0	0	cloudy	
Buffalo, New York	29.59	749.3	30.30	769.6	45.6	7.6	51	s.	18	8.0			10 s		sw.	0	0	cloudy	
Burlington, Vermont	30.08	764.0	30.39	771.9	31.0	— 0.6	68	s.	26	11.6		9 ck	0	w.		0	0	cloudy	
Cairo, Illinois	29.81	757.2	30.23	767.8	57.0	13.9	89	s.	19	8.5			10 s		s.	0.20	5.1	threatening	
Campo, California	27.57	700.3	30.21	767.3	28.5	— 1.9	88	calm	0	0		0	0			0.15	3.8	clear	
Camp Thomas, Arizona	27.28	692.9	30.11	764.8	44	6.7	93	nw.			2		9 ks		w.	inap.	inap.	cloudy	
Cape Henry, Virginia	30.66	778.7	30.68	779.3	41	5.0	82	se.	6	2.7		3 k	2 s	sw.	sw.	0	0	fair	
Cape May, New Jersey	30.61	777.5	30.64	778.2	40	4.4	82	s.	14	6.3		0	3 ks		s.	0	0	clear	
Castroville, Texas	29.26	743.2	30.10	764.5	67	19.4	93	s.	6	2.7			10 s			0.03	0.8	cloudy	
Cedar Keys, Florida	30.40	772.1	30.42	772.7	60	15.6	81	ne.	6	2.7		4 ck	0			0	0	fair	
Champaign, Illinois	29.22	742.2	30.10	764.5	54.2	12.3	80	s.	19	8.5		0	5 s		s.	inap.	inap.	fair	
Charleston, S. Carolina	30.50	774.7	30.56	776.2	59	15.0	87	e.	8	3.6		0	9 s		e.	0	0	cloudy	
Charlotte, N. Carolina	29.70	754.4	30.59	777.0	46.0	7.8	76	se.	5	2.2			10s;fg			0	0	cloudy	
Chattanooga, Tennessee	29.63	752.6	30.49	774.4	54.0	12.2	66	s.	5	2.2			10 ks		s.	0	0	cloudy	
Cheyenne, Wyoming	23.80	604.5	30.05	763.3	25.2	— 3.8	57	nw.	20	8.9		0	0			0	0	clear	
Chicago, Illinois	29.28	743.7	30.03	762.7	50.5	10.3	88	s.	12	5.4		7 k	0	s.		inap.	inap.	fair	
Chincoteague, Virginia	30.63	778.0	30.65	778.5	42	5.6	93	s.	4	1.8		4 c	0			0	0	fair	
Cincinnati, Ohio	29.63	752.6	30.32	770.1	56.2	13.4	51	se.	5	2.2		8 k	0	nw.		0	0	cloudy	
Cleveland, Ohio	29.51	749.5	30.30	769.6	52.3	11.3	70	s.	15	6.7			10 s			0	0	cloudy	
Coleman City, Texas	28.23	717.0	30.11	764.8	56	13.3	93	s.	7	3.1			10 s			0.03	0.8	cloudy	
Columbus, Ohio	29.43	747.5	30.33	770.4	50	10.0	58	s.	9	4.0			10dks		w.	0	0	cloudy	
Concho, Texas	28.13	714.5	30.15	765.8	60	15.6	93	s.	4	1.8		0	5 s			0	0	fair	
Davenport, Iowa	29.22	742.2	29.92	760.0	50	10.0	72	s.	10	4.5		0	4 s		s.	0.01	0.3	fair	
Dayton, Washington T'y	28.22	716.8	30.03	762.7	29.8	— 1.2	71	se.	2	0.9			10 s			inap.	inap.	cloudy	
Deadwood, Dakota	25.06	636.5	29.98	761.5	26	— 3.3	88	sw.	5	2.2			10 s		w.	0	0	cloudy	
Decatur, Texas					56	13.3	62	nw.	10	4.5			10 s			0	0	cloudy	
Delaware Breakwater, Del.	30.62	777.7	30.64	778.2	38	3.3	89	s.	12	5.4		7 cs	0	w.		0	0	fair	
Denison, Texas	29.27	743.4	30.11	764.8	62.3	16.8	100	s.	6	2.7			10 n			0.04	1.0	light rain	
Denver, Colorado	24.54	623.3	30.06	763.5	38.4	3.6	49	nw.	4	1.8		0	0			0	0	clear	
Des Moines, Iowa	28.79	731.3	29.76	755.9	55	12.8	86	sw.	18	8.0			10 s		sw.	0	0	cloudy	
Detroit, Michigan	29.44	747.8	30.19	766.8	51.0	10.6	59	s.	17	7.6		4 cs	6 s	w.	s.	0.02	0.5	cloudy	
Dodge City, Kansas	27.22	691.4	29.96	761.0	43.3	6.3	94	sw.	13	5.8		0	0			0	0	clear	
Dubuque, Iowa	29.12	739.6	29.88	758.9	45.6	7.6	68	s.	5	2.2		2 ck	2 s	sw.	s.	inap.	inap.	fair	
Duluth, Minnesota	28.98	736.1	29.74	755.4	38.5	3.6	83	ne.	6	2.7			10s;fg		ne.	0	0	cloudy	
Eagle Pass, Texas	29.27	743.4	30.11	764.8	65.1	18.4	100	calm	0	0			10 n			inap.	inap.	light rain	
Eagle Rock, Idaho	25.25	641.3	30.15	765.8	3	—16.1	79	sw.	16	7.2		0	0			0.12	3.0	clear	
Eastport, Maine	30.43	772.9	30.50	774.7	28.5	— 1.9	71	sw.	11	4.9		4 c;cs	3 s	w.	w.	0	0	fair	
El Paso, Texas	26.28	667.5	30.16	766.1	44	6.7	68	w	6	2.7		0	0			0	0	clear	
Erie, Pennsylvania	29.54	750.3	30.30	769.6	51	10.6	59	s.	17	7.6		10 k	0	s.		0	0	cloudy	
Escanaba, Michigan	29.20	741.7	29.92	760.0	36	2.2	79	e.	4	1.8			10 s			0	0	cloudy	
Fort Apache, Arizona	24.99	634.7	30.09	764.3	40	4.4	86	se.	3	1.3			10 s		calm	0.43	10.9	cloudy	
Fort Assiniboine, Montana	27.05	687.1	30.09	764.3	19	— 7.2	58	sw.	15	6.7		0	0			0.01	0.3	clear	
Fort Bennett, Dakota	28.03	711.9	29.76	755.9	28	— 2.2	77	nw.	6	2.7			10 ks		nw.	0	0	cloudy	
Fort Benton, Montana	27.11	688.6	30.11	764.8	17	— 8.3	70	calm	0	0		7 k	0	sw.		inap.	inap.	fair	
Fort Buford, Dakota	27.84	707.1	30.02	762.5	20	— 6.7	73	n.	6	2.7			10 s		calm	0.02	0.5	cloudy	
Fort Custer, Montana	26.69	677.9	30.05	763.3	30	— 1.1	52	e.	5	2.2		0	6 s		calm	0	0	fair	
Fort Davis, Texas	25.16	639.1	30.12	765.0	47	8.3	93	sw.	4	1.8			10 s		calm	0	0	cloudy	
Fort Elliott, Texas	27.16	689.9	30.06	763.5	42	5.6	52	s.	8	3.6		7 c	0	s.		0	0	fair	
Fort Gibson, Indian T'y	29.46	748.3	30.06	763.5	63.0	17.2	90	s.	12	5.4			10 s		s.	inap.	inap.	cloudy	
Fort Grant, Arizona	25.28	642.1	30.14	765.5	40	4.4	65	nw.	3	1.3			10 s			0.01	0.3	cloudy	
Fort Griffin, Texas	28.75	730.2	30.12	765.0	58	14.4	93	s.	4	1.8		10 cs	0	sw.		0	0	cloudy	
Fort Keogh, Montana	27.32	693.9	30.00	762.0	26	— 3.3	76	nw.	13	5.8		4 cs	0	w.		0.02	0.5	fair	
Fort Macon, North Carolina	30.62	777.7	30.63	778.0	48	8.9	93	ne.	12	5.4		4 cs	6 s	calm	se.	0	0	cloudy	
Fort McKavett, Texas	27.81	706.4	30.19	766.8	57.6	14.2	83	s.	9	4.0		4 cs	0			0	0	fair	
Fort Missoula, Montana	26.67	677.4	30.10	764.5	13	—10.6	83	nw.	3	1.3			10 ks			0.01	0.3	cloudy	
Fort St. Michaels, Alaska	29.96	761.0	29.99	761.7	—23	—30.6	100	ne.	3	1.3		0	0			0	0	clear	
Fort Shaw, Montana	26.29	667.8	30.14	765.5	17	— 8.3	70	w.	5	2.2		1 cs	0			0.01	0.3	clear	
Fort Sill, Indian Territory	28.77	730.7	30.08	764.0	52.8	11.6	98	calm	0	0		10 c	0	w.		0	0	cloudy	
Fort Stevenson, Dakota	27.83	706.9	29.85	758.2	21	— 6.1	100	n.	16	7.2			10 n			inap.	inap.	light snow	
Fort Verde, Arizona					33.4	0.8	88	w.			1	2 k	4 s	sw.	w.	0.07	1.8	fair	
Fredericksburg, Texas	28.31	719.1	30.11	764.8	65	18.3	90	sw.	6	2.7			10 ks		sw.	0.01	0.3	threatening	
Galveston, Texas	30.13	765.3	30.17	766.3	66.3	19.1	100	s.	12	5.4			10 s		s.	0.08	2.0	threatening	
Grand Haven, Michigan	29.32	744.7	30.03	762.7	47.0	8.3	86	s.	24	10.7			10 n		sw.	inap.	inap.	light rain	
Hatteras, North Carolina	30.64	778.2	30.66	778.7	49	9.4	93	ne.	12	5.4		4 ck	2 k	n.		0	0	fair	
Helena, Montana	25.70	652.8	30.10	764.5	16	— 8.9	70	w.	4	1.8		0	0			0	0	clear	
Henrietta, Texas	29.04	737.6	30.10	764.5	60	15.6	87	s.	18	8.0			10 s			0	0	cloudy	
Huron, Dakota	28.15	715.0	29.67	753.6	29.2	— 1.6	84	nw.	13	5.8			10 s			0	0	cloudy	
Indianapolis, Indiana	29.37	746.0	30.22	767.6	56	13.3	86	s.	10	4.5			10 s		s.	0.04	1.0	threatening	
Indianola, Texas	30.09	764.3	30.12	765.0	68.8	20.4	93	se.	14	6.3		7 ck	3 ks	s.	s.	0.01	0.3	cloudy	
Jacksboro, Texas	28.86	733.0	30.10	764.5	58	14.4	93	se.	3	1.3			10 s			0	0	cloudy	
Jacksonville, Florida	30.43	772.9	30.48	774.2	59	15.0	87	ne.	4	1.8		2 cs	fg.			0	0	clear	
Keokuk, Iowa	29.23	742.4	29.93	760.2	53.0	11.7	80	s.	16	7.2		5 k	0	s.		0.13	3.3	fair	
Key West, Florida	30.28	769.1	30.31	769.9	73.0	22.8	82	e.	15	6.7		0	5 ks		e.	0.05	1.3	fair	
Kittyhawk, North Carolina	30.66	778.7	30.68	779.3	40	7.8	87	e.	6	2.7		5 c	0	nw.		0	0	fair	
Knoxville, Tennessee	29.42	747.3	30.50	774.7	48	8.9	79	ne.	1	0.4			10 n			0.01	0.3	light rain	
La Crosse, Wisconsin	28.96	735.6	29.80	756.9	52	11.1	72	s.	13	5.8			10 s		s.	0	0	cloudy	
La Mesilla, New Mexico	26.14	663.9	30.15	765.8	37.0	2.8	82	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	28.96	735.6	29.90	759.4	57	13.9	69	s.	16	7.2		0	0			0	0	clear	
Lewiston, Idaho	29.22	742.2	30.09	764.3	27	— 2.8	88	e.	5	2.2		0	7 s		e.	inap.	inap.	cloudy	
Little Rock, Arkansas	29.82	757.4	30.15	765.8	63	17.2	84	s.	9	4.0			10 ks		s.	0.04	1.0	cloudy	
Los Angeles, California	29.87	758.7	30.27	768.8	40.6	4.8	73	n.	4	1.8		0	0			0	0	clear	
Louisville, Kentucky	29.68	753.9	30.27	768.8	57.0	13.9	64	s.	11	4.9			10 n		calm	0.02	0.5	light rain	
Lynchburg, Virginia	29.90	759.4	30.62	777.7	41.0	5.0	65	calm	0	0		6 k	0	sw.		0	0	fair	
Mackinac City, Michigan																			
Madison, Wisconsin	28.86	733.0	29.95	760.7	47	8.3	86	s.	10	4.5			10 s		sw.	0.01	0.3	cloudy	
Marquette, Michigan	29.10	739.1	29.88	758.9	41	5.0	48	se.	8	3.6			10 s		calm	0	0	cloudy	
Mason, Texas	28.40	721.3	30.13	765.3	62	16.7	93	sw.	1	0.4			10 ks		sw.	inap.	inap.	cloudy	
Memphis, Tennessee	29.88	758.9	30.23	767.8	62	16.7	84	calm	0	0			10 s		s.	inap.	inap.	cloudy	
Milwaukee, Wisconsin	29.17	740.9	29.97	761.2	48	8.9	86	s.	7	3.1			10 s		sw.	inap.	inap.	threatening	
Mobile, Alabama	30.30	769.6	30.34	770.6	60.0	15.6	87	se.	2	0.9		10 cs	0			0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	30.18	766.6	30.42	772.7	57	13.9	79	se.	6	2.7		9 k	0	sw.		0	0	cloudy	
Moorhead, Minnesota	28.53	724.6	29.63	752.6	25	— 3.9	88	n.	2	0.9		0	5 s			0	0	fair	
Morgantown, W. Virginia	29.43	747.5	30.50	774.7	49.0	9.4	68	calm	0	0			10 s		w.	0	0	cloudy	
Mt. Washington, N. H.	23.92	607.6	30.54	775.7	21.0	— 6.1	76	nw.	60	26.8		7 cs	0	nw.		0	0	fair	
Nashville, Tennessee	29.76	755.9	30.32	770.1	58.7	14.8	59	se.	10	4.5			10 ks		s.	inap.	inap.	threatening.	
New Haven, Connecticut	30.53	775.4	30.65	778.5	30	— 1.1	83	sw.	3	1.3		5 c	2 s; sk	sw.	sw.	0	0	fair	
New London, Connecticut	30.62	777.7	30.67	779.0	33	0.6	60	sw.	4	1.8		5 k	0	calm		0	0	fair	
New Orleans, Louisiana	30.20	767.1	30.26	768.6	62.5	16.9	87	se.	11	4.9		1 c	0			0	0	clear	
Newport, Rhode Island	30.60	777.2	30.65	778.5	37.0	2.8	79	sw.	6	2.7		3 cs	4 s	sw.	calm	0	0	fair	
New River, N. Carolina					45	7.2	76	ne			1		10 s			0.15*	3.8*	cloudy	
New Shoreham, Rhode I'd.	30.62	777.7	30.65	778.5	37.6	3.1	73	sw.	8	3.6		7 ck	0	nw.		0	0	fair	
New York, New York	30.47	773.9	30.66	778.7	33.9	1.1	88	s.	5	2.2		4 cs	4 s	sw.		0	0	cloudy	
Norfolk, Virginia	30.64	778.2	30.67	779.0	41	5.0	82	se.	3	1.3		2 ck	4 ks			0	0	fair	
North Platte, Nebraska	26.78	680.2	29.88	758.9	34.6	1.4	78	w.	8	3.6		0	0			0	0	clear	
Olympia, Washington T'y	29.94	760.5	29.98	761.5	35.5	1.9	89	nw.	1	0.4			10 n		calm	0.01	0.3	light snow	
Omaha, Nebraska	28.47	723.1	29.74	755.4	52.2	11.2	66	s.	19	8.5		0	2 s			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	30.05	763.3	30.07	763.8	—35.2	—37.3	76	wsw.	2	0.9		0	0			0	0	clear	
Oswego, New York	30.00	762.0	30.35	770.9	39.0	3.9	54	s.	12	5.4			10 s		w.	0	0	cloudy	
Palestine, Texas	29.58	751.3	30.16	766.1	66	18.9	100	s.	8	3.6			10 n			0.03	0.8	light rain	
Pensacola, Florida	30.34	770.6	30.37	771.4	62.1	16.7	87	se.	18	8.0		0	4 s		sw.	0	0	fair	
Philadelphia, Pa.	30.56	776.2	30.67	779.0	37	2.8	82	sw.	2	0.9		0	7 s		w.	0	0	fair	
Pike's Peak, Colorado	17.32	439.9	30.04	763.0	2	—16.7	100	sw.	12	5.4			10 n			0.02	0.5	light snow	
Pioche, Nevada	24.07	611.4	30.23	767.8	12	—11.1	70	n.	2	0.9		0	0			0.05	1.3	clear	
Pittsburg, Pennsylvania	29.56	750.8	30.42	772.7	46.0	7.8	56	e.	2	0.9			10 s			0	0	cloudy	
Port Eads, Louisiana	30.29	769.4	30.30	769.6	58.2	14.6	97	se.	6	2.7		2 c	hz	w.		0	0	clear	
Port Huron, Michigan	29.45	748.0	30.18	766.6	45.0	7.2	85	s.	15	6.7			10 s		sw.	0.08	2.0	cloudy	
Portland, Maine	30.48	774.2	30.53	775.4	27.0	— 2.8	77	sw.	9	4.0		2 cs	6 s	sw.	calm	0	0	cloudy	
Portland, Oregon	29.88	758.9	29.95	760.7	36.8	2.7	89	s.	9	4.0			10 n		calm	0.25	6.3	light rain	
Portsmouth, N. Carolina					48	8.9	71	ne.	14	6.3			10 k		calm	0	0	cloudy	
Prescott, Arizona	24.76	628.9	30.12	765.0	18	— 7.8	73	s.	3	1.3		0	0			0.40	10.2	clear	
Punta Rassa, Florida	30.32	770.1	30.33	770.4	66	18.9	84	e.	14	6.3		1 c	hz	calm		inap.	inap.	clear	
Red Bluff, California	29.78	756.4	30.16	766.1	41.8	5.4	73	se.	15	6.7			10 s			inap.	inap.	cloudy	
Rio Grande City, Texas	29.87	758.7	30.12	765.0	71	21.7	94	se.	3	1.3			8 s		se.	0	0	cloudy	
Rochester, New York	29.61	752.1	30.32	770.1	44	6.7	60	sw.	16	7.2			10 s		sw.	0	0	cloudy	
Roseburg, Oregon	29.47	748.5	30.04	763.0	35	1.7	89	s.	1	0.4			10 n			0.27	6.9	light snow	
Sacramento, California	30.18	766.6	30.25	768.6	37.0	2.8	82	se.	5	2.2			9 s			inap.	inap.	cloudy	
St. Louis, Missouri	29.45	748.0	30.09	764.3	55.9	13.3	86	s.	17	7.6		0	4 s		sw.	0.04	1.0	fair	
St. Paul, Minnesota	28.73	729.7	29.67	753.6	44.5	6.7	87	se.	11	4.9			10 s		se.	0	0	cloudy	
St. Vincent, Minnesota	28.77	730.7	29.74	755.4	22	— 5.6	88	ne.	12	5.4			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.71	653.0	30.27	768.8	22	— 5.6	61	calm	0	0		2 k	0	w.		0.15	3.8	clear	
San Antonio, Texas	29.36	745.7	30.08	764.0	66	18.9	100	s.	4	1.8			10 k		s.	0.06	1.5	cloudy	
San Diego, California	30.18	766.6	30.25	768.3	42.9	6.1	83	ne.	8	3.6		0	0			0.02	0.5	clear	
Sandusky, Ohio	29.51	749.5	30.23	767.8	52	11.1	66	s.	24	10.7			10 s			0.04	1.0	cloudy	
Sandy Hook, New Jersey	30.61	777.5	30.65	778.5	36.0	2.2	69	s.	11	4.9		5 k	0	calm		0	0	fair	
San Francisco, California	30.15	765.8	30.22	767.6	43	6.1	83	se.	10	4.5			8 s		s.	0.05	1.3	cloudy	
Santa Fé, New Mexico	23.15	588.0	30.19	766.8	32.4	0.2	80	sw.	3	1.3			10 s		w.	0.02	0.5	cloudy	
Savannah, Georgia	30.44	773.2	30.53	775.4	57	13.9	83	e.	4	1.8			10 ks		e.	0	0	cloudy	
Shreveport, Louisiana	29.91	759.7	30.16	766.1	61	16.1	100	s.	6	2.7			10 s		s.	inap.	inap.	threatening.	
Silver City, New Mexico	24.23	615.4	30.08	764.0	39	3.9	82	w.	3	1.3		0	8 ks		calm	0.11	2.8	cloudy	
Sitka, Alaska	29.59	751.6	29.66	753.4	31.5	— 0.3	85	w.	5	2.2		4 k	2 s	w.	calm	0.81	20.6	fair	
Smithville, North Carolina	30.59	777.0	30.63	778.0	51	10.6	93	ne.	9	4.0		3 c	3 s	n.		0	0	fair	
Spokane Falls, Wash. Ter.	27.95	709.9	30.08	764.0	11	—11.7	80	s.	1	0.4			10 s		sw.	0	0	cloudy	
Springfield, Illinois	29.33	745.0	30.05	763.5	53	11.7	80	s.	16	7.2		0	0			0.02	0.5	clear	
Springfield, Massachusetts	30.48	774.2	30.62	777.7	28.6	— 1.9	92	s.	5	2.2		9 c	0	w.		0	0	cloudy	
Springfield, Mo.	28.58	725.9	30.15	765.8	49	9.4	77	s.	15	6.7		3 c	0	w.		0.05	1.3	clear	
Stockton, Texas	26.98	685.3	30.11	764.8	55.5	13.1	74	s.	8	3.6			10 s		s.	0	0	cloudy	
Thatcher's Island, Mass.	30.53	775.4	30.59	777.0	33.0	0.6	88	sw.	28	12.5		4 cs	0			0	0	clear	
Toledo, Ohio	29.45	748.0	30.19	766.8	53.5	11.9	59	s.	13	5.8			10 s		sw.	0.01	0.3	cloudy	
Tucson, Arizona	27.65	702.3	30.13	765.3	45	7.2	85	nw.	3	1.3			10 s			0	0	cloudy	
Umatilla, Oregon	29.65	753.1	30.03	762.7	36.0	2.2	66	se.	2	0.9			10 s			0	0	cloudy	
Uvalde, Texas	29.07	738.4	30.07	763.8	67	19.4	100	se.	3	1.3			10 n		calm	0.05	1.3	light rain	
Vicksburg, Mississippi	29.99	761.7	30.25	768.6	62	16.7	84	se.	2	0.9		8 cs	fg	calm	calm	0	0	cloudy	
Visalia, California	29.88	758.9	30.25	768.6	29.5	— 1.4	91	e.	3	1.3		0	0			0.07	1.8	clear	
Washington, D. C.	30.51	774.9	30.63	778.0	38.0	3.3	82	s.	3	1.3		2 c	3 s	w.	s.	0	0	fair	
West Los Animas, Colorado	25.83	656.1	29.95	761.0	44	6.7	56	sw.	11	4.9		0	0			0	0	clear	
Wickenburg, Arizona					29	— 1.7	76	w.			1	0	1 s		w.	0.08	2.0	clear	
Williamsport, Pa.	29.91	759.7	30.54	775.7	36	2.2	61	e.	1	0.4			10 s			0	0	cloudy	
Wilmington, N. Carolina	30.58	776.7	30.64	778.2	46	7.8	83	ne.	5	2.2			10 s		calm	0	0	cloudy	
Winnemucca, Nevada	25.65	651.5	30.17	765.3	8	—13.3	80	se.	6	2.7		0	0			0	0	clear	
Wood's Holl, Mass.																			
Yankton, Dakota	28.21	716.5	29.63	752.6	32	0.0	78	sw.	5	2.2		0	0			0	0	clear	
Yuma, Arizona	30.05	763.3	30.20	767.1	44.4	6.9	55	nw.	8	3.6		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.06	560.3			52.0	11.1	82	calm	0	0		2 c	3 s			0.12	3.0	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.09	764.3	30.10	764.5	77	25.0	85	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	30.06	763.5	30.08	764.0	75	24.4	86	s.	8	3.6			10 ks		s.	1.35	34.3	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.99	761.7	30.01	762.2	75	23.9	86	e.				2 k	4 ks		ese.	0.551	14.0		B. Bigar.
Havana, Cuba, W. I.	30.26	768.6	30.31	769.9	73	22.8	84	se.	1.2	0.5		1 cs	2 ks	calm	calm	0	0	fair	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.16	766.1	30.17	766.3	68.0	20.0	97	n.	1	0.4		0	0			0.10	2.5		Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	78	25.6	91	e.			2	5 k	8 ps	e.	e.	0.140	3.6		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.54	750.3	30.00	762.0	78	25.6	89	calm			0	3 ck	3 ks	calm	calm	0	0	fair	Miss Flora A. Nichols.
Rivas, Nicaragua							95	ne.			4	0	6 ks		ne.	0	0	fair	Earl Flint.
Santiago de Cuba, W. I.	30.17	766.3	30.19	766.8	75	23.9	76	n.	3.6	1.6		0	2 ks			0.08	2.0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.94	760.5	29.99	761.7	—10.0	—23.3	78	w.	11	4.9		0	0			0.07	1.8	clear	J. Fortescue & W. Wood.

* Total rainfall for 5 days.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Vigo, Spain	30.26	768.6	51.5	10.8	82	nne.			1		3	ssw.						d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 22° 12′, E. 113° 35′	30.20	767.1	61	16.1		ene.			2		10					3	e.	overcast	Capt. A. J. Errington.
H. M. S. Alert, N. 6° 09′, E. 87° 19′	29.85	758.2	82.2	27.9	82	ne.			3		4							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.23	767.8	59	15.0	70	se.			1		2							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 10° 23′, E. 64° 26′	29.88	758.9	80	26.7	78	nne.			4		4	n.				2	ne.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.90	759.4	77	25.0	71	se.			1–3		3	ese.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S. 35° 35′, E. 19° 38′	29.94	760.5	72	22.2	80	sse.			3		1	sw.				2	s.	blue sky	Capt. A. T. Dale.
H. M. S. Dido, N. 12° 00′, W. 61° 45′	30.15	765.8	78	25.6		ene.			2		2	ne.						d. clouds	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.58	776.7	57	13.9	57	nne.			2–3		8	nne.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 45° 50′, W. 57° 43′	29.88	758.9	59	15.0	87	nnw.			3		10					2–3	n.	foggy	Capt. Sir W. Wiseman.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 35° 47′, E. 14° 27′	30.00	762.0	66	18.9	94	se.			4–5		9					3	e.	d. clouds	Capt. C. A. G. Bridge.
H. M. S. Fawn, Aden, Arabia	29.83	757.7	79.5	26.4	82	sse.			3		3	sse.						d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.02	762.5	45.5	7.5	84	calm			0		5							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 12° 04′, W. 77° 11′	30.03	762.7	68.5	20.3	92	s.			2		10							misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.68	753.9	55	12.8	80	wnw.			6		9							d. clouds	Capt. L. F. Jones.
H. M. S. Inconstant, N. 19° 00′, E. 112° 00′	30.11	764.8	70	21.1	84	ene.			4–5		4	ne.				3	ne.	d. clouds	
H. M. S. Iris.																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 13′, E. 114° 14′	30.18	766.6	60	15.6	82	ne.			2–4		7	n.						squally	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey, Coquimbo, Chili	30.00	762.0	66	18.9		calm			0		10							overcast	Capt. J. T. R. Aylen.
H. M. S. Marple																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 30′, E. 148° 40′	30.36	771.1	59	15.0	81	s.			2–3		2	nw.				2	s.	d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, Colon, Panama	29.99	761.7	79	26.1	82	n.			3		3	nne.						d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 4° 07′, E. 52° 57′	29.86	758.4	84.5	29.2	80	w.			1		5	sw.				2	nw.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 29° 16′, W. 38° 33′	30.31	769.9	70	21.1	95	ene.			1		2					3	ef'd	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix, N. 15° 27′, W. 78° 44′	30.08	764.0	78	25.6	90	ne.			4		3	ne.				2	ne.	d clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, Cape Coast Castle; Africa	29.86	758.4	83	28.3	100	sw.			2		3							d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.10	764.5	53	11.7		nw.			2–5		4							squally	Capt. W. H Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id.	29.97	761.2	32	0.0	89	wnw.			2		6							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Sea Gull.																			Capt. M. Byles.
H. M. S. Thalia, N. 47° 42′, W. 9° 30′	30.14	765.5	53	11.7		ssw.			3		3					6	wsw.	d. clouds	
H. M. S. Triumph, Callao Bay, Peru	30.05	763.3	68	20.0	94	calm			0		3	s.						d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 13° 57′, E. 112° 19′	30.02	762.5	78	25.6	90	nne.			3		4					2	nne.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica W I.	30.11	764.8	74	23.3		calm			0		0							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Muscat, Arabia	29.86	758.4	75.5	24.2	72	ese.			1–3		0					5	nw.	squally	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon																			
Quanza, Brava, Cape Verd Ids.	30.00	762.1	73.0	22.8	84	ne.			2		10					2	ne.	foggy	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 11° 36′, W. 74° 23′	30.00	761.9	74.7	23.7	90	e.			5		3							misty	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla.	30.30	769.6	65	18.3	89	e.	14	6.3	.....	.....	5	.....	se.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	30.53	775.4	26	— 3.3	.....	sw.	12	5.4	.....	.....	8	.....	sw.	0	0	.....	.....	fair	
Naval Hospital Yokohama, Japan	29.81	757.2	40	4.4	60	n.	.....	.....	3	.....	8	.....	w.	0.02	0.5	.....	.....	cloudy	
Adams, Callao, Peru	29.82	757.4	69	20.6	95	sse.	.....	.....	1	.....	10	.....	.....	0	0	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	30.00	762.0	61	16.1	100	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert. Singapore, India*	29.76	755.9	80	26.7	87	ne.	.....	.....	3	.....	8	.....	calm	.....	.....	sm'h	.....	cloudy	
Alliance, N. 38° 08′, W. 74° 08′	30.62	777.7	47	8.3	77	s.	.....	.....	2	.....	2	.....	.....	0	0	sm'h	.....	clear	
Ashuelot, Tientsin, China	30.63	778.0	29	— 1.7	100	s.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, S. 49° 55′, W. 66° 08′	29.52	749.8	63	17.2	89	wnw.	12	5.4	.....	.....	2	.....	n; w	0	0	sm'h	.....	fair	
Colorado, New York, N. Y.	30.62	777.7	34	1.1	90	s.	7	3.1	.....	.....	8	.....	.....	0	0	.....	.....	cloudy	
Enterprise, Norfolk, Va*	30.66	778.7	43	6.1	92	se.	.....	.....	2	.....	5?	.....	w.	.....	.....	.....	.....	clear	
Essex, N. 31° 40′, W. 16° 44′	30.47	773.9	63	17.2	72	ne.	.....	.....	2	.....	8	.....	ne.	.....	.....	sm'h	nw.	cloudy	
Franklin, Norfolk, Va.	30.74	780.8	42	5.6	74	se.	3	1.3	.....	.....	8?	.....	w.	0	0	.....	.....	clear	
Galena, Villafranca, France	30.13	765.3	56	13.3	63	ese.	.....	.....	3–5	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Independence, N. Yard, Mare I'd, Cal.	30.15	765.8	41	5.0	74	ese.	2.4	1.1	.....	.....	8	.....	ese.	0.06	1.5	.....	.....	cloudy	
Kearsarge, New Orleans, La.	30.25	768.3	63	17.2	89	e.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	clear	
Lackawanna. Valparaiso, Chili*	29.95	760.7	61	16.1	94	calm	.....	.....	0	.....	2	.....	ne.	.....	.....	.....	.....	clear	
Lancaster, N. 34° 01′, E. 24° 02′	30.23	767.8	59	15.0	49	e.	.....	.....	0–1	.....	2	.....	e.	.....	.....	sm'h	.....	fair	
Marion, S. 30° 20′, E. 36° 01′	29.74	755.4	78	25.6	69	s.	.....	.....	2	.....	2	.....	ssw.	.....	.....	sm'h	.....	fair	
Michigan, Erie, Pa.	30.23	767.8	50	10.0	86	s.	.....	.....	4	.....	10	.....	s.	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I.	30.64	778.2	39	3.9	73	ssw.	6	2.7	.....	.....	8	.....	.....	.....	.....	.....	.....	cloudy	
Monocacy, Yokohama, Japan	29.95	760.7	41	5.0	82	nnw.	.....	.....	3	.....	10	.....	calm	.....	.....	.....	.....	cloudy	
Nipsic, Malaga, Spain	30.21	767.3	59	15.0	53	nw.	.....	.....	4	.....	8	.....	.....	.....	.....	sm'h	.....	squally	
Onward, Callao, Peru†	30.11	764.8	68	20.0	100	sse.	.....	.....	2	.....	10	.....	n.	.....	.....	long	w.	cloudy	
Palos, Hong Kong, China	30.20	767.1	59	15.0	94	ene.	.....	.....	1	.....	2	.....	n; e.	.....	.....	.....	.....	clear	
Passaic, Washington, D. C.	30.65	778.5	37	2.8	90	ssw.	.....	.....	2	.....	5	.....	sw.	.....	.....	.....	.....	fair	
Pensacola. Valparaiso, Chili	30.04	763.0	61	16.1	77	calm	0	0	.....	.....	2	.....	sw.	0	0	sm'h	.....	clear	
Powhatan. N. 24° 58′, W. 66° 03′	30.36	771.1	71	21.7	75	ne.	.....	.....	6	.....	1	.....	n; e.	.....	.....	mod.	n.	clear	
Quinnebaug. N. 34° 16′, E. 21° 51′	30.22	767.6	53	11.7	61	e.	.....	.....	2	.....	5	.....	n.	.....	.....	sm'h	.....	fair	
Ranger. N. 19° 34′, W. 105° 07′*	29.98	761.5	65	18.3	78	se.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, N. 21° 11′, E. 158° 09′*	29.97	761.2	72	22.2	62	nne.	.....	.....	2	.....	8	.....	ne.	0	0	mod.	nne.	fair	
Shenandoah, S. 27° 48′, W. 38° 42′*	30.11	764.8	79	26.1	62	ene.	.....	.....	4	.....	5	.....	ene.	.....	.....	mod.	e.	fair	
St. Louis, League Island, Pa.	30.90	784.8	31	— 0.6	100	calm	0	0	.....	.....	8	.....	.....	0	0	.....	.....	cloudy	
Swatara. Yokohama, Japan*	29.76	755.9	43	6.1	67	nnw.	.....	.....	4	.....	5	.....	n.	.....	.....	mod.	n.	fair	
Tennessee, Fort Monroe, Va.	30.64	778.2	42	5.6	91	se.	3	1.3	.....	.....	8	.....	.....	0	0	.....	.....	hazy	
Vandalia, N. 10° 12′, W. 77° 43′*†	30.10	764.5	78	25.6	86	nne.	.....	.....	5	.....	2	.....	ne.	.....	.....	long	ne.	fair	
Wabash, Boston, Mass.	30.60	777.2	31	— 0.6	.....	ssw.	8	3.6	.....	.....	8	.....	w.	0	0	.....	.....	cloudy	
Wachusetts. Esquimalt, B. C.	30.02	762.5	35	1.7	100	nw.	.....	.....	1	.....	5	.....	nw.	.....	.....	sm'h	.....	fair	
Wyoming, Port Royal, S. C.	30.54	775.7	56	13.3	87	nne.	8	3.6	.....	.....	10	.....	nne.	0	0	.....	.....	overcast	
Yantic, Aspinwall, Panama*	29.99	761.7	78	25.6	91	n.	.....	.....	4	.....	5	.....	n.	.....	.....	.....	.....	fair	

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind. Up'er	Amount and kind. Lo'er	Direction. Upper.	Direction. Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith, N. 44° 45′, W. 62° 00′	30.80	782.3	28	—2.2	.....	wsw.	4	.....	3	.....	nw.	6 h'r	sleet	.....	.....	d. clouds	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, Boston, Mass*	30.32	770.1	34	1.1	.....	ssw.	4	.....	9?	.....	sw.	0	0	.....	.....	clear.?	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, Glasgow, Scotland*	29.45	748.0	50	10.0	.....	sw.	3	.....	6	.....	sw.	.....	.....	.....	.....	fair	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 53° 25′, W. 22° 12′*	29.40	746.7	45	7.2	.....	sw.	6	.....	10	.....	wsw.	2 h'r	2 h'r	chop	w.	squally	.....
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. British Crown, Capt. E. H. Freeth,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Off Kinsale, Ireland	29.91	759.7	48	8.9	92	s.	6	.....	2	.....	sw.	.....	.....	sm'h	sw.	fair	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, Engt	29.90	759.4	53	11.7	66	wsw.	3	.....	8	.....	w.	0	0	.....	.....	fine	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, N. 39° 20′ W. 70° 58′*†	30.53	775.4	47	8.3	92	sw.	6	.....	9	.....	sw.	.....	.....	mod.	nw.	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
S. S. Devonia, Capt. H. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Dan, 3d officer.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 38° 00′, W. 74° 02′*	30.68	779.3	47	8.3	.....	s.	3	.....	1	.....	.....	0	0	sm'h	.....	.....	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Savanilla, U. S. C.*†	29.88	758.9	75	23.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Maracaibo, Venezuela, S. A.	.....	.....	.....	.....	.....	ne.	1	.....	.....	.....	.....	.....	.....	.....	.....	fine	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 18° —′, W. 77° —	29.77	756.1	.....	.....	.....	e.	4	.....	0	.....	.....	0	0	sm'h	.....	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX. *E. W Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 55° 42′, W. 53° 28′	29.74	755.4	47	8.3	.....	nw.	3	.....	10	.....	.....	.....	.....	.....	.....	misty	.....
Baroda, Capt. C. J. Russell, S. 1° 41′, W. 28° 19′	29.96	761.0	80.8	27.1	86	s.	3	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	.....
Caldew, Capt. W. Peterson, S. 49° 44′, W. 47° 10′	30.09	764.3	53	11.7	.....	nnw.	4	.....	10	.....	.....	.....	.....	.....	.....	foggy	.....
S. S. Cipero, Capt. W. N. Lalley, Demerara, British Guiana	30.03	762.7	80.1	26.7	86	nne.	3	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. City of Agra, Capt. Thos. Young, N. 45° 16′, W. 23° 10′	29.93	760.2	55.7	13.2	.....	sw.	6	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Coppename. Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. S. G. Jones, S. 50° 18′, W. 51° 43′	29.98	761.5	51	10.6	100	nnw.	2	.....	10	.....	.....	.....	.....	.....	.....	foggy	.....
Hope, Capt. James Campbell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery, S. 3° 45′, W. 36° 46′	30.00	762.0	84.2	29.0	75	nne.	2	.....	3	.....	.....	.....	.....	...	.....	d. clouds	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 27° 00′, E. 8° 36′	29.99	761.7	72	22.2	71	se.	3	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, S. 58° 37′, W. 70° 00′	29.37	746.0	46	7.8	92	ene.	3	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	30.00	762.0	72	22.2	97	calm	0	.....	2	.....	.....	.....	.....	.....	.....	blue sky	.....
Naiad, Capt. John Smith, N. 31° 27′, W. 47° 33′	30.22	767.6	64.5	18.1	90	nw.	5	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry, S. 18° 55′, E. 79° 36′	29.87	758.7	80	26.7	74	ne.	6	.....	9	.....	.....	.....	.....	.....	.....	showery	.....
S. S. Strathleven, Capt. C. W. Pearson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge N. 48° 37′, W. 12° 48′	30.01	762.2	50	10.0	100	sse.	5	.....	10	.....	.....	.....	.....	.....	.....	raining	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham, N. 46° 10′, W. 48° 00′*†	30.15	765.8	.....	.....	.....	nnw.	7	.....	9	.....	nw.	6 h'r	snow	high	nw.	cloudy	Wm. Fitt.
CROMWELL LINE. *Clark & Seaman, Agents, New York*																	
S. S. Hudson, Capt. H. R. Freeman, N. 32° 15′, W. 78° 20′*†	30.63	778.0	65	18.3	.....	ese.	5	.....	9	.....	se.	0	0	r'gh	ne; se.	cloudy	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 34° 00′, W. 70° 30′*†	30.75	781.0	46	7.8	.....	s.	.....	.....	2	.....	se.	.....	.....	.....	.....	clear	T. P. C. Halsey.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Bothnia, Capt. W. McMickan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Stembridge, 3d offi
S. S. Gallia, Capt. W. H. P. Hains, N. 43° 05′, W. 51° 55′	30.37	771.4	33	0.6	79	nw.	7	.....	8	.....	nw.	hail	hail	high	n.	squally	J. H. Mills, 3d officer.

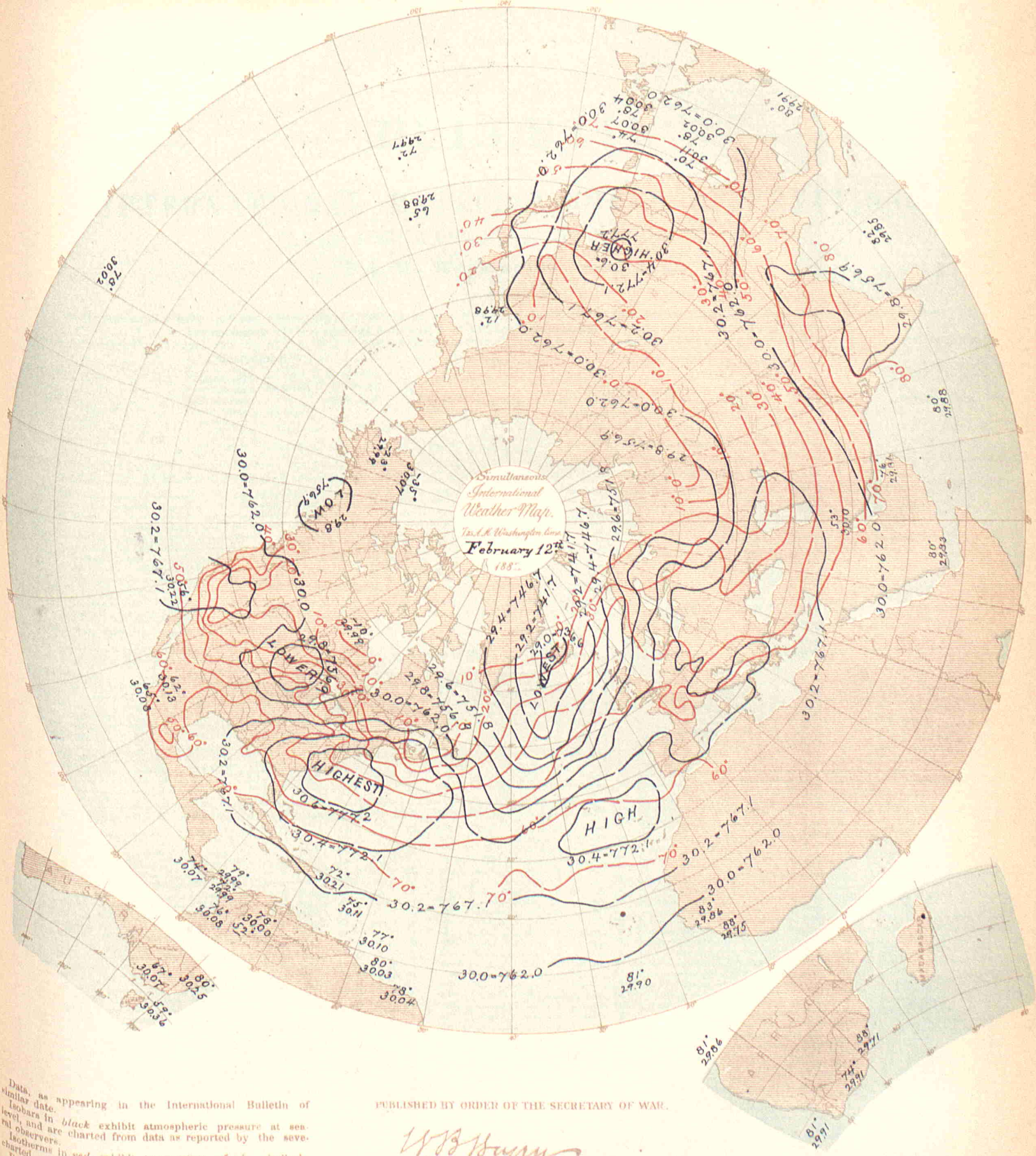
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, N. 43° 48′, W. 54° 31′	30.10	764.6	21.2	—6.0	.....	wnw.	4	.....	5	.....	nw.	0	0	h'vy	wnw.	.....	.....
S. S. France, Capt. Périer d'Hauterive,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Sérvan, N. 45° 30′, W. 46° 40′*†	30.20	767.0	35.6	2.0	.....	wnw.	6	.....	.....	.....	.....	0	0	very h'vy	wnw.	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Silesia, Capt. A. Albers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich, N. 42° 46′, W. 57° 06′*	30.50	774.7	29	—1.7	.....	nnw.	5	.....	2	.....	n.	0	0	5	nnw.	clear	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Montevideo, Uruguay, S. A.	30.20	767.1	78	25.6	.....	sw.	1	.....	3	.....	sw.	0	0	.....	.....	clear	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry, N. 53° 29′, W. 5° 59′	.....	.....	.....	.....	.....	ssw.	1	.....	1	.....	ssw.	0	0	sm'h	.....	clear	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, Nem York.*																	
S. S. Colorado, Capt. M. B. Crowell, New York, N. Y*†	30.08	764.0	38	3.3	.....	sw.	2	.....	0	.....	.....	0	0	.....	.....	clear	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d offi.
S. S. Santiago, Capt. S. F. Phillips, Cienfuegos, Cuba†	30.26	768.6	71	21.7	.....	nne.	1	.....	0	.....	.....	0	0	.....	.....	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom . N. 10° 00′, W. 79° 12† [man	30.00	762.0	81	27.2	.....	nne.	4	.....	.....	.....	.....	.....	.....	.....	nne.	cloudy	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey- N. 28° 20′, W. 79° 10′*† [nolds	30.60	777.2	70	21.1	.....	e.	4	.....	.....	.....	.....	.....	.....	.....	w.	fine	.....
S. S. Elbe, Capt. W. Willigerod N. 48° 20′, W. 31° 30′*	29.22	742.2	48.2	9.0	.....	wsw.	9	.....	.....	.....	.....	.....	.....	h'vy	.....	raining	.....
S. S. Lessing, Capt. B. Voss, N. 44° 54′ W. 49° 51′*†	30.02	762.5	32	0.0	.....	n.	6	.....	.....	.....	.....	.....	.....	7	w.	squally	.....
S. S. Maas, Capt. T. H. Bonjer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke, N. 48° 25′, W. 32° 00′*†	29.42	747.3	.....	.....	.....	sw.	7–9	.....	.....	.....	.....	.....	.....	.....	wsw.	rainy	.....
S. S. P. Caland, Capt. E Dedden, N. 48° 49′, W. 34° 57′	29.18	741.2	42.8	6.0	.....	wsw.	8	.....	.....	.....	.....	.....	.....	8	wsw.	rainy	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 42° 43′, W. 55′ 00′	30.47	773.9	34	1.1	.....	wnw.	5	.....	.....	.....	.....	.....	.....	.....	nw.	clear	.....
S. S. Scythia, Capt. M Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d offi.
S. S. Leipzig, Capt. F. Pfeiffer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sander & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	30.20	767.1	35.6	2.0	.....	s.	4	.....	8	.....	s.	0	0	.....	.....	cloudy	.....
S. S. Mosel, Capt. F. Hesse, N. 40° 14′, W. 65° 20′	30.38	771.6	34.2	1.2	.....	w.	3	.....	1	.....	w.	3 h'r	snow	mod.	wnw.	clear	J. Hesse.
S. S. Neckar, Capt. R. Bussius	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, S. 26° 13′, W. 41° 17′*	29.98	761.5	77.9	25.5	77	e.	5	.....	5	.....	e.	6 h'r	h'vy	4	e.	fair	.....
S. S. Oder, Capt. Undeutsch, N. 49° 24′, W. 23° 04′*	29.52	749.8	61.2	16.2	.....	wsw.	6	.....	9	.....	wsw.	rain	rain	long	wsw.	misty	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, N. 34° 03′, W. 40° 26′	30.19	766.8	.....	.....	.....	ssw.	6	.....	4	.....	ssw.	0	0	r'gh	ssw.	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 16′, E. 157° 19′†	29.88	758.9	65	18.3	78	sw.	6	.....	5	.....	w.	0	0	high	sw.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, San Francisco, Cal	.....	.....	46	7.8	85	se.	2	.....	8	.....	se.	.....	.....	.....	.....	cloudy	.....
S. S. Oceanic, Capt. J. Metcalfe, N. 35° 27′, E. 140° 54′..*	30.03	762.7	49	9.4	50	ene.	2	.....	4	.....	ne.	.....	.....	.....	.....	fine	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 37° 25′, W. 74° 52′*†	30.40	772.1	.....	.....	.....	sse	3	.....	2	.....	.....	.....	.....	sm'h	.....	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, N. 38° 30′, W. 74° 20′†	30.77	781.5	47	8.3	77	s.	1	.....	1	.....	e.	0	0	sm'h	se.	clear	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 40 29', W. 124° 39'†	30.02	762.5	44	6.7	84	e.	4	.....	10	.....	se.	.....	.....	mod	w.	heavy rain	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 40° 40', W. 124° 22'†	30.03	762.7	42	5.6	83	se.	4	.....	10	.....	se.	.....	.....	mod	se.	squally	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	30.13	765.3	43	6.1	83	s.	3	.....	5	.....	s.	.....	.....	.....	.....	hazy	.....
S. S. G. W. Elder, Capt. H. G. Morse, N. 44° 29', W. 124° 57'†	30.07	763.8	44	6.7	.....	nnw.	5	.....	4	.....	nw.	0	0	light	w.	clear	.....
S. S. Idaho, Capt. H. M. Hayward, N. 43° 55', W. 124° 58'..†	30.11	764.8	40	4.4	100	n.	4	.....	8	.....	n.	.....	.....	.....	n.	rainy	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 24', W. 118° 14'†	30.12	765.0	57	13.9	53	nw.	2	.....	1	.....	nw.	.....	.....	sm'h	nw.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, Monterey, Cal.†	30.20	767.1	37	2.8	80	e.	1	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. State of California, Capt. G. Debney, Portland, Oregon†	30.01	762.2	39	3.9	81	se.	2	.....	10	.....	se.	.....	.....	.....	.....	raining	.....
S. S. Victoria, Capt. W. E. Plummer, N. 44° 00', W. 124° 40'†	29.95	760.8	43	6.1	83	n.	2	.....	2	.....	n.	.....	.....	h'vy	w.	fair	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of New York, Capt. W. B. Cobb, N. 7° 50', W. 163° 20'†	30.02	762.5	78	25.6	86	ne.	4	.....	8	.....	ne.	0	0	mod.	ne.	cloudy	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, Sydney, N. S. W†	30.25	768.3	80	26.7	82	se.	3	.....	5?	.....	ne.	0	0	sm'h	.....	cloudy?	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, Hong Kong, China†	30.15	765.8	64	17.8	67	e.	6	.....	10	.....	ne.	1 h'r	light	.....	.....	cloudy	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 29° 20', W. 117° 00'†.	30.22	767.6	56	13.3	62	nnw.	4	.....	2	.....	calm	0	0	mod.	nw.	clear	.....
S. S. Grenada, Capt. M. Connolley, Panama, Panama†	29.99	761.7	72	22.2	100	nw.	2	.....	10?	.....	n.	0	0	.....	.....	clear?	.....
S. S. South Carolina, Capt. W. J. Russell, N. 7° 03', W. 81° 20'†	30.07	763.8	74	23.3	81	n.	3	.....	0	.....	.....	0	0	light	n.	fair	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	30.20	767.1	70	21.1	75	e.	1	.....	1	.....	s.	.....	.....	.....	.....	fine	.....
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Fairclotb	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 35° 02', W. 70° 35'	.....	.....	.....	.....	.....	e.	3	.....	5	.....	ne.	0	0	sm'h	.....	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes N. 47° 37', W. 22° 34'*†	29.82	757.4	56	13.3	.....	ssw.	6	.....	10	.....	sw.	4 h'r	light	r'gh	w.	hazy	.....
S. S. Nederland, Capt J. Ueberweg, N. 49° 47', W. 8° 49'*†	30.40	772.1	56	13.3	.....	s.	2	.....	2?	.....	s.	0	0	long	w.	cloudy?	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, N. 40° 31' W. 69° 08'*†	30.78	781.8	33	0.6	.....	sw.	3	.....	1	.....	sw.	0	0	light	sw.	clear	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon, N. 42° 36', W. 58° 34'*†	30.45	773.4	30	—1.1	100	nw.	5	.....	0	.....	.....	0	0	mod.	wnw.	clear	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels. N. 50° 28', W. 1° 00'*	30.87	784.1	49	9.4	.....	s.	3	.....	2	.....	ssw.	2 h'r	light	sm'h	s.	clear	Olsen & Aesfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis. New York, N. Y.*	30.45	773.4	44.6	7.0	84	w.	2	.....	2	.....	wsw.	.....	.....	.....	.....	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 54° 03', W. 30° 13'†	29.08	738.6	44.6	7.0	.....	sw.	3	.....	3	.....	sw.	6 h'r	rain snow	cross	sw.	clear	J. T. Eberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 51° 17', W. 19° 25'*†	29.34	745.2	50	10.0	.....	s.	6	.....	10	.....	ssw.	2 h'r	2 h'r	r'gh	sw.	overcast	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell New York, N. Y.*†	30.47	773.9	38	3.3	80	nnw.	2	.....	2	.....	nnw.	0	0	.....	.....	fair	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 51° 05' W. 12° 06'*†	29.40	746.7	51	10.6	.....	sw.	4	.....	10	.....	w.	rain	rain	mod.	wnw.	misty	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving, N. 41° 42', W. 53° 14'†	30.34	770.6	40	4.4	82	nnw.	6	.....	8	.....	nnw.	snow	hail	r'gh	nnw.	cloudy	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 49° 01', W. 15° 34'*	29.94	760.5	51	10.6	.....	wsw.	4	.....	10	.....	w.	inap.	inap.	r'gh	nw.	cloudy	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.				Character.	Direction.		
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.46	773.7	64	17.8	83	ese.	3	3 cs	hz	s.	.....	0	0	.....	.....	fair	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 34° 03′, W. 70° 20′*†	30.74	780.8	62	16.7	.....	n to e	2	.....	8	.....	e.	0	0	long	ene.	cloudy	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 21° 35′, W. 31° 10′.*†	30.18	766.6	76	24.4	.....	e.	6	.....	2	.....	e.	0	0	r'gh	e.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 49° 31′, W. 4° 20′*†	30.10	764.5	54	12.2	79	w.	3	.....	5†	.....	w.	1 h'r	light	high	sw.	clear?	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. Ponce, Porto Rico, W. I.†*	30.20	767.1	76	24.4	.....	ne.	1	.....	8	.....	e.	0	0	.....	.....	cloudy	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 5° 25′ W. 25° 30′*†	29.90	759.4	81	27.2	.....	n.	3	.....	10	.....	nne.	0	0	sm'h	ne.	cloudy	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 45° 50′, W. 31° 34′*†.	29.52	749.8	.....	.....	.....	w.	6	.....	.....	.....	wnw.	18 h'r	18 h'r	long	wnw.	.....	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	30.04	763.0	.....	.....	.....	s.	2	.....	1	.....	s.	0	0	.....	.....	clear	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Andersen, Jr.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.67	779.0	43	6.1	75	sw.	1	.....	7	.....	calm	0	0	.....	.....	cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison, S. 23° 36′, W. 84° 25′†	30.15	765.8	.....	.....	.....	ese.	3	.....	5	.....	.....	0	0	h'vy	ssw.	fair	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 24° 32′, W. 27° 10′	.....	.....	74	23.3	.....	e.	6	.....	2	.....	e.	0	0	mod.	e.	fair	.....
Bk. Gamaliel, Capt. D. J. Anthony, N. 12° 19′, W. 53° 04′*†	29.08	738.6	.....	.....	.....	ene.	6	.....	0	.....	.....	0	0	long	ene.	clear	.....
Bk. Geo. Booth, Capt. D. Williams, N. 17° 00′, W. 36° 30′*†	29.95	760.7	74	23.3	.....	e.	.....	.....	.....	.....	.....	shr's	shr's	.....	se. e.	hazy	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 39° 16′, W. 66° 41′*†	30.65	778.5	54	12.2	.....	nnw.	4	.....	.....	.....	nnw.	0	0	hv'y	nw.	clear	.....
Schr Henry Denison, Capt. Jno. Fehring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt, S 41° 52′, E. 37° 51′*	29.86	758.4	.....	.....	.....	n.	3	.....	5	.....	nnw.	5 h'r	light	mod	ne.	clearing	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. T. Lecompte.
Bk. New York, Capt. J. E. Sorensen,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 35° 53′ W. 15° 46′*†	30.70	779.8	60	15.6	88	nw.	3	.....	2	.....	nw.	.....	.....	mod.	nw.	.....	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.28	769.1	59	15.0	44	calm	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 18° 25′, W. 30° 30′*†	30.00	762.0	.....	.....	.....	var.	.....	.....	.....	.....	.....	0	0	.....	.....	clear	J. Connolly.
Schr. S. B. Hubbard, N. 34° 37′, W. 73° 31′*†	30.71	780.0	55	12.8	.....	nne.	1	.....	8	.....	e.	0	0	sm'h	.....	fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 14° 05′, W. 33° 27′*	29.89	759.2	79	26.1	93	e.	3	.....	3	.....	se.	.....	.....	mod.	e.	d. clouds	H. N T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 32° 11′. W. 23° 05′*†	30.51	774.9	66	18.9	90	e.	4	.....	2	.....	e.	0	0	long	nw.	clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 33° 45′, E. 16° 36′*†	30.00	762.0	.....	.....	.....	s.	5	.....	5	.....	se.	0	0	light	sw.	.....	.....
S. Wm. Woodbury Capt. H. T. Schmidt, N. 44° 50′, W. 30° 54′*†	29.55	750.6	60	15.6	82	sw.	9	.....	.....	.....	sw.	.....	.....	h'vy	sw.	covered	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, S. 0° 44′, W. 28° 30′*†	30.00	762.0	.....	.....	.....	var.	.....	.....	.....	.....	se.	.....	.....	light	se.	rainy	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer. U. S. A.

Heliotype Printing Co. Boston

BULLETIN

OF

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7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.47	774.0	67.3	19.6	78	sw.			4		4			0	0	cloudy	Moiroud.
Algiers			30.48	774.2	55.4	13.0	84	e.			1		0			0.244	6.2	clear	Nicolas.
La Galle			30.49	774.4	60.4	15.8	77	e.			4		4			0	0	cloudy	Fonfréde.
Tunis			30.52	775.1															Jacques.
Sfax																			Gau.
Saida			30.44	773.2	41.7	5.4	87	e.			4		4			0.795	20.2	cloudy	Dumas.
Tebessa			30.45	773.4	49.6	9.8	47	s.			3		7			0	0	very cloudy	Derché.
Geriville					38.1	3.4	80	nnw.			6		10			0.197	5.0	covered	Lonchamp.
Laghonat			30.46	773.7	46.4	8.0	59	sw.			2		4			0.433	11.0	cloudy	Herbin.
Biskra			30.47	773.9	56.5	13.6	52	se.			2		10			0.028	0.7	covered	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.15	765.8	30.24	768.1	60.8	16.0	75	sse.	12	5.4			10			0	0	dull	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.97	761.3	30.55	775.9	42.4	5.8	62	e.			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.67	753.7	30.47	774.0	40.3	4.6	60	sw.	1.8	0.8			0			0	0		Dr. Wierzbiski.
Eperies	29.57	751.1	30.50	774.6	36.7	2.6	55	s.			2	0	0			0	0		Julius Mikolik.
Gratz	29.18	741.1	30.48	774.2	39.4	4.1	39	sw.			2		0			0	0		Andreas Rospini.
Hermannstadt	29.06	738.0	30.57	776.5	34.5	1.4	76	se.			3		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.06	738.0	30.47	774.0	34.2	1.2	76	ne.			1		0			0	0	clear	The Staff.
Lemberg	29.42	747.2	30.46	773.7	35.6	2.0	59	sw.			1		0			0	0		Dr. T. Stanecki.
Pola	30.34	770.7	30.46	773.6	50.9	10.5	66	ese.			1		0			0	0		I. R. Hydrographic Office.
Szathmar	30.06	763.5	30.53	775.4	40.6	4.8	56	s.			1		0			0	0		Joseph Midlinszky, S. J.
Szegedin	30.22	767.5	30.51	774.9	41.7	5.4	63	calm			0		0			0	0		Karl Stancel.
Trieste	30.37	771.3	30.47	773.9	51.8	11.0	28	calm			0		0			0	0		Rieder.
Vienna	29.74	755.5	30.49	774.5	41.7	5.4	57	se.			1		0			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.08	738.6	29.18	741.2	49.1	9.5	73	sw.	32	14.3			4			0.025	0.6	squally	W. Boswell.
Armagh, Observatory	29.28	743.7	29.52	749.8	50.1	10.1	64	sw.	28	12.5			3					squally	S. Call.
Bidston, Liverpool Obs'y			29.63	752.6	55.0	12.8	76	wsw.	50	22.3			7					d. clouds	John Hartnup.
Bolton, Sharples	29.14	740.1	29.67	753.6	52.1	11.2	83	ssw.	36	16.1			10					overcast	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.21	741.9	29.61	752.1	51.3	10.7	92	sw.			4		10			0.07	1.8	raining	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	74.0	23.3	83	ne			1		8					overcast	Corpl. J. Surgenor, A.H.C.
Cardington			29.92	760.0	51.0	10.6	86	sw.			4.0		10					overcast	John McLaren.
Chatham, School M. E.	29.92	760.0	30.05	763.3	46.9	8.3	93	sw.			3		10					drizzling	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.82	757.4	30.05	763.3	53.0	11.7	89	sw.			6		10					rain & fog	The Staff.
Fort Napier, Natal	27.64	702.0	29.86	758.4	82.2	27.9	44	se.			1		0					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.57	751.1	29.80	756.9	89.0	31.7	59	w.			1		2						Sergt. John Robinson.
Galway, Queen's College			29.63	752.6	54	12.2	48	sw.			4		6					d. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.24	768.1	30.29	769.4	62.8	17.1	77	sw.			4		0					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	29.14	740.1	29.35	745.5	46.7	9.3	62	wsw.			7		5					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.85	758.2	30.02	762.5	47.5	8.6	92	ssw.			4		10					overcast	The Staff.
Guernsey	29.88	758.9	30.18	766.6	49.0	9.4	93	sw.			2		8					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	29.99	761.7	30.03	762.7	48.9	9.4	86	sw.	33	14.8			10					threatening	The Staff.
Leicester, Museum	29.56	750.8	29.81	757.2	53.8	12.1	73	sw.			6		10					overcast	J. C. Smith.
Malta, Mediterranean	30.23	767.8	30.31	769.9	60.0	15.6	70	sw.			2		5					d. clouds	Corpl. A. King, A H. C.
Nassau, Bahamas	30.33	770.4	30.38	771.6	73.0	22.8	85	ne.			3		8					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	29.72	754.9	29.94	760.5	52.0	11.1	83	s.			7		10					squally	The Staff.
Plymouth	29.98	761.5	30.05	763.3	52.7	11.5	93	sw.			6		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			28.97	735.8	43.2	6.2	92	wsw.	24	10.7			10					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.37	771.4	30.44	773.2	41.2	5.1	63	ne.			1		8					d. clouds	W. H. Lyne.
Sheffield	29.39	746.5	29.66	753.4	53.1	11.7	83	sw.			6		10			0.06	1.5	squally	W. F. Cooper.
Silloth Rectory	29.46	748.3	29.49	749.0	49.3	9.6	84	sw.			6		10			0.070	1.8	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.66	753.4	52.3	11.3	79	sw.	26	11.6			10					squally	I. New.
Stratfield Turgiss	29.80	756.9	30.02	762.5	50.3	10.2	89	sw.			2.5		10					raining	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.98	761.5	30.03	762.7	55	12.8	93	sw.			6		10					raining	W. Newcombe.
Valencia, Observatory	29.78	756.4	29.80	756.9	51.3	10.7	67	sw.	39	17.4			8					squally	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.01	762.2	30.04	763.0	75.0	23.9	79	se.	5.7	2.5		0	7 k			0	0	hazy	John Duthie.
Cape Town, O. G. H. Obs'y	29.88	758.9	29.92	760.0	88.0	31.1	52	sse.	18	8.0		0	2			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.07	763.8	30.12	765.0	33	0.6	98	calm		0	0		10 s			0.020	0.5	cloudy	H. J. Cundall, C. E.
Chatham, N. B*	30.00	762.0	30.07	763.8	32	0.0	88	s.	1	0.4			10 s		s.	0	0	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.85	758.2	29.87	758.7	31	— 0.6	96	ne.	2	0.9			10 n		calm			light rain	J. McWilliams.
Fort Garry, Manitoba*	28.97	735.8	29.85	758.2	14	—10.0	100	w.	8	3.6		5 k	5 kn	w.	w.	0.590	15.0	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.06	763.5	30.19	766.8	33	0.6	96	se.	2	0.9			10 k		w.	0	0	cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.51	749.5	29.85	758.2	42	5.6	76	s.	19	8.5			10 kn		sw.	0.04	1.0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.68	753.9	29.89	759.2	38	3.3	92	s.	22	9.8			10 s			0.08	2.0	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	28.96	735.6	29.65	753.1	46	7.8	96	s.	20	8.9			10 n		sw.	0.09	2.3	cloudy	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.17	740.9	29.87	758.7	42	5.6	100	s.	5	2.2			10 n		s.	0.09	2.3	light rain	H. Morgan.
Port Stanley, Ontario	29.18	741.2	29.84	757.9	41	5.0	92	sw.	10	4.5			fg			0.10	2.5	light rain	M. Payne.
Quebec, Quebec*	29.58	751.3	29.91	759.7	33	0.6	100	calm			0		fg			0.18	4.6	light rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.16	740.7	29.62	752.3	42	5.6	93	se.	3	1.3			10 s		se.	0.60	15.2	light rain	W. H. McIntyre.
Saugeen, Ontario*	28.96	735.6	29.66	753.4	51	10.6	93	sw.	21	9.4			10 s			0.05	1.3	cloudy	
St. Andrews, N .B.	30.03	762.7	30.08	764.0	34	1.1	90	sw.	1	0.4			10 n			0	0	cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.11	764.8	30.17	766.3	30	— 1.1	96	sw.	7	3.1			10 s			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.43	747.5	29.82	757.4	44	6.7	96	s.	9	4.0			10 n			inap.	inap.	cloudy	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.13	765.3	30.20	767.1	37	2.8	96	sw.	2	0.9		fg	fg			0	0	foggy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.92	760.0	30.19	766.8	24	—4.4		w.	1	0.4			10			0	0	fine	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.20	767.1	30.49	774.4	36.2	2.3	100	ne.			4		10			0.43	10.9	raining	N. Titoushkin.
Sung-shu-chwang†	24.56	623.7			25.5	—3.6		calm			0		10			0.43	11.		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	30.45	773.3	30.47	774.0	39.2	4.0	77	ene.	2.5	1.1			10			0	0	covered	M. Marc Dechevrens, S. J.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.97	761.1	30.01	762.3	42.3	5.7	80	sw.	18	8			4						Oversergent Fischer.
Fanöe	29.86	758.4	29.88	758.9	41.0	5.0	87	ssw.			6		9						Overloerer Lauridsen.
Godthaab, Greenland	29.61	752.0	29.65	753.1	— 0.4	—18.0	95	nne.			6		1						S. Kleinschmidt.
Stykkisholm, Iceland	29.21	741.9	29.25	743.0	5.9	—14.5		ne.			8		10						A. O. Thorlacius.
Thorshavn	28.80	731.5	28.84	732.4	34.0	1.1	89	sw.	27	12			5						Overloerer Bergh.
Vestervig	29.59	751.6	29.68	753.9	42.1	5.6	89	ssw.			7		10						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.80	756.8	30.47	774.0	42.1	5.6	19	calm			0		fg			0	0	dense fog	M. Labroue, Director.
Alençon, Normal School	29.82	757.4	30.37	771.4	41.0	5	94	s.			2		k		ne.	0	0		M. Nicot, Director.
Arras, Engineer School	29.94	760.4	30.20	767.0	48.4	9.1	81	sw.			3		10 n			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.37	771.5	30.45	773.5	53.6	12	54	ne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.80	757.0	30.37	771.3	51.8	11.0	61	s.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.04	762.9	30.31	769.8	47.8	8.8	76	sw.			2		8		wsw.	0	0	very cloudy	M. Frère Eugène Marie
Besançon, Normal School			30.39	771.9	42.8	6	91	s.			1		2 n		sw.	0	0	slightly cl'dy.	M. Gobin, Director.
Bordeaux, Observatory	30.15	765.9	30.43	772.9	43.3	6.3	100	sse.			1		fg			0.012	0.3	dense fog	M. Rayet, Director.
Bourges, Normal School	29.83	757.7	30.39	771.9	55.4	13	92	sw.			1		8		sw.	0	0		M. Postel, Director.
Brest, Naval Observatory	29.98	761.5	30.22	767.7	51.8	11.0	95	sw.			3		10		sw.	0	0		M. de Kennaree, Dir.
Caen, Normal School	30.17	766.4	30.25	768.4	49.6	9.8	81	s.			2		10			0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.97	761.2	30.30	769.6	50.9	10.5	72	s.			2		2		se.	0	0	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School.	29.79	756.7	30.31	769.9	50.0	10	62	sw.			1		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.04	737.5	30.41	772.3	56.3	13.5	45	e.			1	0	1 k			0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.61	752.2	30.47	774.0	54.1	12.3	78	e.			1		0			0	0	clear	M. de Villemontée, Dir.
Commercy, Normal School.	29.50	749.3	30.41	772.4	52.3	11.3	61	sw.			2	2 c		sw.	sw.	0	0	slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.87	707.8	30.45	773.3	49.6	9.8	48	n.			2	2 c	0	n.		0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.27	743.4	30.41	772.4	55.4	13.0	40	n.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.65	753.2	30.45	773.4	45.0	7.2	53	e.			1	0	0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.79	731.2	30.40	772.2	52.7	11.5	9	sw.			1	c	0	sw.		0	0		M. Rivoire, Director.
Lamballe, Normal School	30.00	761.9	30.27	768.9	51.4	10.8	77	s.			3		5		s.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.86	758.4	30.43	772.9	58.3	14.6	78	w.			1	c	n		w.	0.008	0.2		M. Chauvin, Director.
Lorient, Naval Observatory	30.21	767.4	30.32	770.0	55.4	13.0	77	sw.			8		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.37	746.0	30.46	773.6	47.7	8.7	55	e.			1		0			0	0	clear	M. André, Director.
Mans, Normal School	30.03	762.7	30.35	770.8	42.8	6	77	sw.			3		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.16	766.0	30.43	773.0	57.0	13.9	36	wsw.			1		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.08	637.0	29.92	760.0	38.8	3.8	60	ne.	7.4	3.3			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.32	770.0	30.43	773.0	54.0	12.2	70	ese.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.58	751.2	30.37	771.4	51.4	10.8	63	s.			1	0	2 ks			0	0	slightly cld'y	M. Hasse, Director
Nantes, Observatory	30.22	767.6	30.38	771.7	54.1	12.3	73	ssw.			1–3	ck	9 kn	wnw.	ssw.	0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.34	770.6	30.45	773.5	54.1	12.3	66	se.	3.8	1.7			0			0.579	14.7	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.39	543.2			28.4	—2.0		s.			1		1		s.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.34	745.2	30.44	773.2	53.6	12	90	n.			1		0			0	0	clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.44	646.2			39.2	4.0	78	sse.			2	0	2 k		wsw.	0.004	0.1	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.38	771.6	30.41	772.4	49.5	9.7	89	ssw.			1		5		s.	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.06	763.6	30.28	769.2	47.8	8.8	97	s.			2		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	28.26	717.9	30.47	773.8	46.7	8	57	nw.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.21	767.2	30.25	768.4	49.6	9.8	71	ssw.			2		8			0	0	very cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.10	764.4	30.25	768.4	50.9	10.5	82	wsw.			3		2		wsw.	0	0	slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.17	766.4	30.34	770.6	46.8	8.2	80	ssw.			2		1	n.	sw.	0	0		M. Renou, Director.
Toulouse, Observatory	29.76	755.8	30.49	774.4	42.4	5.8	100	sse.			1		fg		w.	0.098	2.5	dense fog	M. Baillard, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.82	757.4	30.32	770.0	47.1	8.4	81	sw.			3					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.04	763.1	30.34	770.5	49.3	9.6	76	ssw.			2		8	nnw.		0	0		M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.53	750.0	30.39	772.0	40.3	4.6	50	sse.			2		0			0	0		Prof. Dr. Hoh.
Berlin	30.07	763.8	30.25	768.4	45.0	7.2	52	sw.			2		1			0	0		Prof. Dr. Arndt.
Breslau	29.86	758.5	30.40	772.2	42.6	5.9	50	ssw.			1		0			0	0		Royal University Obs'y.
Carlsruhe	29.94	760.5	30.40	772.1	42.6	5.9	64	sw.			1		0			0	0		Albert Senz.
Cassel	29.52	749.8	30.24	768.0	45.3	7.4	58	s.			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.98	761.6	30.37	771.3	41.7	5.4	68	ssw.			1		2			0	0		Physical Society.
Friedrichshafen	28.97	735.8	30.49	774.5	32.0	0.0	92	ssw.			1		0			0	0		Wilhelm, Chief Tel.
Hamburg	30.04	763.0	30.13	765.4	46.9	8.3	67	ssw.			4		4	nw.		0	0		E. Preller.
Kiel	30.03	762.8	30.05	763.2	44.4	6.9	75	ssw.			2		4			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.89	759.3	30.33	770.3	46.6	8.1	54	ssw.			3		2			0	0		H. Leppig, Asst.
Magdeburg	30.06	763.5	30.25	768.4	49.8	9.9	58	s.			2	7c	0	ne.		0	0		Dr. Assmann.
Memel	30.24	768.2	30.29	769.4	34.5	1.4	83	s.			3	0	3 s						Issermann.
Munich	28.56	725.3	30.45	773.3	41.5	5.3	49	ne.			1		2			0	0		Central Station.
Neufahrwasser	30.24	768.2	30.26	768.6	37.2	2.9	71	ssw.			2		2			0	0		A. Lothes.
Neustadt, Palatinate	29.82	757.4	30.35	770.9	41.4	5.2		w.			2		0			0	0		Dicknether.
Stuttgart	29.41	747.0	30.33	770.3	47.7	8.7	58	e.			1		0			0	0		Prof. Dr. Schoder.
Wustrow	30.13	765.2	30.15	765.8	46.9	8.3	98	s.			4		10 s			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.04	763.0	30.45	773.3	43.2	6.2		ne.			4.0		10			0.012	0.3	covered	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.83	757.7	29.88	759.0	76.6	24.8	69	wsw.	34	15.2			2			0	0	misty	
Deesa	29.33	744.9	29.80	756.8	83.5	28.6	40	wsw.	10.2	4.6			6	wsw.	wsw.	0	0	d. clouds	
Bombay	29.87	758.8	29.91	759.7	78.1	25.6	70	nw.	15	6.7			0			0	0	blue sky	
Poona, Yarrowda	27.99	711.0	29.82	757.5	85.9	29.9	21	wnw.	19	8.5			0			0	0	blue sky	
Belgaum	27.33	694.2	29.83	757.8	83.9	28.8	25	w.	7	3.1			0			0	0	blue sky	
Lahore	29.15	740.3	29.92	760.0	61.6	16.4	56	calm	1.6	0.7			3			0	0	d. clouds	
Roorkee	28.93	734.8	29.86	758.4	64.2	17.9	40	w.	1.1	0.5			8			0	0		
Agra	29.24	742.8	29.81	757.2	77.7	25.4	24	n.	1.6	0.7			6		nw.	0	0		
Nagpur	28.77	730.7	29.80	756.8	87.3	30.7	25	w.	3.8	1.7			0			0	0	blue sky	
Jubbulpore	28.51	724.0	29.87	758.8	75.8	24.3	42	nw.	2.5	1.1			0			0	0	blue sky	
Lucknow	29.46	748.3	29.85	758.1	71.2	21.8	24	wsw.	2.0	0.9			0			0	0	blue sky	
Allahabad	29.52	749.9	29.84	758.0	73.8	23.2	31	n.	1.4	0.6			0			0	0	blue sky	
Patna	29.65	753.0	29.84	757.9	71.5	21.9	30	w.	5.1	2.3			0			0	0	blue sky	
Hazaribagh	27.82	706.7	29.86	758.4	71.8	22.1	11	nnw.	9.2	4.1			4			0	0		
Cuttack	29.76	755.9	29.84	758.0	84.0	28.9	54	sw.	1.7	0.8			0			0	0	blue sky	
Calcutta, Alipore	29.84	758.0	29.86	758.5	73.5	23.1	58	w.	2.0	0.9			0			0	0	blue sky	
Dhubri	29.70	754.3	29.82	757.4	66.8	19.3	57	calm	2.2	1.0			0			0.02	0.5	blue sky	
Chittagong	29.79	756.6	29.88	759.0	75.1	23.9	90	s.	8.5	3.8			8			0	0	d. clouds	
Sibsagar	29.44	747.8	29.79	756.6	62.9	17.2	83	ne.	2.2	1.0			5	e.	e.	0.34	8.6	d. clouds	
Jeypore	28.32	719.3	29.77	756.1	76.5	24.7	25	wnw.	4.1	1.8			3		wnw.	0	0	d. clouds	
Zanzibar, Africa	29.79	756.7			85.2	29.6	70	n.	8.4	3.8			2			0	0	d. clouds	
Trichinopoly	29.61	752.1			87.4	30.8	39	ese.	2	0.9			0			0	0	blue sky	
Bellary	28.37	720.6			93.0	33.9	17	nw.	4.5	2.0			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	30.05	763.2	30.47	774.0	49.8	9.9	30	n.	1.3	0.6			0			0	0		Prof. Giovanni Clodig.
Milan	29.95	760.8	30.49	774.5	45.7	7.6	58	s.	0.7	0.3			1			0	0		Prof. Schiaparelli.
Padua	30.37	771.5	30.49	774.4	45.9	7.7	42	n.	1.8	0.8			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.56	750.7	30.50	774.6	43.3	6.3	62	ene.	1.3	0.6			0			0	0		Prof. P. F. Denza.
Genoa	30.23	767.9	30.43	772.9	52.2	11.2	43	ne.	3.1	1.4			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.50	723.9	30.49	774.4	43.3	6.3	37	ne.			4		0			0	0		Prof. D. C. Bruno.
Pesaro	30.42	772.6	30.47	773.9	43.5	6.4	70	n.	11.9	5.3			0			0	0		Prof. Luigi Guidi.
Florence	30.15	765.9	30.42	772.6	52.9	11.6	29	ne.			4		0			0	0		Prof. Costantino Pitter.
Leghorn	30.26	768.7	30.35	770.9	51.6	10.9	39	e.	4.9	2.2			0			0	0		Prof. P. Monte.
Rome	30.19	766.9	30.37	771.5	53.2	11.8	39	wnw.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	30.13	765.2	30.39	771.8	52.2	11.2	55	se.	7.4	3.3			3	se.		0.020	0.5		Prof. C. de Giorgi.
Cosenza	29.42	747.3	30.34	770.6	49.6	9.8	72	nne.	5.6	2.5			8	ne.		0	0		Prof. D. Conti.
Cagliari	30.05	763.2	30.24	768.2	58.1	14.5	64	e.			4		7	nne.		0.004	0.1		Prof. A. Pacinotti.
Palermo	30.04	763.0	30.30	769.5	57.4	14.1	56	ne.	6.3	2.8			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.23	767.9	30.28	769.1	54.0	12.2	65	ene.	13.0	5.8			10	ene.		0.157	4.0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.81	757.1	30.34	770.7	55.0	12.8	47	e.	7.4	3.3			2	se.		0	0		Prof. T. Brioschi.
Stelvio	22.36	567.9			23.4	— 4.8	34	s.			1		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.41	569.2			26.6	— 3.0	47	se.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.92	759.9	29.96	761.0	11.3	—11.5	84	s.	5.3	2.4		0	0			0.038	1.0	clear	
Hakodate	29.88	758.9	29.89	759.2	21.8	— 5.7	50	nw.	13.8	6.2			0			0	0	clear	
Hiroshima, I. M. Obs'y	30.27	768.8	30.28	769.1	38.6	3.7	76	nne.	2.2	1.0		ck	10 s			0	0	overcast	K. Sasaki.
Kanazawa	30.20	767.1	30.31	769.9	32.0	0.0	97	nw.	9.7	4.3			10 n			0.140	3.6	light rain	S. Endo.
Kioto	30.03	762.7	30.22	767.6	33.8	1.0	71	nw.	3.0	1.3		0	6 s			0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.12	765.0	30.33	770.4	37.7	3.2	86	ne.	0.5	0.2		0	0			0	0	clear	S. Takehayashi.
Niigata	30.03	762.7	30.07	763.8	30.0	— 1.1	73	nnw.	13.2	5.9		3 ck	0			0.085	2.2	fair	
Nobiru	29.93	760.2	29.95	760.7	23.0	— 5.0	100	nnw.	4.3	1.9		0	0			0	0	clear	H. Midzushina.
Supporo					20.8	— 6.2	64	e.	4.2	1.9			10			0.350	8.9	snowing	
Tokei Obs'y, Yeddo	29.91	759.7	29.98	761.5	33.3	0.7	48	n.	7.3	3.3		0	0			0	0	clear	The Staff.
Wakayama	30.20	767.1	30.26	768.6	37.6	3.1	67	nw.	8.2	3.7		10 ck	0			0	0	cloudy	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.51	622.6	30.32	770.1	48.6	9.1	75	nne.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.84	758.0	30.10	764.7	64.0	17.8	81	nw.	5.3	2.3		1 cs	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.18	588.8	30.35	771.0	46.9	8.3	62	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.41	620.0	30.65	778.6	52.2	11.2	67	ne.			4	0	0			0	0	fine	M. Tena, M. D.
Pabellon, Aguascalientes	24.06	611.0	30.18	766.6	47.5	8.6	61									0	0		M. Y de Leon, M. E.
Puebla, Catholic Institute	23.50	596.8	30.42	772.7	42.8	6.0	51	calm	0	0		0	0			0	0	very fine	Prof. P. Spina.
San Luis Potosi	24.29	617.2	30.45	773.5	52.7	11.5	78	ese.			1	4	0	w.		0	0		G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.64	575.2	30.41	772.5	46.2	7.9	70					0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.76	755.9	29.94	760.5	80.4	26.9	67	e.	23.0	10.3		1 c	5 ks;k		e.	0.06	1.5	fair	Oliver & Figon
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.16	766.0	30.16	766.0	47.1	8.4		ssw.			4					0	0		
Groningen	30.03	762.7	30.08	764.1	45.0	7.2		ssw.			5					0	0		
Helder	30.02	762.5	30.02	762.5	43.0	6.1		ssw.			5					0	0		
Hellevoetsluis	30.13	765.4	30.13	765.4	45.9	7.7	86	ssw.			4					0	0		
Utrecht	30.10	764.5	30.15	765.7	49.3	9.6	78	ssw.			4		5			0	0	cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.07	738.3	29.13	739.9	44.6	7.0	94	s.	38	17			10			1.102	28.0	raining	
Brono	28.73	729.7	28.77	730.7	43.2	6.2	53	s.	27	12			10			0.110	2.8		
Christiania	29.25	743.0	29.40	746.8	40.1	4.5	89	ssw.	27	12			10					raining	
Gjæsvær	28.70	729.0	28.72	729.6	35.2	1.8		s.			4		8						
Lodingen	28.74	730.1	28.79	731.3	39.0	3.9	76	ssw.			6		9			0.362	9.2		
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					61.2	16.2	77	sw.	21.0	9.4			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.38	746.3	30.41	772.3	53.6	12.0	59	e.	3.8	1.7			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.32	770.0	30.40	772.2	64.6	18.1	63	calm	0	0			2			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.09	764.3	30.46	773.7	53.1	11.7	53	nne.	10.5	4.7			0			0	0		The Staff.
Ponta Delgada, Azores	30.31	769.9	30.38	771.7	61.5	16.4	75	ssw.	5.6	2.5			3			0	0		
Saint Paul de Loando	29.65	753.2	29.85	758.2	82.4	28.0	76	nnw.	0.7	0.3			1	sse.		0	0		
Serra da Estrella	25.56	649.2	30.48	774.1	36.1	2.3	91	se.	4.3	1.9			0			0.283*	7.2*		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.91	734.3	30.15	765.9	—16.1	—26.7		sw.	20	9		3 cs	0			0	0	light clouds	Major K. Lasarew.
Archangel	29.40	746.8	29.42	747.3	30.6	— 0.8	92	sw.	18	8			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.36	771.2	30.28	769.1	32.5	0.3	85	nnw	7	3			10 ks			blank	blank		Capt. Wisganow.
Barnaul	29.63	752.5	30.17	766.3	12.6	—10.8	77	sw.	2	1			10			0.039	1.0		Meteorological Obs'y.
Dorpat	29.83	757.7	30.09	764.2	29.3	— 1.5	68	ssw.	9	4			10 s			0.031	0.8		Observatory.
Ekaterinburg	28.84	732.5	29.88	759.0	8.1	—13.3	70	w.	13	6		3 ck	0			0	0		Meteorological Obs'y.
Kasan	29.88	758.9	30.17	766.2	20.3	— 6.5	68	calm	0	0			9			0	0		Observatory.
Kertch	30.45	773.3	30.47	773.8	34.2	1.2	75	nw.	2	1			10 n			0	0		Lagorio & Sastyrez.
Kieff	29.77	756.2	30.45	773.3	31.6	— 0.2	76	wsw.	7	3		c	2 ks			0	0		Observatory.
Lugan	30.21	767.3	30.42	772.7	35.2	1.8	71	w.	4	2			10			0	0		Meteorological Obs'y.
Moscow	29.60	751.8	30.10	764.5	33.8	1.0	81	ssw.	4	2			10 s			0	0		Meteorological Obs'y.
Nikolaiev	30.49	774.5	30.56	776.3	35.2	1.8	71	ne.	9	4		0	5 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.87	758.8	29.96	761.0	— 6.9	—21.6	94	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.43	772.9	30.57	776.5	30.4	— 0.9	47	calm	0	0		0	1 k			0	0		Physical Observatory.
St. Petersburg	29.93	760.3	29.95	760.7	33.6	0.9	80	wsw.	18	8			10 n			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.78	731.0	30.50	774.7	18.7	— 7.4	67	calm	0	0			0			0.205	5.2		Telch, A. M.
Tiflis	28.86	733.1	30.35	770.9	36.5	2.5	56	nw.	22	10		0	0			0	0		Physical Observatory.
Vladivostok	30.21	767.2	30.27	768.9	5.0	—15.0	94	calm	0	0		0	0			0	0		
Warsaw	29.96	761.0	30.40	772.2	40.5	4.7	57	ssw.	9	4		0	0						Astronomical Obs'y.
Wilna	29.89	759.2	30.33	770.4	34.9	1.6	71	sw.	2	1			1			0	0	light clouds	Berg, Assistant.
Yeniseisk	29.80	757.0	30.12	765.0	6.8	—14.0	74	ene.	2	1			1			0	0		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restairig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.18	741.2	46	7.8	85	wsw.			8		10			0	0	heavy cl'ds.	J. Youngchuse.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	29.87	758.6	30.37	771.3	54.1	12.3	68	ne.	4.5	2.0			1			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.36	771.1	30.42	772.6	59.7	15.4	57	se.	3.1	1.4		2	0	e.		0.228	5.8	almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.42	696.4	30.50	774.8	44.6	7.0	69	n.	4.3	1.9		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.16	715.3	30.46	773.6	50.2	10.1	63	e.	8.7	3.9		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.17	766.4	30.33	770.3	56.7	13.7	73	ne.	6.0	2.7		5	4	sw.		0	0	almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.48	748.7	30.40	772.1	50.7	10.4	83	calm	0	0			10			0.004	0.1	covered	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.17	766.2	30.23	767.9	70.2	21.2	86	e.	1.8	0.8		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.97	761.3	30.03	762.8	77.9	25.5	70	se.	8.8	3.9		0	ks			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.25	768.4	30.35	770.9	58.8	14.9	49	nne.	8.5	3.8		0	0			0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.03	762.8	30.12	765.1	74.1	23.4	89	e.	18.6	8.3		4 k	6 kn	e.	e.	0.126	3.2	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.96	761.0	30.09	764.3	74.0	23.3	77	nw.	2.7	1.2		0	4 ks		ese.	0.02	0.5	cloudy	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.24	742.7	29.28	743.7	30.9	— 0.6	96	sw.			4		10			0	0		
Umea	29.22	742.3	29.28	743.6	34.9	1.6	89	sw			6		10			0	0		
Hernosand	29.22	742.3	29.28	743.6	36.5	2.5	84	s.			4		10			0	0		
Stockholm	29.52	749.9	29.70	754.4	43.5	6.4	69	sw.			4		10			0	0		
Wisby	29.91	759.7	29.97	761.2	39.6	4.2	90	sw			6		10			0	0		
SUB-SERIES.																			
Upsala	29.55	750.5	29.63	752.7	42.3	5.7	74	ssw.	24.8	11.1			10			0.016	0.4		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.00	736.6	30.46	773.7	42.3	5.7	48	nne.			1					0	0	clear	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.49	774.5	39.4	4.1	73	ne.	10	4.5			9		ne.	0	0		The Observatory.
Valona			30.37	771.3	54.5	12.5		w.			1		2			0	0	slightly cl'dy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.34	770.6	52.9	11.6	57	n.			1	4 c	0			0.10	2.5		Prof. C. V. A. van Dyck.

* Total rainfall for two days.

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

Stations.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Albany, New York	30.02	762.5	30.11	764.8	47	8.3	77	s.	8	3.6			10 s		sw.	0.03	0.8	cloudy	
Alpena, Michigan	29.00	736.6	29.72	754.9	43	6.1	60	w.	19	8.5			10 s			inap.	inap.	cloudy	
Atlanta, Georgia	29.08	738.6	30.30	769.6	57.5	14.2	83	se.	12	5.4			10 s		calm	0	0	cloudy	
Atlantic City, New Jersey	30.27	768.8	30.28	769.1	44	6.7	93	s.	15	6.7			10 s			0	0	cloudy	
Augusta, Georgia	30.18	766.6	30.38	771.6	53.8	12.1	86	calm	0	0			10s;fg			0	0	cloudy	
Baltimore, Maryland	30.17	766.3	30.22	767.6	51	10.6	93	s.	3	1.3			10s;fg		sw.	0.04	1.0	cloudy	
Barnegat, New Jersey	30.22	767.6	30.24	768.1	45.0	7.2	89	sw.	20	8.9			10 n		sw.	0.02	0.5	light rain	
Bismarck, Dakota	28.09	713.5	30.07	763.8	17	— 8.3	83	nw.	2	0.9		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.51	698.7	30.47	773.9	27	— 2.8	88	nw.	2	0.9			10 s		calm	0.02	0.5	cloudy	
Boston, Massachusetts	30.02	762.5	30.18	766.6	44.0	6.7	83	sw.	14	6.3		10 ck	hz.	sw.		0	0	cloudy	
Brownsville, Texas	30.05	763.3	30.10	764.5	67	19.4	100	calm	0	0		9 c	0			0	0	cloudy	
Buffalo, New York	29.10	739.1	29.90	759.4	49.7	9.8	95	s.	15	6.7			10n;fg			0.03	0.8	light rain	
Burlington, Vermont	29.68	753.9	29.99	761.7	40.5	4.7	81	s.	22	9.8		6 cs	4 s	w.	s.	0.02	0.5	cloudy	
Cairo, Illinois	29.70	754.4	30.12	765.0	54.0	12.2	95	s.	4	1.8			10 s		nw.	1.53	38.9	cloudy	
Campo, California	27.60	701.0	30.24	768.1	38	3.3	45	e.	11	4.9		4 c	0	w.		0	0	fair	
Camp Thomas, Arizona	27.45	697.2	30.28	769.1	31.5	— 0.3	90	se.			1	0	0			0	0	clear	
Cape Henry, Virginia	30.35	770.9	30.37	771.4	55	12.8	74	s.	11	4.9		0	3 s			0	0	clear	
Cape May, New Jersey																			
Castroville, Texas	29.28	743.7	30.12	765.0	69	20.6	93	calm	0	0			10 s		w.	0.06	1.5	cloudy	
Cedar Keys, Florida	30.32	770.1	30.34	770.6	62	16.7	84	e.	4	1.8		0	2 s			0	0	clear	
Champaign, Illinois	29.24	742.7	30.11	764.8	36.4	2.4	74	nw.	15	6.7			10 s		nw.	0.02	0.5	cloudy	
Charleston, S. Carolina	30.31	769.9	30.37	771.4	59	15.0	87	se.	5	2.2		0	9 s		sw.	0	0	cloudy	
Charlotte, N. Carolina	29.44	747.8	30.33	770.4	55.0	12.8	86	sw.	8	3.6			10 s		sw.	0	0	cloudy	
Chattanooga, Tennessee	29.30	745.7	30.22	767.6	58.0	14.4	83	s.	12	5.4			10 n		s.	0.06	1.5	light rain	
Cheyenne, Wyoming	24.02	610.1	30.27	768.8	17.3	— 8.2	52	w.	6	2.7		0	0			0	0	clear	
Chicago, Illinois	29.29	744.0	30.04	763.0	35.9	2.2	82	w.	12	5.4		7 c	0			0.03	0.8	fair	
Chincoteague, Virginia	30.32	770.1	30.34	770.6	46.5	8.1	89	s.	12	5.4		3 c	3 s	sw.		0	0	fair	
Cincinnati, Ohio	29.27	743.4	29.96	761.0	58.1	14.5	93	s.	12	5.4			10 n		sw.	1.22	31.0	heavy rain	
Cleveland, Ohio	29.10	739.1	29.89	759.2	53.4	11.9	88	s.	14	6.3			10 n			0.18	4.6	light rain	
Coleman City, Texas	28.29	718.6	30.17	766.3	57	13.9	83	nw.	7	3.1		0	6 ks		sw.	0	0	fair	
Columbus, Ohio	29.03	737.3	29.93	760.2	55	12.8	86	sw.	13	5.8			10 n			0.76	19.3	light rain	
Concho, Texas	28.15	715.0	30.17	766.3	54	12.2	86	nw.	4	1.8		8 cs	0	w.		0	0	cloudy	
Davenport, Iowa	29.44	747.8	30.14	765.5	38	3.3	62	nw.	8	3.6		2 k	2 s	w.	nw.	0	0	fair	
Dayton, Washington T'y	28.54	724.9	30.36	771.1	29	— 1.7	84	sw.	10	4.5		0	0			0.20	5.1	clear	
Deadwood, Dakota	25.30	642.6	30.22	767.6	23	— 5.0	88	sw.	5	2.2		0	0			inap.	inap.	clear	
Decatur, Texas																0.04	1.0		
Delaware Breakwater, Del.	30.23	767.8	30.25	768.3	50	10.0	86	s.	18	8.0		6 cs	4 s	w.	w.	0	0	cloudy	
Denison, Texas	29.28	743.7	30.12	765.0	59.3	15.2	87	w.	2	0.9		0	5 s			inap.	inap.	fair	
Denver, Colorado	24.79	629.7	30.31	769.9	21.0	— 6.1	87	s.	10	4.5		0	0			0	0	clear	
Des Moines, Iowa	29.24	742.7	30.21	767.3	30	— 1.1	78	nw.	4	1.8		4 c	0	w.		0	0	fair	
Detroit, Michigan	29.10	739.1	29.86	758.4	54.0	12.2	86	sw.	11	4.9			10 n		sw.	0.27	6.9	light rain	
Dodge City, Kansas	27.50	698.5	30.24	768.1	26	— 3.3	77	n.	2	0.9		0	0			0	0	clear	
Dubuque, Iowa	29.34	745.2	30.10	764.5	30.3	— 0.9	67	w.	5	2.2		0	0			inap.	inap.	clear	
Duluth, Minnesota	29.10	739.1	29.86	758.4	27	— 2.8	88	w.	12	5.4			10 s		w.	0.25	6.3	cloudy	
Eagle Pass, Texas	29.39	744.2	30.14	765.5	63.0	17.2	93	calm	0	0			10 s			0	0	cloudy	
Eagle Rock, Idaho	25.38	644.6	30.28	769.1	10	—12.2	76	sw.	20	8.9			10 s			0	0	cloudy	
Eastport, Maine	30.05	763.3	30.12	765.0	36	2.2	89	sw.	8	3.6			10 s		sw.	0	0	cloudy	
El Paso, Texas	26.41	670.8	30.29	769.4	40.3	4.6	67	w.	9	4.0		0	0			inap.	inap.	clear	
Erie, Pennsylvania	29.12	739.6	29.89	759.2	55	12.8	86	s.	18	8.0			10 s		sw.	0.19	4.8	threatening	
Escanaba, Michigan	29.06	738.1	29.78	756.4	31	— 0.6	68	sw.	10	4.5		0	0			0	0	clear	
Fort Apache, Arizona	25.20	640.1	30.30	769.6	26	— 3.3	70	ne.	4	1.8		0	0			0.05	1.3	clear	
Fort Assinnaboine, Montana	27.13	689.1	30.17	766.3	17	— 8.3	56	sw.	5	2.2		0	0			0	0	clear	
Fort Bennett, Dakota	28.42	721.9	30.15	765.8	23	— 5.0	73	calm	0	0		0	0			inap.	inap.	clear	
Fort Benton, Montana	27.19	690.6	30.19	766.8	18	— 7.8	64	sw.	12	5.4		0	0			0	0	clear	
Fort Buford, Dakota	27.94	709.7	30.12	765.0	5	—15.0	76	sw.	6	2.7		0	0			0	0	clear	
Fort Custer, Montana	26.84	681.7	30.20	767.1	23	— 5.0	73	sw.	16	7.2		0	0			0	0	clear	
Fort Davis, Texas	25.24	641.1	30.20	767.1	39	3.9	82	nw.	1	0.4		7 cs	0	calm		0.01	0.3	fair	
Fort Elliott, Texas	27.38	695.4	30.28	769.1	30	— 1.1	41	nw.	8	3.6		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.52	749.8	30.12	765.0	49.0	9.4	71	n.	3	1.3		0	0			0.34	8.6	clear	
Fort Grant, Arizona	25.38	644.6	30.24	768.1	33	0.6	81	nw.	4	1.8		2 cs	0			0	0	clear	
Fort Griffin, Texas	28.82	732.0	30.19	766.8	49	9.4	77	n.	6	2.7		2 cs	0	calm		0	0	clear	
Fort Keogh, Montana	27.48	698.0	30.16	766.1	19	— 7.2	70	sw.	6	2.7		3 cs	0			0	0	clear	
Fort Macon, North Carolina	30.39	771.9	30.40	772.1	56	13.3	93	s.	4	1.8		0	4 ks		calm	0.01	0.3	fair	
Fort McKavett, Texas	27.93	709.4	30.31	769.9	57.3	14.1	83	calm	0	0			10 s			inap.	inap.	cloudy	
Fort Missoula, Montana	26.81	681.0	30.24	768.1	18	— 7.8	87	w.	3	1.3			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	30.09	764.3	30.13	765.3	—33	—36.1	100	ne.	4	1.8		0	0			0	0	clear	
Fort Shaw, Montana	26.35	669.3	30.20	767.1	19	— 7.2	70	w.	11	4.9		0	0			0	0	clear	
Fort Sill, Indian Territory	28.89	733.8	30.20	767.1	42	5.6	52	n.	20	8.9		0	0			inap.	inap.	clear	
Fort Stevenson, Dakota	28.05	712.5	30.07	763.8	8	—13.3	80	calm	0	0		0	0			0.01	0.3	clear	
Fort Verde, Arizona					26.9	— 2.8	77	nw.			1	6 cs	0	sw.		0	0	fair	
Fredericksburg, Texas	28.34	719.8	30.14	765.5	64	17.8	93	calm	0	0			fg.			0.01	0.3	dense fog	
Galveston, Texas	30.12	765.0	30.16	766.1	66	18.9	95	s.	5	2.2			10 s		sw.	0	0	cloudy	
Grand Haven, Michigan	29.23	742.4	29.94	760.5	37.5	3.1	77	w.	16	7.2			10 s		w.	inap.	inap.	cloudy	
Hatteras, North Carolina	30.38	771.6	30.40	772.1	57	13.9	86	se.	9	4.0		4 c	2 k	s.		0	0	fair	
Helena, Montana	25.81	655.6	30.21	767.3	24	— 4.4	64	sw.	8	3.6			10 s		w.	0	0	cloudy	
Henrietta, Texas	29.14	740.1	30.19	766.8	45	7.2	68	ne.	12	5.4		0	0			0.03	0.8	clear	
Huron, Dakota	28.62	726.9	30.14	765.5	25	— 3.9	80	s.	7	3.1		9 cs	0			0	0	cloudy	
Indianapolis, Indiana	29.16	740.7	30.01	762.2	47	8.3	89	n.	6	2.7			10 n		n.	0.96	24.4	light rain	
Indianola, Texas	30.10	764.5	30.13	765.3	68.5	20.3	93	s.	4	1.8			10 s			0	0	cloudy	
Jacksboro, Texas	28.92	734.6	30.16	766.1	53	11.7	80	w.	6	2.7		2 c	1 s	w.		0	0	clear	
Jacksonville, Florida	30.32	770.1	30.36	771.1	59	15.0	87	calm	0	0		2 cs	fg.			0	0	clear	
Keokuk, Iowa	29.47	748.5	30.17	766.3	35.0	1.7	64	nw.	6	2.7		0	1 s			0	0	clear	
Key West, Florida	30.24	768.1	30.27	768.8	72.0	22.2	84	se.	9	4.0		0	4 k;s		se.	0.03	0.8	fair	
Kittyhawk, North Carolina	30.39	771.9	30.41	772.4	54	12.2	86	sw.	17	7.6		5cs;hz	0			0	0	fair	
Knoxville, Tennessee	29.10	739.1	30.18	766.6	54.8	12.7	88	sw.	2	0.9			10s;fg		sw.	0.09	2.3	cloudy	
La Crosse, Wisconsin	29.20	741.7	30.04	763.0	33	0.6	68	nw.	2	0.9		0	0			0	0	clear	
La Mesilla, New Mexico	26.26	667.0	30.27	768.8	30.0	— 1.1	84	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.33	745.0	30.28	769.1	42	5.6	57	ne.	2	0.9			10 s		sw.	0	0	cloudy	
Lewiston, Idaho	29.51	749.5	30.38	771.6	30.3	— 0.9	65	calm	0	0			10 s		calm	0.02	0.5	cloudy	
Little Rock, Arkansas	29.72	754.9	30.05	763.3	63	17.2	100	calm	0	0			10 ks			1.31	33.3	cloudy	
Los Angeles, California	29.92	760.0	30.32	770.1	40.0	4.4	73	s.	9	4.0		0	4 s		calm	0	0	fair	
Louisville, Kentucky	29.36	745.7	29.95	760.7	60.0	15.6	90	sw	10	4.5			10 n		s.	1.76	44.7	light rain	
Lynchburg, Virginia	29.54	750.3	30.26	768.6	53.6	12.0	86	sw.	4	1.8			10 n		sw.	0.10	2.5	light rain	
Mackinac City, Michigan																			
Madison, Wisconsin	28.97	735.8	30.06	763.5	29	— 1.7	77	w.	18	8.0		0	0			0	0	clear	
Marquette, Michigan	28.92	734.6	29.70	754.4	32	0.0	60	w.	16	7.2		0	0			inap.	inap.	clear	
Mason, Texas	28.42	721.9	30.15	765.8	63	17.2	90	sw.	6	2.7			10 s		sw.	0.06	1.5	cloudy	
Memphis, Tennessee	29.71	754.6	30.06	763.5	60	15.6	100	calm	0	0			10 s			1.24	31.5	cloudy	
Milwaukee, Wisconsin	29.19	741.4	29.99	761.7	34	1.1	79	w.	16	7.2		0	2 s		w.	0	0	clear	
Mobile, Alabama	30.19	766.8	30.23	767.8	64	17.8	90	calm	0	0			10s;ks		sw.	0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	30.02	762.5	30.26	768.6	61.5	16.4	92	s.	5	2.2			10 n			0.01	0.3	light rain	
Moorhead, Minnesota	28.95	735.3	30.05	763.3	15	— 9.4	83	nw.	8	3.6		0	0			0.08	2.0	clear	
Morgantown, W. Virginia	29.04	737.6	30.11	764.8	57.5	14.2	73	sw.	4	1.8			10 n		sw.	0.13	3.3	light rain	
Mt. Washington, N. H.	23.72	602.5	30.34	770.6	32.8	0.4	96	nw.	50	22.4			fg		nw.	0.25	6.3	dense fog	
Nashville, Tennessee	29.49	749.0	30.05	763.3	62.6	17.0	86	s.	10	4.5			10 n		s.	0.68	17.3	light rain	
New Haven, Connecticut	30.10	764.5	30.22	767.6	39	3.9	94	sw.	4	1.8			10n;fg			0.03	0.8	light rain	
New London, Connecticut	30.22	767.6	30.27	768.8	43	6.1	83	sw.	6	2.7			10 s		sw.	0	0	cloudy	
New Orleans, Louisiana	30.14	765.5	30.20	767.1	64.5	18.1	92	s.	3	1.3			fg			0	0	dense fog	
Newport, Rhode Island	30.20	767.1	30.26	768.6	43.0	6.1	93	sw.	19	8.5			10 ks		sw.	0	0	cloudy	
New River, N. Carolina																			
New Shoreham, Rhode I'd.	30.24	768.1	30.26	768.6	44.8	7.1	76	sw.	20	8.9			10 ks		sw.	0	0	cloudy	
New York, New York	30.04	763.0	30.23	767.8	46	7.8	100	s.	8	3.6			10 s		s.	0.02	0.5	cloudy	
Norfolk, Virginia	30.33	770.4	30.36	771.1	54	12.2	80	sw.	8	3.6		1 cs	1 s			0	0	clear	
North Platte, Nebraska	27.22	691.4	30.32	770.1	18.6	— 7.4	86	w.	8	3.6		0	0			0	0	clear	
Olympia, Washington T'y	30.29	769.4	30.33	770.4	34.5	1.4	88	s.	4	1.8			10 n		calm	0.05	1.3	light snow	
Omaha, Nebraska	29.02	737.1	30.28	769.1	34.0	1.1	60	sw.	8	3.6		0	0			0	0	clear	
Ogglaamie, Pt. Barrow, Alas.	29.80	756.9	29.82	757.4	—33.2	—36.2	76	s.	8	3.6		0	0			0	0	clear	
Oswego, New York	29.57	751.1	29.92	760.0	49.3	9.6	77	s.	10	4.5			10 s		w.	0.02	0.5	cloudy	
Palestine, Texas	29.54	750.3	30.12	765.0	64	17.8	100	s.	8	3.6			10 n			1.13	28.7	light rain	
Pensacola, Florida	30.22	767.6	30.25	768.3	65.1	18.4	97	se.	5	2.2			10 s		sw.	0.19	4.8	cloudy	
Philadelphia, Pa	30.12	765.0	30.23	767.8	50	10.0	100	s.	8	3.6			10 n		w.	0.08	2.0	light rain	
Pike's Peak, Colorado	17.47	443.7	30.19	766.8	— 6	—21.1	74	sw.	31	13.9		0	0			inap.	inap.	clear	
Pioche, Nevada	24.22	615.2	30.38	771.6	15	— 9.4	70	sw.	1	0.4		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.16	740.7	30.02	762.5	53.5	11.9	90	s.	6	2.7			10 n		sw.	0.14	3.6	light rain	
Port Eads, Louisiana	30.21	767.3	30.22	767.6	60.3	15.7	100	se.	4	1.8			fg.			0.01	0.3	dense fog	
Port Huron, Michigan	29.07	738.4	29.80	756.9	48.4	9.1	100	s.	12	5.4			10 s		s.	0.14	3.6	threatening.	
Portland, Maine	30.06	763.5	30.11	764.8	41.0	5.0	82	sw.	5	2.2			10 s		sw.	0	0	cloudy	
Portland, Oregon	30.33	770.4	30.40	772.1	35.0	1.7	89	se.	6	2.7			10 s		s.	0.02	0.5	cloudy	
Portsmouth, N. Carolina					59	15.0	81	s.	11	4.9		0	5 ks		s.	0.02	0.5	fair	
Prescott, Arizona	24.90	632.4	30.26	768.6	18	— 7.8	61	s.	3	1.3		3 cs	0	calm		0	0	clear	
Punta Rassa, Florida	30.29	769.4	30.30	769.6	65	18.3	92	ne.	7	3.1		1 c	0	calm		0	0	clear	
Red Bluff, California	30.11	764.8	30.49	774.4	30.0	— 1.1	100	calm	0	0		1 k	0	ne.		0.87	22.1	clear	
Rio Grande City, Texas	29.86	758.4	30.11	764.8	70	21.1	90	se.	3	1.3			10 s		se.	0	0	cloudy	
Rochester, New York	29.19	741.4	29.90	759 4	52	11.1	86	sw.	6	2.7			10 ks		sw.	0	0	threatening.	
Roseburg, Oregon	29.92	760.0	30.49	774.4	32.2	0.1	92	calm	0	0			10 s			0.02	0.5	cloudy	
Sacramento, California	30.36	771.1	30.44	773.2	38.2	3.4	89	n.	11	4.9		0	3 s			0.26	6.6	clear	
St. Louis, Missouri	29.55	750.6	30.19	766.8	42.4	5.8	67	nw.	13	5.8			10 s		sw.	0.43	10.9	threatening.	
St. Paul, Minnesota	29.07	738.4	30.01	762.2	28.0	— 2.2	77	w.	10	4.5		0	0			0	0	clear	
St. Vincent, Minnesota	28.97	735.8	29.94	760.5	12	—11.1	100	nw.	14	6.3			10 s		n.	0.16	4.1	cloudy	
Salt Lake City, Utah	25.85	656.6	30.41	772.4	28	— 2.2	47	sw.	6	2.7			10 s			0	0	cloudy	
San Antonio, Texas	29.38	746.2	30.10	764.5	67.5	19.7	100	se.	2	0.9			fg			0.25	6.3	dense fog	
San Diego, California	30.18	766.6	30.25	758.3	42.7	5.9	75	ne.	3	1.3		1 cs	0			0	0	clear	
Sandusky, Ohio	29.19	741.4	29.91	759.7	53	11.7	80	sw.	18	8.0			10 n			0.45	11.4	light rain	
Sandy Hook, New Jersey	30.18	766.6	30.22	767.6	50	10.0	72	sw.	20	8.9			10 ks		sw.	0	0	cloudy	
San Francisco, California	30.33	770.4	30.40	772.1	44	6.7	80	n.	12	5.4			9 s		n.	0.33	8.4	cloudy	
Santa Fé, New Mexico	23.37	593.6	30.41	772.4	21	— 6.1	76	n.	6	2.7		0	0			0	0	clear	
Savannah, Georgia	30.27	768.8	30.36	771.1	57	13.9	83	e.	4	1.8		4 cs	0			0	0	fair	
Shreveport, Louisiana	29.86	758.4	30.10	764.5	63	17.2	100	s.	5	2.2		0	9 s		s.	0.65	16.5	cloudy	
Silver City, New Mexico	24 36	618.7	30.21	767.3	28	— 2.2	70	nw.	3	1.3		0	0			0.08	2.0	clear	
Sitka, Alaska	29.11	739.4	29.18	741.2	38.6	3.7	88	se.	15	6.7			10 n		se.	0.66	16.8	light rain	
Smithville, North Carolina	30.36	771.1	30.40	772.1	55	12.8	93	s.	5	2.2		2 ck	3 s		s.	0	0	fair	
Spokane Falls, Wash. Ter.	28.19	716.0	30.32	770.1	23	— 5.0	73	sw.	10	4.5			10 s			0.05	1.3	cloudy	
Springfield, Illinois	29.44	747.8	30.17	766.3	39.8	4.3	62	nw.	12	5.4		0	7 s		w.	0.50	12.7	fair	
Springfield, Massachusetts	30.05	763.3	30.19	766.8	42.6	5.9	89	sw.	3	1.3			10 s			0	0	cloudy	
Springfield, Mo.	28.69	728.7	30.26	768.6	45	7.2	68	ne.	13	5.8		2 c	6 ks	w.		0.18	4.6	cloudy	
Stockton, Texas	27.11	688.6	30.24	768.1	41.0	5.0	100	sw.	4	1.8		0	3 k		sw.	0	0	clear	
Thatcher's Island, Mass.	30.13	765.3	30.19	766.8	42.0	5.6	92	s.	18	8.0		10 ck	0	sw.		inap.	inap.	cloudy	
Toledo, Ohio	29.17	740.9	29.91	759.7	54	12.2	90	s.	8	3.6			10 n			0.37	9.4	light rain	
Tucson, Arizona	27.75	704.8	30.23	767.8	37	2.8	75	se.	3	1.3		0	0			0	0	clear	
Umatilla, Oregon	30.05	763.3	30.43	772.9	36.0	2.2	61	w.	2	0.9			10 s		w.	0	0	cloudy	
Uvalde, Texas	29.12	739.6	30.12	765.0	67	19.4	100	e.	2	0.9			10 n		calm	0.04	1.0	light rain	
Vicksburg, Mississippi	29.87	758.7	30.14	765.5	66	18.9	90	s.	6	2.7		0	9 ks		s.	0	0	cloudy	
Visalia, California	29.92	760.0	30.30	769.6	37	2.8	72	ne.	3	1.3		0	0			0	0	clear	
Washington, D. C.	30.10	764.5	30.22	767.6	52.0	11.1	90	s.	12	5.4			10 s		sw.	0.02	0.5	cloudy	
West Los Animas, Colorado	26.20	665.5	30.33	770.4	12	—11.1	83	calm	0	0		0	0			0	0	clear	
Wickenburg, Arizona					31	— 0.6	88	calm			0	1 c	5 s	n.	n.	0	0	fair	
Williamsport, Pa	29.49	749.0	30.12	765.0	41	5.0	82	e.	1	0.4			10 n		calm	0.03	0.8	light rain	
Wilmington, N. Carolina	30.34	770.6	30.40	772.1	58	14.4	81	s.	4	1.8		0	7 s		calm	0	0	fair	
Winnemucca, Nevada	25 87	657.1	30.39	771.9	18	— 7.8	70	ne.	1	0.4			10 s		calm	0.33	8.4	cloudy	
Wood's Holl, Mass.																			
Yankton, Dakota	28.77	730 7	30.19	766.8	25	— 3.9	73	sw.	8	3.6		0	0			0	0	clear	
Yuma, Arizona	30.10	764.5	30.25	768.3	44.8	7.1	39	n.	4	1.8		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559.3			53.0	11.7	82	calm	0	0		2 k	8 s;n			0.02	0.5	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.05	763.3	30.06	763.5	76	24.4	95	e.				5 k	5 ks	e.	e.	0.60	15.2	cloudy	J. A. Racker.
Buenaventura, U. S. C.	30.01	762.2	30.03	762.7	76	24.4	86	calm	0	0			10 ks		s.	0.90	22.9	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.98	761.5	30.00	762.0	76	24.4	86	e.				2 k	2 ks			0.118	3.0		B. Bigar.
Havana, Cuba, W. I.	30.22	767.6	30.27	768.8	73	22.8	84	e.	1.2	0.5		0	2 ks		calm	inap.	inap.	fair	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	69.0	20.6	93	calm	0	0		0	1 s		e.	0	0	fair	Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.05	763.3	30.05	763.3	77	25.0	91	e.			3		8 ps	e.	e.	0.270	6.9	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.49	749.0	29.95	760.7	78	25.6	89	calm			0	3 ck	3 ks	calm	calm	0	0	fair	Miss Flora A. Nichols.
Rivas, Nicaragua							100	ne.			2	0	8 ks		ne.	0.04	1.0	cloudy	Earl Flint.
Santiago de Cuba, W. I.	30.13	765.3	30.16	766.1	73	22.8	58	nw.	1.2	0.5		0	0			0.04	1.0	clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.80	756.9	29.86	758.4	—11.0	—23.9	76	nw.	13	5.8		2 k	1 s	nw.	nw.	0	0	fair	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.					Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.								
										Up'er	Lo'er	Upper.	Lower				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.		Inch.	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																				
H. M. S. Agincourt, Vigo, Spain	30.43	772.9	53	11.7	79	ne.			1		5	ssw.							d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 22° 12′, E. 113° 35′	30.15	765.8	63	17.2		se.			3		10						3	e.	overcast	Capt. A. J. Errington.
H. M. S. Alert, N. 6° 38′, E. 84° 51′	29.85	758.2	82	27.8	83	nne.			3		4								d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.21	767.3	60.5	15.8	68	ene.			1		8								d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 10° 46′, E. 62° 35′	29.90	759.4	80	26.7	78	n.			2		4	n.					2	nne.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.89	759.2	78	25.6	69	e.			4		0								blue sky	Com. Sir F. W. Richards.
H. M. S. Champion																				Capt. G. R. Hope.
H. M. S. Curacoa																				Capt. S. Long.
H. M. S. Diamond, S. 36° 42′, E. 20° 41′	30.01	762.2	71	21.7	75	e.			4		8						3	ese.	d clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 13° 09′, W. 61° 14′	30.07	763.8	78	25.6		ne.			2		2	ne.							d. clouds	Capt. C. Domville.
H. M. Dock Yard, Bermuda, W. I.	30.57	776.5	60	15.6	66	nne.			1–2		8	nne.							d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																				Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 44° 28′, W. 59° 23′	29.63	752.6	57.5	14.2	91	nnw.			1–2		0						3–5	n.	blue sky	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S 6° 32′, E. 39° 17′	29.78	756.4	85	29.4		calm			0		6								d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle																				Capt. C. A. G. Bridge.
H. M. S. Fawn, Aden, Arabia	29.85	758.2	79.5	26.4	82	s.			3–5		3								d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.24	768.1	40	4.4	73	wnw.			1		8	w.							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 12° 04′, W. 77° 11′	29.98	761.5	66.5	19.2	98	calm			0		10								foggy	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.67	753.6	58	14.4	81	wnw.			7		7								squally	Capt. L. F. Jones.
H. M. S. Inconstant, N. 17° 00′, E. 110° 30′	30.01	762.2	74	23.3	85	e.			2–3		2	se.					3	e.	d. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																				Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 13′ E. 114° 14′	30.16	766.1	60	15.6	94	ne.			2–4		5	nw.					1	s.	squally	Capt. R. E. Tracey.
H. M. S. Lark																				Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	30.02	762.5	67	19.4		n.			1		6									Comm. J. Aylen.
H. M. S. Magpie																				Capt. A. Carpenter.
H. M. S. Malabar																				Capt. H. Hand.
H. M. S. Mutine																				Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E 147° 21′	30.34	770.6	59	15.0	76	s.			2		2	n.							d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton																				Capt. E. Drummond.
H. M. S. Orontes, S. 6° 34′, E. 50° 23′	29.83	757.7	84.5	29.2	84	wsw.			1		9							of'd	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 31° 33′, W. 36° 13′	30.18	766.6	67	19.4	94	se.			4		3						4	se.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix, N. 13° 23′, W. 81° 00′	30.08	764.0	79	26.1	86	ne.			3–4		3						2	ne.	showery	Capt. H. H. Grenfell.
H. M. S. Rambler, Cape Coast Castle, Africa	29.84	757.9	83	28.3	95	ssw.			2		6	calm							threatening.	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.20	767.1	51	10.6		nw.			3–6		0								squally	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	30.21	767.3	36	2.2	100	calm			0		10								raining	Lieut. V. B. Orlebar.
H. M. S. Sea Gull																				Capt. E. T. Church.
H. M. S. Thalia, N. 47° 46′, W. 11° 00′	30.09	764.3	55	12.8		wsw.			4		10						4	wsw.	drizzling	
H. M. S. Triumph, Callao Bay, Peru	30.02	762.5	68	20.0	94	calm			0		9	calm							foggy	Capt. A. H. Markham.
H. M. S. Tyne, N. 17° 26′, E. 113° 59′	30.04	763.0	74	23.3	97	ne.			2		3	ne.					2	ne.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.11	764.8	75	23.9		calm			0		1								blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Muscat, Arabia	29.92	760.0	72.5	22.5	59	nw.			4–5		2	nw.					5	nw.	squally	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																				
Quanza, Brava, C. Verd Ids	29.95	760.7	74.3	23.5	91	ne			2		10						2	ne.	overcast	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorologicel Bureau at Stockholm.																				
H. M. Corvette Balder, N. 10° 56′, W. 77° 00′	29.93	760.2	78.1	25.6	82	ne.			7		5								misty	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level. Inch	Barometer reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Sea-swell. Character.	Sea-swell. Dir'n from.	Weather.	Observers.
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.22	767.6	67	19.4	89	e.	4	1.8			10		sw.	0.23	5.8			foggy	
N. Yard, Portsmouth, N. H.	30.13	765.3	42	5.6		sw.	19	8.5			10		sw.	0	0			cloudy	
Naval Hospital Yokohama, Japan	29.79	756.7	35.5	1.9	43	n.			3		0			0	0			clear	
Adams, Callao, Peru	29.78	756.4	68	20.0	100	sse.			2					0	0	gr'd		dense fog	
Alaska. Valparaiso, Chili	30.01	762.2	62	16.7	88	calm			0		0			0	0	sm'h		clear	
Alert, Singapore, India*	29.76	755.9	81	27.2	83	ne.			3		8		calm			mod.		hazy	
Alliance, N. 36° 55′, W. 76° 05′	30.30	769.6	55	12.8	59	ssw.			2		2		ssw.	0	0	sm'h		clear	
Ashuelot, Tientsin, China	30.60	777.2	28	— 2.2	88	sse.			2		2		calm					clear	
Brooklyn, S. 51° 38′, W. 68° 11′	29.03	737.3	62	16.7	94	w.	36	16.1			5		w.	0.27	6.9	irreg.	w.	fair	
Colorado, New York, N. Y.	30.21	767.3	48	8.9	92	s.	7	3.1			10		s.	0.05	1.3			overcast	
Enterprise, Norfolk, Va	30.34	770.6	54	12.2	87	ssw.			2		2		calm					clear	
Essex, N. 29° 42′, W. 16° 25′	30.34	770.6	65	18.3	63	e.			5		8		e.			r'gh	e.	cloudy	
Franklin, Norfolk, Va	30.43	772.9	54	12.2	87	ssw.	7.5	3.4			2		calm	0	0			fair	
Galena, Villafranca, France	30.40	772.1	57	13.9	63	ssw.			1		0					sm'h		clear	
Independence, N. Yard, Mare I'd, Cal	30.00	762.0	40	4.4	74	calm	0	0			10			0.01	0.3			overcast	
Kearsarge, New Orleans, La	30.20	767.1	64	17.8	83	calm			0		2							foggy	
Lackawanna. Valparaiso, Chili*	29.95	760.7	64	17.8	94	nne.			0–1		2		nne.					clear	
Lancaster, N. 32° 35′, E. 27° 02′	30.36	771.1	60	15.6	44	s.			2		2					sm'h		fair	
Marion, S. 30° 13′, E. 34° 44′	29.84	757.9	78	25.6	73	s.			0–1		2		calm	0	0	sm'h		clear	
Michigan, Erie, Pa	29.78	756.4	55	12.8	93	sw.			6		10							raining	
Minnesota, Newport, R. I.	30.23	767.8	45	7.2	100	sw.	10	4.5			10		sw.					overcast	
Monocacy, Yokohama, Japan	29.97	761.2	38	3.3	81	nnw.			4		0							clear	
Nipsic, N. 36° 27′, W. 4° 40′	30.33	770.4	64	17.8	40	nw.			1		0					sm'h		clear	
Onward, Callao, Peru†	30.10	764.5	67	19.4	100	sse.			1		10		nnw.			long	w.	foggy	
Palos, Hong Kong, China	30.16	766.1	60	15.6	94	e.			3		10		e.					overcast	
Passaic, Washington, D. C.	30.24	768.1	53	11.7	86	sw.			3		8		sw.					fair	
Pensacola. Valparaiso, Chili	30.06	763.5	62	16.7	94	calm	0	0			0			0	0	sm'h		clear	
Powhatan, N. 21° 12′, W. 66° 00′	30.19	766.8	73	22.8	76	ene.			6		5		n; e.			r'gh	e.	clear	
Quinnebaug. N. 34° 16′, E. 22° 37′	30.27	768.8	58	14.4	70	nnw.			1		5		calm			sm'h		fair	
Ranger. N. 19° 34′, W. 105° 07′*	29.94	760.5	65	18.3	100	calm			0		0			0	0	sm'h		clear	
Richmond, N. 21° 26′, E. 157° 48′*	29.98	761.5	74	23.3	56	nne.			1		8			0	0	light	ne.	cloudy	
Shenandoah, S. 26° 16′, W. 37° 31′*	29.99	761.7	77	25.0	77	ene.			4		10		e.			r'gh	e.	cloudy	
St. Louis, League Island, Pa	30.49	774.4	47	8.3	85	s.	15	6.7			10		s.	0.06	1.5			cloudy	
Swatara. Yokohama, Japan*	29.79	756.7	39	3.9	46	n.			4		0					mod.	n.	clear	
Tennessee, Fort Monroe, Va	30.34	770.6	51	10.6	93	ssw.	15	6.7			2			0	0			fair	
Vandalia, N. 9° 48′, W. 79° 19′*†	30.07	763.8	78	25.6	82	ne.			5		5		ne.			long	e.	fair	
Wabash, Boston, Mass.	30.17	766.3	44	6.7	84	sw.	13	5.8			10		sw.	0	0			overcast	
Wachusetts. Esquimalt, B. C.	30.19	766.8	38	3.3	90	se.			1		10		calm			sm'h		raining	
Wyoming. Port Royal, S. C.	30.37	771.4	60	15.6	88	se.	4	1.8			5?		w.	0	0			cloudy?	
Yantic, Aspinwall, Panama*	29.96	761.0	78	25.6	91	nne.			3		8		n.					fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, Boston, Mass*	29.92	760.0	42	5.6		sse.	4		10		se.	0	0			misty	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, Glasgow, Scotland*	29.45	748.0	49	9.4		nw.	6		8		nw.					fair	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 52° 57′, W. 24° 04′*	29.94	760.5	39	3.9		wnw.	6		5		w.	1½h'r	2½h'r	high	wsw.	hailing	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth,																	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 51° 32′. W. 14° 35′	29.74	755.4	50	10.0	93	w.	7		2		w.			r'gh	w.	fair	Chauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	29.67	753.6	54	12.2	86	sw.	5		8		sw.	0	0			cloudy	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, N. 39° 58′, W. 64° 40′*†	30.40	772.1	60	15.6	94	sw.	5		6		sw.			mod.	e.	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,																	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young,																	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Daw, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 34° 25′, W. 74° 00′*	30.47	773.9	65	18.3		s.	6		5		s.	0	0	mod.	sse.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Savanilla, U. S. C*†	29.87	758.7	73	22.8													W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Maracaibo, Venezula, S. A						ne.	2									fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 18° —′, W. 77° —′	29.76	755.9				e.	4		0			0	0	sm'h		clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S†	30.01	762.2	51	10.6		ssw.						0	0			hazy	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 54° 29′, W. 50° 34′	29.59	751.6	46	7.8		nnw.	4		10							dense mist.	
Baroda, Capt. C. J. Russell, S. 3° 16′, W. 29° 41′	29.94	760.5	81.6	27.6	78	se.	3		4							d. clouds	
Bk. Caldew, Capt. W. Peterson S. 48° 40′, W. 44° 57′	30.04	763.0	54	12.2		nnw.	4		10							foggy	
S. S. Cipero, Capt. W. N. Lailey Georgetown, British Guiana, S. A	30.01	762.2	79.5	26.4	82	ne.	2		9							d. clouds	
S. City of Agra, Capt. Thos. Young. N. 47° 00′, W. 18° 45′	29.94	760.5	57.5	14.2		w.	4		2							blue sky	
Coppename, Capt. James Buchan																	
Bk. Glaramara, Capt. R. Morton,																	
Glencairn, Capt. R. S. Tannock, S. 5° 26′, E. 89° 50′	29.86	758.4	82	27.8	91	ese.	2-3		6							d. clouds	
Hermine, Capt. S. G. Jones, S. 49° 31′, W. 49° 01′	29.88	758.9	55	12.8	100	nnw.	4		10							dense fog	
Hope, Capt. James Campbell																	
S. S. Humboldt, Capt. A. W. Jeffery, S. 1° 18′, W. 39° 59′	29.98	761.5	81.5	27.5	78	n.	3		3							d. clouds	
S. S. Gordon Castle, Capt. W. Waring,																	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 25° 40′, E. 60 39′	30.01	762.2	77.4	25.2	69	ese.	2		2							d. clouds	
May Hulse, Capt. H. Youlden, R. N. R., S. 58° 33′, W. 72° 50′	28.84	732 5	45.7	7.6	85	ese.	4		10							raining	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	29.90	759.4	80	26.7	74	calm	0		0							blue sky	
Naiad, Capt. J. Smith, N. 32° 20′, W. 45° 17′	30.30	769.6	56.0	13.3	93	n.	7		6							raining	
Pole Star, Capt. F. Norman,																	
Queen of Cambria, Capt. M. Parry. S. 16° 07′, E. 79° 09′	29.90	759.4	81	27.2	82	e.	6		10							raining	
S. S. Strathleven, Capt. H. W. Pearson																	
S. Superb, Capt. Berridge,																	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 44° 57′, W. 51° 21′*†	30.30	769.6				w.	6		9		wsw.	0	0	mod.	w.	foggy	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman, N. 35° 45′, W. 75° 00′*†	30.53	775.4	58	14.4		sw.	2		4		sw.	0	0	sm'h	etos	hazy	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 34° 12′, W. 70° 30′†*	30.40	772.1	65	18.3		se.			5†		se.			mod.	se.	cloudy?	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,																	E. F. Stembridge, 3d offr.
S. S. Gallia, Capt. W. H. P. Hains, N. 42° 04′, W. 58° 17′†	30.50	774.7	58	14.4	87	w.	5		8		sw.	5 h'r	shr's	mod.	nw.	hazy	J. H. Mills, 3d officer.

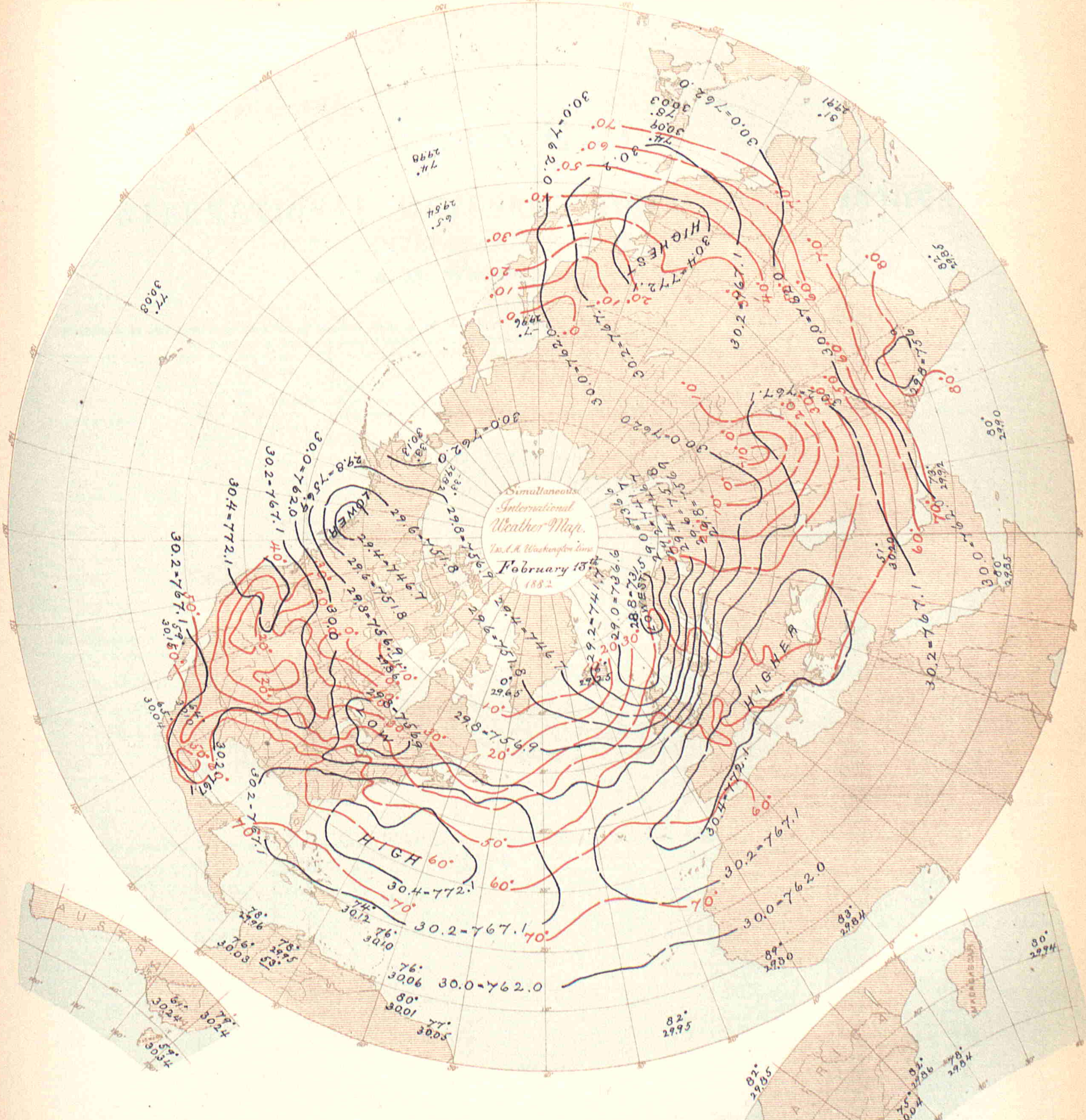
Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, N. 42° 30′, W. 60° 46′	30.35	770.9	42.8	6.0		wsw.	4		8		wsw.	0	0	hv'y	wsw.		
S. S. France, Capt. Périer d'Hauterive,																	
S. S. St. Laurent, Capt. A. Sérvan, N. 47° —′, W. 39° 40′*†	30.16	766.0	39.2	4.0		wsw.	6					light	light		wnw.		A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein,																	
S. S. Silesia, Capt. A. Albers																	
S. S. Wieland, Capt. C. Hebich, N. 44° 51′, W. 50° 55′*	30.11	764.8	34	1.1		wsw.	4		10		w.	6 h'r	snow	4	w.	covered	Jorgensen, Wolkowots
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch																	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Montevideo, Uruguay, S. A†*	30.10	764.5	78	25.6		sw.	1		1		wsw.	0	0	sm'h		clear	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, New York, N. Y.*†	30.25	768.3	38	3.3		sw.	3		6		sw.	0	0			cloudy	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann,																	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,																	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, Cienfuegos, Cuba, W. I†	30.24	768.1	72	22.2		nne.	1		0			2 h'r	shr's			clear.	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 12° 27′, W. 77° 31′† [man	30.01	762.2	79	26.1		ne.	4								ne.	showery	
S. S. City of Alexandria, Capt. L. F. Timmer-																	
S. S. City of Washington, Capt. J. W. Rey- N. 24° 25′, W. 81° 00′*† [nolds	30.50	774.7	80	26.7		e.	3							sm'h		fine	
S. S. Elbe, Capt. W. Willigerod N. 46° 51′, W. 37° 41′*	29.86	758.4	44.6	7.0		w.	5							r'gh		cloudy	
S. S. Lessing, Capt. B. Voss, N. 43° 12, W. 54° 49′*†	30.22	767.6	42	5.6		wsw.	4							4	w.		
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke N. 49° 13′, W. 26° 00′*†	30.09	764.3	50	10.0		wnw.	3-4							high cross	nw; sw.	cloudy	
S. S. P. Caland, Capt. E. Deddes, N. 48° 27′, W. 38° 46′	29.93	760.2	37.4	3.0		w.	6							6	w.	hailing	
S. S. Schiedam, Capt. E. M. Chevalier, N. 42° 29′, W. 59° 02′	30.34	770.6	47	8.3		wsw.	4								w;nw	cloudy	
S. S. Scythia, Capt. M. Murphy																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur																	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,																	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer,																	Sander & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	30.12	765.0	35.6	2.0		sse.	4-5		5?		sse.	0	0			cloudy?	
S. S. Mosel, Capt. F. Hesse, N. 40° 30′, W. 72° 22′	30.30	769.6	45.5	7.5		wsw.	5		10		sw.	0	0	sm'h		cloudy	J. Hesse.
S. S. Neckar, Capt. R. Bussius,																	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, S. 28° 56′, W. 45° 06′*	29.95	760.7	79.7	26.5	74	ene.	1		6		ene.	0	0	2	e.	fair	
S. S. Oder, Capt. C. Undeutsch, N. 49° 27′, W. 14° 00′*	29.97	761.2	62.4	16.9		w.	5		5		w.	0	0	long	w.	fair	Montz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, N. 33° 25′, W. 45° 07′	30.40	772.1				n	6		2		nw.	5 h'r	5 h'r	h'vy	wnw.	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch.																	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 30′, E. 155° 17′†	29.54	750.3	65	18.3	83	wsw.	6		8		w.	rain	rain	high	w.	raining	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, San Francisco, Cal			45	7.2	92	ne.	3		5?		s.					cloudy?	
S. S. Oceanic, Capt. J. Metcalfe, Yokohama, Japan*	30.04	763.0	47	8.3	54	var.	3		3							fine	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 33° 24′, W. 78° 07′*†	30.14	765.5				sw.	2		1		sw.			long	se.	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 35° 15′ W. 75° 15′†	30.52	775.2	69	20.6	75	ssw.	3		1		sw.	0	0	mod.	se.	clear	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 37° 54′, W. 122° 59′†	30.38	771.6	47	8.3	77	ne.	3	.....	8	.....	e.	.....	.....	h'vy	wnw.	fair	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. Fred. Bolles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Poleimann, San Francisco, Cal†	30.33	770.4	44	6.7	75	ne.	3	.....	5	.....	ne.	.....	.....	.....	.....	fair	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	30.31	769.9	44	6.7	75	e.	3	.....	8	.....	se.	.....	.....	.....	.....	cloudy	.....
S. S. Geo. W. Elder, Capt. H. G. Morse, Strait of Fuga†	30.08	764.0	43	6.1	.....	se.	6	.....	8	.....	se.	light	light	mod.	s.	cloudy	.....
S. S. Idaho, Capt. H. M. Hayward, N. 40° 02′, W. 124° 18′†	30.24	768.1	40	4.4	83	nne.	5	.....	2	.....	nnw.	.....	.....	.....	nnw.	clear	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 32° 40′, W. 117° 14′†	30.12	765.0	57	13.9	53	nw.	3	.....	1	.....	nw.	.....	.....	sm'h	nw.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, San Francisco Cal†	30.50	774.7	44	6.7	84	nne.	2	.....	9	.....	.....	12 h'r	light	.....	.....	cloudy	.....
S. S. State of California, Capt. G. Debney, Portland, Oregon†	30.37	771.4	36	2.2	80	se.	3	.....	10	.....	se.	0	0	.....	.....	cloudy	.....
S. S. Victoria, Capt. W. E. Plummer, N. 40° 10′, W. 124° 28′†	30.44	773.2	43	6.1	83	ne.	5	.....	0	.....	.....	.....	.....	mod.	w.	clear	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of New York, Capt. W. B. Cobb, N. 11° 50′, W. 161° 50′†	30.08	764.0	77	25.0	90	ne.	5	.....	8	.....	ne.	0	0	mod.	ne.	cloudy	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, Sydney, N. S. W.†	30.24	768.1	79	26.1	38	ene.	4	.....	2	.....	ne.	0	0	sm'h	.....	clear	E. Le Salk.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	30.00	762.0	61	16.1	82	ene.	8	.....	10	.....	e.	.....	.....	.....	.....	drizzling	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 26° 16′, W. 113° 54′†	30.15	765.8	69	20.6	60	nne.	3	.....	8	.....	se.	0	0	small	n.	hazy	.....
S. S. Grenada, Capt. M. Connolley, Panama, Panama†	29.94	760.5	74	23.3	100	nw.	2	.....	5†	.....	n.	0	0	.....	.....	clear?	.....
S. S. South Carolina, Capt. W J. Russell, Panama, Panama..†	30.05	763.3	75	23.9	76	nw.	1	.....	0	.....	.....	0	0	sm'h	.....	fair	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.15	765.8	73	22.8	76	calm	0	.....	0	.....	.....	.....	.....	.....	.....	fine	.....
QUEBEC S. S. CO. *E. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 32° 17′, W. 68° 44′	.....	.....	.....	.....	.....	se.	3	.....	2	.....	e.	0	0	long	e.	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes, N. 48° 34′, W. 15° 20′*†	30.09	764.3	54	12.2	.....	wsw.	5	.....	8	.....	.....	2 h'r	light	mod.	wsw.	overcast	.....
S. S. Nederland, Capt. J. Uberweg, N. 50° 00′, W. 1° 54′*†	30.52	775.2	51	10.6	.....	sw.	5	.....	10	.....	.....	0	0	short	sw.	overcast	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, N. 42° 03′, W. 62° 46′*	30.48	774.2	45	7.2	84	wsw.	4	.....	9	.....	wsw.	0	0	light	wsw.	cloudy	U. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Egmond & Ludder.
S. S. Vaderland. Capt. W. A. Beynon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Waesland, Capt. H. Nickels, N. 49° 33′. W. 7° 26′*	29.89	759.2	54	12.2	.....	ssw.	6	.....	2	.....	sw.	3 h'r	light	mod.	wsw.	clearing	Olsen & Assfeld.
ROTTERDAM LINE. *Fundh, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, New York, N. Y*	30.11	764.8	58.4	14.7	93	sw.	3	.....	10	.....	.....	3 h'r	3 h'r	.....	.....	rain and fog.	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 52° 02′, W. 35° 31′†	29.85	758.2	35.6	2.0	.....	wsw.	3	.....	4	.....	wsw.	9 h'r	rain snow	mod.	w.	clear	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 51° 00′, W. 26° 42′*†	29.65	753.1	44	6.7	.....	nw.	6	.....	5	.....	w.	.....	.....	very r'gh	w.	hailing	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell, New York, N. Y*†	30.06	763.5	48	8.9	85	sw.	2	.....	10	.....	s.	4 h'r	light	.....	.....	cloudy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving. N. 44° 09′, W. 46° 40′†	30.36	771.1	45	7.2	84	w.	5	.....	8	.....	w.	snow	&hail	mod.	w.	cloudy	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 48° 41′, W. 19° 05′*	30.03	762.7	54	12.2	.....	sw.	3	.....	8	.....	nw.	sq'lls	sq'lls	mod.	.....	cloudy	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. Pensacola, Florida †	30.35	770.9	66.5	19.2	92	calm	0		10 s		sw.	0.26	6.6			cloudy	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 33° 55′, W. 69° 02′*†	30.60	777.2	67	19.4		e to ese	1		4		se.	0	0	short	ese.	fair	C. Bailey.
Bk. Alpha, Capt. O. Grönn N. 20° 30′, W. 33° 30′*†	30.10	764.5	76	24.4		ese.	6		3		ese.	0	0	mod.	e.	fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby, N. 50° 23′ W. 7° 05′*†	30.05	765.3	55	12.8	80	sw.	6		10		sw.	1 h'r	light	high cross	wsw.	cloudy	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, Ponce, Porto Rico, W. I.*†	30.12	765.0	77	25.0		ne.	1		2		e.	2 h'r	light			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 4° 20′, W. 25° 18′*†	29.95	760.7	82	27.8		n.	2		6		nne.	2 h'r	2 h'r	sm'h	n.	fair	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 45° 27′, W. 31° 10′*†	29.92	760.0				nw.	6		1		nnw.	6 h'r	6 h'r	long h'vy	nw.		G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill, S. 44° 09′ W. 60° 39′†	29.70	754.4				wsw.	2		0			0	0	sm'h	w.	clear	A. J. Pettengill.
S. Enoch Train, Capt. H. D. Chapman, Bremerhaven, Germany*	30.07	763.8				sw.	4		0			0	0			clear	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.																	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C†	30.33	770.4	55	12.8	87	ssw.	4		10		s.	0.03	0.8			cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 23° 05′, W. 30° 51′			75	23.9		se.	5		0			0	0	sm'h		fine	
Bk. Gamaliel, Capt. D. J. Anthony, N. 14° 23′, W. 56° 00′*†	29.08	738.6				ne.	7		0			0	0	con.	var.	clear	
Bk. Geo. Booth, Capt. D Williams, N. 14° 10′, W. 35° 10′*†	29.85	758.2	76	24.4		e.	1					0	0		ene.	hazy	D. Williams.
Bk. Granville, Capt. R. Bonney N. 38° 09′, W. 65° 43′*†	30.80	782.3	64	17.8		ssw.	1					0	0	mod.	nne.	clear	J. Fehring.
Schr. Henry Denison, Capt Jno. Fehring																	
Bk. Johanne Auguste, Capt. H. Schmidt, S. 41° 00′. E. 41° 20′*†	29.84	757.9				sse.	6		8		ssw.	10 h'r	light	long	e.	threatening.	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo T. L. Compte																	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen,																	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 34° 51′, W. 16° 31′*†	30.67	779.0	64	17.8	89	ne.	3		2		ene.			mod.	nw.		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.32	770.1	54	12.2	50	ne.	2										G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 19° 15′, W. 30° 25′*†	29.90	759.4				calm	0					0	0			clear	J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	30.41	772.4	60	15.6		calm	0		5		se.	0	0	sm'h		fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 15° 16′, W. 33° 47′*	29.89	759.2	80.2	26.8	93	e.	3		2		se.			mod.	e.	d. clouds	H. N. T. Sumner.
Bk. Sunbeam, Capt. Joseph Hand, N. 30° 24′, W. 24° 50′*†	30.31	769.9	67	19.4	94	se.	6		8		e.	8 h'r	light	long	nw.	cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert, S. 34° 00′, E. 18° 36′*†	30.10	764.5				s.	6		7		s.	0	0	light	s.		
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 45° 17′, W. 27° 00′*†	29.87	758.7	55	12.8	80	wsw.	7				w.			mod.	wnw.	cloudy	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, S. 1° 54′, W. 29° 12′*†	29.95	760.7				var.					se.			light	se.		N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 14, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.45	773.4	60.8	16.0	73	ne.			2		2			0.315	8.0	fair	Moiroud.
Algiers			30.47	773.8	56.8	13.8	85	nw.			2		5			0	0	cloudy	Nicolas.
La Calle			30.47	773.8	59.4	15.2	89	e.			5		5			0	0	cloudy	Fonfrède.
Tunis			30.49	774.4															Jacques.
Sfax																			Gan.
Saida			30.43	773.0	42.4	5.8	88	nnw.			2		5			0.024	0.6	cloudy	Dumas.
Tebessa			30.40	772.1	46.4	8.0	52	se.			2		8			inap.	inap.	very cloudy	Derché.
Geriville					40.6	4.8	68	ne.			2		10			0.504	12.8	covered	Lonchamp.
Laghouat			30.45	773.5	50.2	10.1	50	ne.			3		1			0.157	4.0	very fair	Herbin.
Biskra			30.45	773.4	64.0	17.8	39	se.			1		10			inap.	inap.	covered	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	62.0	16.7	80	ese.	7	3.1			1			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.97	761.2	30.54	775.7	44.2	6.8	50	se.			2		2			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.54	750.3	30.33	770.3	46.4	8.0	46	wsw.	10.5	4.7			10			0	0		Dr. Wierzbiski.
Eperies	29.52	749.9	30.45	773.3	39.9	4.4	48	s.			5	5 cs	0			0	0		*Julius Mikolik.*
Gratz	29.21	741.9	30.51	775.0	41.4	5.2	53	s.			2		0			0	0		Andreas Rospini.
Hermannstadt	28.99	736.3	30.50	774.7	35.2	1.8	78	se.			2		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.09	738.9	30.49	774.4	40.3	4.6	67	ne.			1		6			0	0	cloudy	The Staff.
Lemberg	29.31	744.5	30.34	770.5	41.0	5.0	54	sw.			2		3			0	0		Dr. T. Stanecki.
Pola	30.49	774.4	30.61	777.4	48.0	8.9	61	w.			1		0			0	0	foggy	I. R. Hydrographic Office.
Szathmar	30.06	763.5	30.52	775.3	41.7	5.4	55	s.			2		0			0	0		Joseph Midlinszky, S. J.
Szegedin	30.27	768.9	30.56	776.3	45.0	7.2	65	s.			2		0			0	0		Karl Stancel.
Trieste	30.51	775.0	30.61	777.6	47.1	8.4	70	calm			0		0			0	0		Rieder.
Vienna	29.75	755.6	30.50	774.6	41.2	5.1	55	s			1		2			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.65	753.1	29.75	755.6	41.1	5.1	57	wsw.	25	11.2			3			0.020	0.5	blue sky	W. Boswell.
Armagh, Observatory	29.82	757.4	30.08	764.0	45.3	7.4	27	wsw.	20	8.9			0					blue sky	S. Call.
Bidston, Liverpool Obs'y			30.13	765.3	46.6	8.1	85	w.	35	15.6			1					blue sky	John Hartnup
Bolton, Sharples	29.59	751.6	30.13	765.3	44.8	7.1	58	w.	30	13.4			4					d. clouds	Thomas Mackereth (A.S.
Bradford, Yorkshire	29.64	752.8	30.04	763.0	47.6	8.7	94	sw.			4		6			0.13	3.3	d. clouds.	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	80.0	26.7	74	ne.			3		2					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			30.18	766.6	52.0	11.1	66	sw.			1.0		5					d. clouds	John McLaren.
Chatham, School M. E.	30.06	763.5	30.19	766.8	55.1	12.8	68	sw.			1		3					d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.06	763.5	30.29	769.4	53.3	11.8	89	sw.			3		8					overcast	The Staff.
Fort Napier, Natal	27.69	703.3	29.90	759.4	89.2	31.8	27	calm			0		0					blue sky	Pvt. E. K. Annies, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88.0	31.1	69	nw.			1		3						Sergt. John Robinson.
Galway, Queen's College			29.98	761.5	48	8.9	71	sw.			3		4					d. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.36	771.1	30.41	772.4	61.8	16.6	75	ne.			4		5					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	29.72	754.9	29.92	760.0	49.8	9.9	77	w.			6		5					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.07	763.8	30.24	768.1	53.2	11.8	63	w.			4		8					d. clouds	The Staff.
Guernsey	30.05	763.3	30.35	770.9	52.0	11.1	98	wsw.			2		10			blank	blank	misty	A. Collenette, F. M. S.
Kew, Observatory	30.22	767.6	30.26	768.6	53.0	11.7	60	w.	16	7.2			4					d. clouds	The Staff.
Leicester, Museum	29.87	758.7	30.13	765.3	50.3	10.2	98	sw.			2		5					d. clouds	J. C. Smith.
Malta, Mediterranean	30.38	771.6	30.46	773.7	56.2	13.4	77	ne.			3		6					d. clouds	Corpl. A. King, A. H. C
Nassau, Bahamas	30.31	769.9	30.36	771.1	73.0	22.8	75	e.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	30.00	762.0	30.23	767.8	51.9	11.1	62	wsw.			4		4					blue sky	The Staff.
Plymouth	30.20	767.1	30.27	768.8	53.0	11.7	90	s.			1		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			29.48	748.8	35.6	2.0	96	nw.	27	12.1			10					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.41	772.4	30.48	774.2	44.6	7.0	57	ne.			2		3					d. clouds	W. H. Lyne
Sheffield	29.86	758.4	30.15	765.8	49.0	9.4	55	wsw.			3		1			0.13	3.3	blue sky	W. F. Cooper.
Silloth Rectory	30.01	762.2	30.04	763.0	41.5	5.3	83	nw.			4		0			0.057	1.4	blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.13	765.3	45.0	7.2	92	w.	30	13.4			8			blank	blank	d. clouds	I. New.
Stratfield Turgiss	30.03	762.7	30.25	768.3	54.8	12.7	70	w.			0.8		2					blue sky	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.21	767.3	30.26	768.6	59	15.0	81	w.			4		6					d. clouds	W. Newcombe.
Valencia, Observatory	30.08	764.0	30.10	764.5	48.6	9.2	79	sse.	30	13.4			10					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.95	760.7	29.98	761.5	74.0	23.3	84	e.	10.0	4.5		0	0			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.82	757.4	29.86	758.4	103.8	39.9	32	nw.	11	4.9		0	0			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.69	754.1	29.73	755.1	36	2.2	92	sw.	10	4.5			10 n			0.160	4.1	threatening.	H. J. Cundall, C. E.
Chatham, N. B.*	29.65	753.1	29.71	754.6	36	2.2	66	s.	13	5.8		5ck	5 ks	s.	s.	0.09	2.3	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.60	751.8	29.62	752.3	28	— 2.2	96	w.	45	20.1		0	8 s		w.	0.40	10.2	clearing	J. McWilliams.
Fort Garry, Manitoba*	28.71	729.2	29.59	751.6	16	— 8.9	100	sw.	18	8.0			1c n		sw.	0	0	cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S*	29.75	755.6	29.88	758.9	38	3.3	100	w.	2	0.9		0	8 k		w.	0.570	14.5	clearing	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.70	754.4	30.05	763.3	31	— 0.6	78	sw.	6	2.7		0	2 s			0.30	7.6	clear	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.73	755.1	29.95	760.7	33	0.6	65	w.	21	9.4		2 cs	0			0.31	7.9	clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.33	745.0	30.07	763.8	25	— 3.9	88	w.	5	2.2		0	0			0	0	clear	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.41	747.0	30.13	765.3	32	0.0	69	sw.	2	0.9		0	0			0.32	8.1	clear	H. Morgan.
Port Stanley, Ontario	29.46	748.3	30.14	765.5	30	— 1.1	81	w.	7	3.1		0	0			0.19	4.8	clear	M. Payne.
Quebec, Quebec*	29.55	750.6	29.88	758.9	29	— 1.7	88	nw.			5	0	2 s			0.68	17.3	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.47	748.5	29.96	761.0	17	— 8.3	83	calm	0	0		0	0			0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.33	745.0	30.08	764.0	27	— 2.8	92	calm	0	0		2 cs	0			0	0	clear	
St. Andrews, N. B.	29.82	757.4	29.87	758.7	36	2.2	78	w.	3	1.3		0	8 s			0.13	3.3	cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	29.70	754.4	29.76	755.9	37	2.8	100	sw.	20	8.9			10 n			0.11	2.8	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.71	754.6	30.12	765.0	31	—0.6	78	w.	7	3.1		0	2 s			0.15	3.8	clear	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	29.84	757.9	29.91	759.7	35	1.7	89	nw.	4	1.8		10 k	5 s	w.	nw.	0.40	10.2	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.73	755.1	29.99	761.7	39	3.9	100	sw.	4	1.8			1c n					raining	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.05	763.3	30.34	770.6	32.5	0.3	94	ne.			3		10			blank	blank		N. Titoushkin.
Sung-shu-chwangf	24.62	625.4			27.9	—2.3		calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.04	763.0	30.07	763.7	46.2	7.9	91	se.	7.8	3.5			10 n			0.24	6.2	raining	M. Marc Dechevrens, S. J.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.80	756.9	29.85	758.1	45.7	7.6	77	wnw.	25	11			3						Oversergent Fischer.
Fanöe	29.85	758.2	29.87	758.7	43.5	6.4	100	w.			6		2						Overloerer Lauridsen.
Godthaab, Greenland	29.59	751.5	29.63	752.6	5.2	—14.9	78	ene.			7		3						S. Kleinschmidt.
Stykkisholm, Iceland	29.56	750.7	29.60	751.8	6.1	—14.4		e.			8		0						A. O. Thorlacius.
Thorshavn	29.50	749.4	29.54	750.3	27.0	— 2.8	74	n.	9	4			3						Overloerer Bergh.
Vestervig	29.61	752.0	29.70	754.3	42.3	5.7	86	wsw.			6		4						Loerer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.93	760.2	30.60	777.2	51.4	10.8	85	calm			0		fg			0	0	foggy	M. Labroue, Director.
Alençon, Normal School	29.89	759.2	30.44	773.2	51.8	11	95	sw.			1		n	nw.	nw.	0	0		M. Nicot, Director.
Arras, Engineer School	30.09	764.3	30.35	770.9	51.3	10.7	96	w.			4		10			0.043	1.1	light rain	M. Klein, Commandant.
Avignon, Normal School	30.55	776.0	30.63	778.0	53.6	12	54	ne.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.94	760.4	30.51	774.9	50.5	10.3	67	s.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.11	764.8	30.38	771.6	55.2	12.9	79	sw.			2		10		wsw.	0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.47	774.0	48.2	9	94	e.			1		2 n		sw.	0	0	slightly cl'dy	M. Gobin, Director.
Bordeaux, Observatory	30.30	769.7	30.58	776.6	44.6	7.0	93	sw.			1		0			0.012	0.3	clear	M. Rayet, Director.
Bourges, Normal School	29.92	760.0	30.48	774.3	53.6	12	94	s.			1		8		s.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.15	765.8	30.39	772.0	53.6	12.0	95	sw.			2		10		sw.	0.126	3.2	rain and fog.	M. de Kennaree, Dir.
Caen, Normal School	30.28	769.0	30.39	771.9	56.1	13.4	88	sw.			2		5		s.	0.012	0.3	cloudy	M. Berson, Director.
Châlons-sur-Marne, N. Sch'l	30.07	763.8	30.40	772.2	47.5	8.6	78	s.			2		10	s.	sw.	0	0	covered	M. Jadot, Director.
Charleville, Normal School	29.86	758.5	30.39	771.8	46.4	8.0	89	w.			1		10			0.04	1.	raining	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.15	740.5	30.50	774.7	58.1	14.5	34	n.			1		1c			0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.72	754.9	30.60	777.2	56.3	13.5	57	nw.			1		1		n.	0	0	clear	M. de Villemontée, Dir.
Commercy, Normal School	29.60	751.7	30.49	774.5	47.3	8.5	72	sw.			2		10 n	sw.	sw.	0.031	0.8	covered	Dr. Coulet, Director.
Gap, Normal School	27.94	709.7	30.52	775.3	52.2	11.2	36	s.			1		c			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.45	747.9	30.59	777.0	55.2	12.9	43	sw.			2		2		sw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.80	756.8	30.58	776.8	51.1	10.6	37	e.			1		0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.93	734.8	30.55	776.0	51.8	11	30	sw.			1		c	0	sw.	0	0		M. Rivoire, Director.
Lamballe, Normal School	30.13	765.2	30.40	772.2	56.3	13.5	86	sw.			2			8	sw.	0	0	very cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.99	761.8	30.56	776.2	62.6	17	43	n.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.35	770.8	30.45	773.4	53.6	12.0	100	sw.			3		10		s.	0.157	4.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.48	748.9	30.57	776.4	51.8	11.0	49	se.			1		0			0	0	clear	M. André, Director.
Mans, Normal School	30.10	764.6	30.42	772.6	49.8	9.9	96	wsw.			4		8		sw.	0	0	very cloudy.	M. Piboen, Director.
Marseille, Observatory	30.32	770.2	30.60	777.2	57.9	14.4	45	sw.			1		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.23	640.9	30.08	763.9	41.9	5.5	24	e.	9.4	4.2			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.48	774.3	30.60	777.2	54.0	12.2	81	w.			2		0			0	0	foggy	M. Galzin, Director.
Nancy, Normal School	29.67	753.6	30.48	774.1	48.6	9.2	71	wsw.			2		1c kn					raining	M. Hasse, Director
Nantes, Observatory	30.35	770.9	30.51	775.0	59.0	15	76	sw.			2–3		7k; kn	sw.	sw.	0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.50	774.7	30.61	777.6	55.0	12.8	57	se.	3.8	1.7			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.53	546.8			33.1	0.6		s.			1		1		s.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.50	749.2	30.61	777.4	53.2	11.8	65	n.			1		0			0	0	clear	M. Tallien.
Puy de Dôme Obs'y, Summit	25.54	648.6			35.8	2.1	82	wsw.			4		2			0	0	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.51	774.9	30.54	775.7	50.5	10.3	93	s.			1		8		sw.	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.19	766.8	30.41	772.3	54.3	12.4	87	sw.			1		5		w.	0.008	0.2	cloudy	M. Mouliot, Director.
Rodez, Normal School	28.40	721.4	30.60	777.3	49.3	9.6	44	ne.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.31	769.8	30.35	771.0	56.8	13.8	75	sw.			2		8			0	0	very cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.21	767.4	30.37	771.4	51.8	11	94	wsw.			2		10		wsw.	0.051	1.3	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.26	768.7	30.43	772.9	49.6	9.8	89	sw.			2		1c		sw.	0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.88	758.9	30.61	777.6	55.8	13.2	66	s.			1		1		w.	0	0	clear	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.91	759.7	30.40	772.2	51.1	10.6	86	sw.			3					0.016	0.4		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.13	765.4	30.43	772.8	51.8	11.0	85	sw.			2		10		wsw.	inap.	inap.	sprinkling	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.51	749.6	30.37	771.5	48.7	9.3	60	s.			4	0	8 s;k		sw.	0.008	0.2	raining	Prof. Dr. Hoh
Berlin	29.95	760.8	30.13	765.4	47.8	8.8	73	sw.			2		10			0.012	0.3	raining	Prof. Dr. Arndt.
Breslau	29.74	755.3	30.27	768.9	45.7	7.6	53	sw.			2		10			0	0		Royal University Obs'y.
Carlsruhe	29.99	761.8	30.45	773.3	51.4	10.8	56	sw.			4		9	se.	sw.	0	0		Albert Senz.
Cassel	29.48	748.7	30.19	766.8	43.7	6.5	90	s.			7	0	8 k		s.	0.079	2.0		Dr. H. Möhl.
Frankfort on the Main	29.99	761.7	30.37	771.3	46.4	8.0	81	ssw.			2		10			0	0		Physical Society.
Friedrichshafen	29.05	737.8	30.51	775.0	39.6	4.2	68	s.			1		5	e.		0	0		Wilhelm, Chief Tel.
Hamburg	29.99	761.8	30.09	764.2	45.3	7.4	96	wsw.			5		10			0.055	1.4	raining	E. Preller.
Kiel	29.96	761.0	29.98	761.4	46.0	7.8	80	wsw.			4		10			0.055	1.4		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.82	757.4	30.25	768.4	47.7	8.7	74	ssw.			3		10	sw.				sprinkling	H. Leppig, Asst.
Magdeburg	29.97	761.3	30.17	766.2	49.3	9.6	79	sw.			4		10 ks		sw.	0.016	0.4	light fog	Dr. Assmann.
Memel	29.84	758.0	29.89	759.2	40.6	4.8	87	sw.			7		10					light fog	Issermann.
Munich	28.60	726.5	30.50	774.6	48.7	9.3	42	nw.			1		4	w.		0	0		Central Station.
Neufahrwasser	29.99	761.7	30.00	762.1	46.8	8.2	75	sw.			2		10	sw.		0	0		A. Lothes.
Neustadt, Palatinate	29.86	758.4	30.39	771.9	50.4	10.2	81	sw.			4		7	s.		0	0		Dickmether.
Stuttgart	29.48	748.7	30.38	771.7	53.2	11.8	42	sw.			4		8	w.		0	0		Prof. Dr. Schoder
Wustrow	29.98	761.6	30.01	762.2	43.2	6.2	87	sw.			5		10 s			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.08	764.0	30.48	774.3	43.7	6.5		ne.			2.0		6			0.024	0.6	raining	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.78	756.5	29.84	757.8	74.9	23.8	67	wsw.	36	16.1			4		w.	0	0	misty	
Deesa	29.31	744.5	29.79	756.6	77.9	25.5	50	wsw.	14.2	6.4			9		wnw.	0	0	d. clouds	
Bombay	29.82	757.4	29.86	758.4	78.7	25.9	67	nw.	17	7.6			0			0	0	blue sky	
Poona, Yarrowda.	27.95	710.0	29.77	756.1	88.9	31.6	21	wnw.	19	8.5			0			0	0	blue sky	
Belgaum	27.28	693.0	29.77	756.2	84.8	29.3	21	w.	12	5.4			0			0	0	blue sky	
Lahore	29.12	739.6	29.89	759.2	62.6	17.0	51	nw.	0.9	0.4			8			0	0	d. clouds	
Roorkee	28.92	734.6	29.84	758.0	68.0	20.0	45	calm	0.9	0.4			2			0	0		
Agra	29.25	742.9	29.82	757.4	75.2	24.0	41	ne.	4.0	1.8			4		n.	0	0		
Nagpur	28.75	730.2	29.78	756.3	88.4	31.3	23	sw.	3.7	1.6			0			0	0	blue sky	
Jubbulpore	28.46	722.8	29.81	757.1	81.7	27.6	28	nw.	3.0	1.3			4			0	0	d. clouds	
Lucknow	29.48	748.8	29.87	758.6	66.3	19.1	38	calm	1.9	0.8			0			0	0	blue sky	
Allahabad	29.51	749.6	29.83	757.7	75.1	23.9	43	calm	1.8	0.8			1			0.02	0.5	d. clouds	
Patna	29.66	753.3	29.85	758.2	72.9	22.7	40	nw.	5.1	2.3			0			0	0	blue sky	
Hazaribagh	27.82	705.5	29.85	758.1	72.8	22.7	29	w.	6.6	3.0			0			0	0	blue sky	
Cuttack	29.75	755.6	29.83	757.6	85.2	29.6	56	wsw.	1.2	0.5			1			0	0	blue sky	
Calcutta, Alipore	29.79	756.7	29.82	757.3	75.7	24.3	64	ssw.	7.0	3.1			3		sw.	0	0	d. clouds	
Dhubri	29.73	755.1	29.85	758.3	66.1	18.9	67	calm	1.8	0.8			3	w.		0	0	d. clouds	
Chittagong	29.79	756.6	29.88	758.9	74.7	23.7	87	ssw.	3.3	1.5			9			0	0	d. clouds	
Sibsagar	29.56	750.9	29.91	759.7	63.0	17.2	75	ne.	3.6	1.6			10	e.	e.	0	0	d. clouds	
Jeypore	28.31	719.1	29.76	756.0	74.7	23.7	42	s.	4.9	2.2			3	sw.		0	0	d. clouds	
Zanzibar, Africa	29.84	757.9			83.7	28.7	72	sw.	4.5	2.0			8k;pk	fk]	ne.	0	0	d. clouds	
Trichinopoly	29.60	751.8			88.2	31.2	40	e.	2	0.9			0			0	0	blue sky	
Bellary	28.32	719.3			94.4	34.7	13	ene.	2.8	1.3			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	30.19	766.7	30.61	777.5	47.5	8.6	33	calm	0	0			0			0	0		Prof. Giovanni Clodig.
Milan	30.08	763.9	30.61	777.6	44.8	7.1	70	ssw.	3.1	1.4			1			0	0		Prof. Schiaparelli.
Padua	30.49	774.4	30.60	777.3	45.3	7.4	49	se.	1.3	0.6			1			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.66	753.4	30.60	777.3	44.1	6.7	60	ne.	3.1	1.4			1			0	0		Prof. P. F. Denza.
Genoa	30.40	772.2	30.60	777.2	54.1	12.3	53	sw.	1.8	0.8			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.61	726.6	30.60	777.1	41.9	5.5	35	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.56	776.3	30.61	777.6	44.1	6.7	61	ne.	4.3	1.9			1			0	0		Prof. Luigi Guidi.
Florence	30.34	770.5	30.60	777.2	48.9	9.4	29	n.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.43	773.0	30.52	775.2	53.4	11.9	30	n.	3.8	1.7			0			0	0		Prof. P. Monte.
Rome	30.41	772.3	30.59	776.9	53.2	11.8	38	n.	0	0			0			0	0		Prof. P. S. Ferrari.
Lecce	30.30	769.7	30.50	776.3	50.0	10.0	46	nne.	17.4	7.8			0			0	0		Prof. C. de Giorgi.
Cosenza	29.65	753.0	30.56	776.3	48.9	9.4	71	nw.	4.3	1.0			3	n.		0	0		Prof. D. Conti.
Cagliari	30.31	769.9	30.51	774.9	57.2	14.0	51	s.			2		3			0	0		Prof. A. Pacinotti.
Palermo	30.29	769.3	30.54	775.8	56.8	13.8	53	ne.	6.3	2.8			1			0	0		Prof. G. Ciacciatore.
Syracuse	30.45	773.4	30.50	774.6	54.1	12.3	58	ne.	22.4	10.0			10	ene.		0.039	1.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	30.02	762.5	30.56	776.2	52.2	11.2	44	ene.	0	0			1	w.		0	0		Prof. T. Brioschi.
Stelvio	22.46	570.6			26.2	— 3.2	38	e.			1		1			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.50	571.6			28.9	— 1.7	40	n.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.99	761.7	30.03	762.7	31.1	— 0.5	81	w.	7.2	3.2			10 n			0.096	2.4	gloomy	
Hakodate	29.98	761.5	29.99	761.7	31.5	— 0.3	67	nw.	12.0	5.4			6		nw.	0	0	cloudy	
Hiroshima, I. M. Obs'y	30.23	767.8	30.25	768.3	38.2	3.4	73	n.	8.6	3.8		0	0			0	0	clear	K. Sasaki.
Kanazawa	30.20	767.1	30.31	769.9	34.4	1.3	84	se.	3.7	1.6		ck	10 ks			0.050	1.3	overcast	S. Endo.
Kioto	30.07	763.8	30.25	768.3	39.1	3.9	68	wnw.	3.3	1.5			10 s			0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.03	762.7	30.25	768.3	39.6	4.2	84	e.	1.0	0.4		0	0			0	0	clear	S. Takehayashi.
Niigata	30.13	765.3	30.16	766.0	38.5	3.6	62	w.	15.5	6.9		4 ck	0	w.		0	0	fair	
Nobiru	30.02	762.5	30.03	762.7	35.1	1.7	71	wnw.	19.1	8.5		0	1 s			0	0	fair	H. Midzushima.
Supporo					29.0	— 1.7	82	nw.	18.0	8.0			8			0.115	2.9	overcast	
Tokei Obs'y, Yeddo	30.03	762.7	30.11	764.8	34.2	1.2	70	nnw.	5.4	2.4		0	0			0	0	clear	The Staff.
Wazayama	30.21	767.3	30.27	768.8	39.6	4.2	67	ne.	3.9	1.7			10 s			0	0	cloudy	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.42	620.3	30.21	767.4	50.9	10.5	85	nw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.80	756.9	30.06	763.6	62.0	16.7	100	nw.	0	0			fg.			0	0	dense fog	F. Quijano, O. E.
Mexico, Central Obs'y	23.16	588.4	30.34	770.8	46.0	7.8	63	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.42	620.3	30.67	779.0	52.3	11.3	72	se.			5	0	0			0	0		M. Tena, M. D.
Pabellon, Aguascalientes	24.05	610.8	30.17	766.4	47.8	8.8	66									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.50	596.8	30.42	772.7	42.8	6.0	54	calm	0	0		0	0			0	0	very fine	Prof. P. Spina.
San Luis Potosi	24.25	615.9	30.44	773.4	52.7	11.5	61	e.			1		10		e.	0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.62	574.6	30.36	771.3	48.0	8.9	55	nnw.	4.8	2.1		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.70	754.4	29.88	758.9	82.2	27.9	74	ene.	21.0	9.4		0	6 k;n		e.	0.12	3.0	fair	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.25	768.3	30.25	768.3	48.2	9.0		wsw.			5					0.039	1.0		
Groningen	30.05	763.3	30.11	764.7	45.7	7.6		w.			5					0.067	1.7		
Helder	30.13	765.2	30.13	765.2	45.0	7.2		sw.			4					0.272	6.9		
Hellevoetsluis	30.21	767.2	30.21	767.2	46.2	7.9	94	wsw.			4					0.138	3.5		
Utrecht	30.16	766.0	30.21	767.2	49.3	9.6	92	wsw.			4		8			0.063	1.6	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.35	745.6	29.42	747.2	35.2	1.8	93	w.	2	1			10			0.441	11.2	snowing	
Brono	28.87	733.4	28.91	734.4	28.4	— 2.0	70	wnw.	31	14			9			0.035	0.9	snowing	
Christiania	29.26	743.2	29.41	746.9	41.4	5.2	53	ssw.	7	3			7			0.098	2.5		
Gjæsvær	28.32	719.3	28.34	719.9	32.9	0.5		wnw.			4		10					snowing	
Lodingen	28.42	721.8	28.47	723.0	30.7	— 0.7	92	wsw.			7–8		9			0.020	0.5	rain & hail	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.0	15.0	91	ssw.	9.8	4.4			5			0.134	3.4		Dr. J. A. Sampaio.
Campo Major	29.50	749.4	30.52	775.3	56.8	13.8	61	ene.	8.7	3.9			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.27	768.9	30.36	771.2	64.4	18.0	57	ese.	3.8	1.7			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.19	766.9	30.57	776.4	53.2	11.8	66	ne.	10.5	4.7			0			0	0		The Staff.
Ponta Delgada, Azores	30.32	770.1	30.39	771.9	63.7	17.6	74	s.	3.1	1.4			3			0	0		
Saint Paul de Loando	29.69	754.1	29.89	759.2	81.5	27.5	80	wsw.	1.8	0.8			2	sse.		0	0		
Serra da Estrella	25.68	652.2	30.58	776.6	39.7	4.3	79	sse.	13.0	5.8			1			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.80	731.6	30.02	762.5	— 6.3	—21.3		s.	9	4		4 cs	0			0	0	light clouds	Major K. Lasarew.
Archangel	28.65	727.7	28.67	728.2	34.7	1.5	87	ssw.	13	6			10			0.118	3.0	light rain	Capt. Sseliwerstow.
Astrakhan	30.51	774.9	30.43	772.8	28.6	— 1.9	84	wsw.	4	2		10 cp	0			0	0		Capt. Wisganow.
Barnaul	29.88	759.0	30.45	773.5	— 5.4	—20.8	72	sw.	4	2			5			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.24	742.8	29.49	749.0	40.3	4.6	86	wsw.	16	7			10 s			0.142	3.6		Observatory.
Ekaterinburg	28.70	728.9	29.73	755.1	12.4	—10.9	89	sw.	4	2			10			0.126	3.2		Meteorological Obs'y.
Kasan	29.51	749.6	29.79	756.7	29.3	— 1.5	93	wsw.	16	7			10			0	0		Observatory.
Kertch	30.45	773.4	30.47	773.9	36.5	2.5	82	wnw.	7	3			9 n			0	0		Lagorio & Sastyrez.
Kieff	29.56	750.8	30.22	767.7	36.9	2.7	57	sw.	11	5		0	0			0.028	0.7		Observatory.
Lugan	30.13	765.2	30.34	770.7	31.5	— 0.3	79	wsw.	13	6			9			0	0		Meteorological Obs'y.
Moscow	29.24	742.8	29.74	755.3	33.4	0.8	61	s.	7.8	3.5		2 c	0			0.020	0.5		Meteorological Obs'y.
Nikolaiev	30.48	774.1	30.55	775.9	36.1	2.3	77	wsw.	9	4		0	0			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.98	761.6	30.07	763.8	— 0.8	—18.2	80	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.15	765.7	30.29	769.3	34.7	1.5	43	calm	0	0			9 n			0	0		Physical Observatory.
St. Petersburg	29.25	742.9	29.26	743.3	39.0	3.9	85	wsw.	25	11			10 n			0.043	1.1	light rain	Central Physical Obs'y.
Tashkend, Laboratory	28.72	729.4	30.42	772.7	21.4	— 5.9	95	calm	0	0			2			0.012	0.3	light clouds	Teich, A. M.
Tiflis	28.97	735.7	30.45	773.3	40.3	4.6	46	nw.	31	14		0	0			0	0		Physical Observatory.
Vladivostok	30.21	767.4	30.28	769.1	19.8	— 6.8	50	n.	2	1		0	0			0	0		
Warsaw	29.74	755.5	30.18	766.6	41.4	5.2	65	sw.	20	9			10 ks						Astronomical Obs'y.
Wilna	29.53	750.1	29.97	761.1	35.1	1.7	93	sw.	7	3			10			0.039	1.0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.01	762.2	30.32	770.2	8.4	—13.1	81	w.	9	4			10			0.004	0.1	snowing	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.64	752.8	45	7.2	76	sw.			8		10			1.0	25.	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.48	774.2	30.58	776.8	54.7	12.6	69	se.	2.5	1.1			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.50	774.6	30.56	776.1	61.0	16.1	54	se.	2.5	1.1		0	0			0	0	clear	Prof. Manuel de Navera^{n}.
Burgos, Met. Obs'y	27.55	699.7	30.60	777.3	49.6	9.8	59	sw.	6.5	2.9		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.33	719.6	30.62	777.8	53.6	12.0	60	calm	2.5	1.1		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.40	772.2	30.56	776.2	58.5	14.7	73	ene.	4.5	2.0		4	4	wsw.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.59	751.5	30.50	774.7	55.6	13.1	80	calm	0	0			10			0	0	covered.	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.18	766.6	30.25	768.3	69.2	20.7	86	ese.	4.0	1.8		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.91	759.8	29.97	761.3	78.8	26.0	73	se.	13.6	6.1		0	1 s			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.40	772.2	30.50	774.8	62.8	17.1	50	ese.	3.6	1.6		0	3		e.	0	0		Capt. O. Pujnzon, R. N.
San Juan de Porto Rico, W. I	30.05	763.2	30.14	765.5	72.3	22.4	92	calm	0	0			10 kn		e.	2.638	67.0	raining	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.89	759.2	30.03	762.7	78.0	25.6	78	se.	2.7	1.2			10 ks		se.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	28.79	731.3	28.83	732.3	31.3	— 0.4	85	sw.			4		2			0	0		
Umea	28.91	734.2	28.95	735.5	38.8	3.8	48	w.			6		5			0	0		
Hernosand	29.08	738.6	29.13	739.9	40.1	4.5	36	w.			6		3			0.031	0.8		
Stockholm	29.30	744.1	29.47	748.6	42.8	6.0	47	wsw.			7		2			0	0		
Wisby	29.55	750.6	29.61	752.1	40.3	4.6	78	wsw.			6		0			0	0		
Sub-Series.																			
Upsala	29.29	744.0	29.38	746.2	44.2	6.8	41	wsw.	17.2	7.7			2	w.	w.	0	0		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.11	739.4	30.54	775.8	52.2	11.2	40	nne.			1							clear	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.55	775.9	41.2	5.1	59	ne.	15	6.5			5		ne.	0	0		The Observatory.
Valona			30.53	775.5	53.2	11.8		nw.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.35	770.9	57.7	14.3	57	nw.			1	0	0			0	0		Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.02	762.5	30.11	764.8	41.2	5.1	65	calm	0	0		0	6 ks			0.04	1.0	fair	
Alpena, Michigan	29.41	747.0	30.12	765.0	26	— 3.3	77	w.	3	1.3		0	0			0	0	clear	
Atlanta, Georgia	29.01	736.8	30.23	767.8	58.2	14.6	90	w.	5	2.2			10 s		calm	0.76	19.3	cloudy	
Atlantic City, New Jersey	30.12	765.0	30.13	765.3	43.1	6.2	83	n.	5	2.2		10 ck	0	sw.		0.66	16.8	cloudy	
Augusta, Georgia	30.04	763.0	30.24	768.1	60.4	15.8	93	calm	0	0			10s;fg			0.37	9.4	cloudy	
Baltimore, Maryland	30.13	765.3	30.18	766.6	48	8.9	56	n.	3	1.3			10s;fg			0.40	10.2	cloudy	
Barnegat, New Jersey	30.10	764.5	30.12	765.0	41.0	5.0	89	nw.	8	3.6		0	8 s		w.	0.43	10.9	fair	
Bismarck, Dakota	27.91	708.9	29.89	759.2	30	— 1.1	70	w.	10	4.5			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.52	699.0	30.48	774.2	27	— 2.8	28	ne.	4	1.8		0	5 s		calm	0	0	fair	
Boston, Massachusetts	29.88	758.9	30.04	763.0	41.5	5.3	73	w.	6	2.7			10 s			0.05	1.3	cloudy	
Brownsville, Texas	30.07	763.8	30.12	765.0	73	22.8	90	se.	4	1.8			10 s		s.	0	0	cloudy	
Buffalo, New York	29.37	746.0	30.17	766.3	33	0.6	88	sw.	13	5.8		1 cs	0			0.35	8.9	clear	
Burlington, Vermont	29.72	754.9	30.02	762.5	37.3	2.9	52	w.	11	4.9		0	0			inap.	inap.	clear	
Cairo, Illinois	29.88	758.9	30.30	769.6	44.0	6.7	86	n.	3	1.3		10 cs	0			0	0	cloudy	
Campo, California	27.52	699.0	30.16	766.1	30.4	— 0.9	52	e.	2	0.9		0	0			0	0	clear	
Camp Thomas, Arizona	27.34	694.4	30.17	766.3	34	1.1	89	se.			1	0	0			0	0	clear	
Cape Henry, Virginia	30.14	765.5	30.16	766.1	47	8.3	93	nw.	6	2.7			10 n		nw.	0.36	9.1	light rain	
Cape May, New Jersey	30.09	764.3	30.12	765.0	45	7.2	83	n.	16	7.2			10 s		sw.	0.45	11.4	cloudy	
Castroville, Texas	29.34	745.2	30.18	766.6	60	15.6	70	n.	5	2.2			10 s			0	0	cloudy	
Cedar Keys, Florida	30.24	768.1	30.26	768.6	67	19.4	90	s.	8	3.6			10 s		s.	0	0	cloudy	
Champaign, Illinois	29.36	745.7	30.23	767.8	32.4	0.2	73	sw.	4	1.8		0	0			0	0	clear	
Charleston, S. Carolina	30.14	765.5	30.20	767.1	63	17.2	93	sw.	5	2.2		0	9 s		sw.	0.15	3.8	cloudy	
Charlotte, N. Carolina	29.26	743.2	30.15	765.8	56.0	13.3	93	sw.	5	2.2			10 s		sw.	0.43	10.9	cloudy	
Chattanooga, Tennessee	29.38	746.2	30.24	768.1	58.5	14.7	89	w.	6	2.7			10 n		w.	0.84	21.3	light rain	
Cheyenne, Wyoming	23.97	608.8	30.22	767.6	24.9	— 3.9	43	w.	18	8.0		0	0			0	0	clear	
Chicago, Illinois	29.42	747.3	30.17	766.3	33.7	0.9	79	sw.	5	2.2		0	0			0	0	clear	
Chincoteague, Virginia	30.11	764.8	30.13	765.3	48.5	9.2	100	n.	4	1.8			10 ks;s		n.	0.78	19.8	cloudy	
Cincinnati, Ohio	29.58	751.3	30.27	768.8	43	6.1	68	nw.	1	0.4		0	0			0.26	6.6	clear	
Cleveland, Ohio	29.44	747.8	30.23	767.8	34.2	1.2	69	sw.	1	0.4		0	0			0.23	5.8	clear	
Coleman City, Texas	28.40	721.3	30.28	769.1	50	10.0	66	w.	3	1.3			10 s		s.	0	0	cloudy	
Columbus, Ohio	29.35	745.5	30.25	768.3	40	4.4	65	n.	2	0.9		0	0			0.33	8.4	clear	
Concho, Texas	28.26	717.8	30.28	769.1	51	10.6	74	calm	0	0			10 s			0	0	cloudy	
Davenport, Iowa	29.49	749.0	30.19	766.8	34	1.1	71	nw.	3	1.3		0	sk.		nw.	0	0	clear	
Dayton, Washington T'y	28.48	723.4	30.29	769.4	39.3	4.1	75	sw.	8	3.6			10 s		sw.	0	0	threatening.	
Deadwood, Dakota	25.24	641.1	30.16	766.1	28	— 2.2	70	sw.	12	5.4		0	0			0	0	clear	
Decatur, Texas					50	10.0	52	nw.	8	3.6			10 s			0	0	cloudy	
Delaware Breakwater, Del.	30.10	764.5	30.12	765.0	42	5.6	82	n.	16	7.2			10 s		w.	0.29	7.4	cloudy	
Denison, Texas	29.40	746.7	30.24	768.1	48.6	9.2	71	n.	2	0.9			10 s			0	0	cloudy	
Denver, Colorado	24.76	628.9	30.28	769.1	34.0	1.1	60	nw.	5	2.2		0	0			0	0	clear	
Des Moines, Iowa	29.22	742.2	30.19	766.8	30	— 1.1	67	nw.	2	0.9		0	fg.			0	0	clear	
Detroit, Michigan	29.43	747.5	30.18	766.6	38.9	3.8	73	sw.	6	2.7		0	1 s		calm	inap.	inap.	clear	
Dodge City, Kansas	27.46	697.5	30.20	767.1	19	— 7.2	87	w.	4	1.8		0	0			0	0	clear	
Dubuque, Iowa	29.39	746.5	30.15	765.8	28.2	— 2.1	77	sw.	1	0.4		0	fg.		calm	0	0	clear	
Duluth, Minnesota	29.22	742.2	29.98	761.5	16	— 8.9	67	calm	0	0			10 s		calm	0	0	cloudy	
Eagle Pass, Texas	29.39	746.5	30.23	767.8	55.3	12.9	86	ne.	6	2.7			10 n			0.30	7.6	light rain	
Eagle Rock, Idaho	25.55	649.0	30.45	773.4	10	—12.2	76	sw.	7	3.1			10 s			0.02	0.5	cloudy	
Eastport, Maine	29.82	757.4	29.89	759.2	37.5	3.1	72	sw.	9	4.0			10 s			0.43	10.9	cloudy	
El Paso, Texas	26.38	670.0	30.26	768.6	47.4	8.6	52	w.	4	1.8		10 cs	0	e.		0	0	cloudy	
Erie, Pennsylvania	29.43	747.5	30.20	767.1	34	1.1	72	sw.	5	2.2		0	0			0.40	10.2	clear	
Escanaba, Michigan	29.37	746.0	30.09	764.3	23	— 5.0	80	w.	4	1.8		0	0			0	0	clear	
Fort Apache, Arizona	25.16	639.1	30.26	768.6	22	— 5.6	64	ne.	1	0.4		0	4 s		calm	0	0	fair	
Fort Assinnaboine, Montana	26.89	683.0	29.93	760.2	32	0.0	52	sw.	32	14.3		0	1 s		sw.	0	0	clear	
Fort Bennett, Dakota	28.30	718.8	30.04	763.0	25	— 3.9	64	w.	3	1.3		0	0			0	0	clear	
Fort Benton, Montana	26.99	685.5	29.99	761.7	38	3.3	56	sw.	28	12.5		0	0			0	0	clear	
Fort Buford, Dakota	27.74	704.6	29.92	760.0	30	— 1.1	60	w.	10	4.5		0	0			0	0	clear	
Fort Custer, Montana	26.72	678.7	30.08	764.0	31	— 0.6	62	se.	13	5.8		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.25	641.3	30.21	767.3	44	6.7	93	se.	4	1.8			10 n		calm	0.01	0.3	light rain	
Fort Elliott, Texas	27.34	694.4	30.24	768.1	29	— 1.7	49	nw.	4	1.8		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.63	752.6	30.23	767.8	38.5	3.6	82	calm	0	0		0	4 s			0	0	fair	
Fort Grant, Arizona	25.30	642.6	30.16	766.1	40	4.4	86	nw.	1	0.4		0	2 s			0	0	clear	
Fort Griffin, Texas	28.91	734.3	30.28	769.1	47	8.3	77	n.	1	0.4		10 cs	0	calm		0	0	cloudy	
Fort Keogh, Montana	27.34	694.4	30.02	762.5	29	— 1.7	56	sw.	9	4.0		0	0			0	0	clear	
Fort Macon, North Carolina	30.18	766.6	30.19	766.8	58	14.4	100	w.	15	6.7			10 n		calm	0.74	18.8	light rain	
Fort McKavett, Texas	28.00	711.2	30.38	771.6	51.7	10.9	86	calm	0	0			10 s			0	0	cloudy	
Fort Missoula, Montana	26.80	680.7	30.23	767.8	29	— 1.7	80	n.	2	0.9			10 ks			0	0	cloudy	
Fort St. Michaels, Alaska	30.31	769.9	30.35	770.9	—28	—33.3	100	ne.	1	0.4		0	0			0	0	clear	
Fort Shaw, Montana	26.18	665.0	30.02	762.5	33	0.6	54	sw.	44	19.7		10 cs	0			0	0	cloudy	
Fort Sill, Indian Territory	28.95	735.3	30.26	768.6	40.5	4.7	81	calm	0	0		3 c	0			0	0	clear	
Fort Stevenson, Dakota	27.82	706.6	29.84	757.9	27	— 2.8	76	nw.	14	6.3			10 s			0	0	cloudy	
Fort Verde, Arizona					24	— 4.4	64	n.			2	0	0			0	0	clear	
Fredericksburg, Texas	28.43	722.1	30.23	767.8	55	12.8	69	calm	0	0			10 ks			0.01	0.3	cloudy	
Galveston, Texas	30.12	765.0	30.16	766.1	66	18.9	100	s.	3	1.3			10 k			0	0	cloudy	
Grand Haven, Michigan	29.44	747.8	30.15	765.8	32.0	0.0	88	s.	4	1.8		0	0			0	0	clear	
Hatteras, North Carolina	30.11	764.8	30.13	765.3	60	15.6	93	sw.	32	14.3			10 n			0.25	6.3	light rain	
Helena, Montana	25.79	655.1	30.19	766.8	34	1.1	65	w.	12	5.4			10 s		sw.	0	0	cloudy	
Henrietta, Texas	29.25	742.9	30.30	769.6	44	6.7	93	calm	0	0			10 s			0	0	cloudy	
Huron, Dakota	28.54	724.9	30.06	763.5	23.2	— 4.9	67	s.	8	3.6		0	0			0	0	clear	
Indianapolis, Indiana	29.39	746.5	30.24	768.1	34	1.1	79	sw.	3	1.3		0	fg.		calm	0.01	0.3	clear	
Indianola, Texas	30.02	762.5	30.15	765.8	68.4	20.2	100	s.	6	2.7			10 s			inap.	inap.	cloudy	
Jacksboro, Texas	29.04	737.6	30.28	769.1	46	7.8	83	calm	0	0			10 s			0	0	cloudy	
Jacksonville, Florida	30.22	767.6	30.27	768.8	66	18.9	90	s.	6	2.7			10 s		s.	0	0	cloudy	
Keokuk, Iowa	29.51	749.5	30.21	767.3	34.5	1.4	74	nw.	1	0.4		0	0			0	0	clear	
Key West, Florida	30.24	768.1	30.27	768.8	73.0	22.8	82	se.	8	3.6		0	3 k		se.	0	0	clear	
Kittyhawk, North Carolina	30.10	764.5	30.12	765.0	57	13.9	96	w.	6	2.7			10 n			0.71	18.0	light rain	
Knoxville, Tennessee	29.17	740.9	30.25	768.3	51.3	10.7	93	n.	2	0.9			10 s		nw.	1.41	35.8	cloudy	
La Crosse, Wisconsin	29.26	743.2	30.10	764.5	28	— 2.2	77	s.	5	2.2		0	0			0	0	clear	
La Mesilla, New Mexico	26.23	666.2	30.24	768.1	41.3	5.2	48	ne.	4	1.8			10 s			0	0	cloudy	
Leavenworth, Kansas	29.29	744.0	30.24	768.1	33	0.6	60	n.	1	0.4		0	0			0	0	clear	
Lewiston, Idaho	29.41	747.0	30.28	769.1	35	1.7	66	e.	2	0.9			10 s		calm	0	0	cloudy	
Little Rock, Arkansas	29.89	759.2	30.22	767.6	49	9.4	86	ne.	6	2.7		3 ck	3 s			0	0	fair	
Los Angeles, California	29.83	757.7	30.23	767.8	42.1	5.6	82	n.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	29.63	752.6	30.22	767.6	42.0	5.6	73	n.	4	1.8		6 cs	0	calm		0.10	2.5	fair	
Lynchburg, Virginia	29.44	747.8	30.16	766.1	56.0	13.3	74	ne.	2	0.9			10 s		nw.	0.51	13.0	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.06	738.1	30.15	765.8	29	— 1.7	77	sw.	5	2.2		0	0			0	0	clear	
Marquette, Michigan	29.29	744.0	30.07	763.8	23	— 5.0	73	w.	1	0.4		0	0			0	0	clear	
Mason, Texas	28.54	724.9	30.27	768.8	52	11.1	72	w.	4	1.8		0	4 s		w.	0	0	fair	
Memphis, Tennessee	29.90	759.4	30.24	768.1	49	9.4	86	n.	2	0.9		10 cs	0	w.		0.32	8.1	cloudy	
Milwaukee, Wisconsin	29.35	745.5	30.15	765.8	33	0.6	78	s.	5	2.2		0	fg.			0	0	clear	
Mobile, Alabama	30.18	766.6	30.22	767.6	62	16.7	87	sw.	3	1.3		1 cs	1 ks	w.		0.01	0.3	clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Montgomery, Alabama	29.97	761.2	30.21	767.3	61.7	16.5	90	calm	0	0	.....	hz.	6 s	.....	w.	0.02	0.5	fair	
Moorhead, Minnesota	28.77	730.7	29.87	758.7	24	— 4.4	88	sw.	12	5.4	.....	0	5 s	.....	w.	0	0	fair	
Morgantown, W. Virginia	29.21	741.9	30.28	769.1	39.5	4.2	78	calm	0	0	.....	0	0	.....	.....	0.91	23.1	clear	
Mt. Washington, N. H	23.42	594.9	30.04	763.0	7.2	—13.8	92	nw.	64	28.6	.....	0	1 s	.....	nw.	0.32	8.1	clear	
Nashville, Tennessee	29.67	753.6	30.23	767.8	48.2	9.0	89	nw.	1	0.4	.....	4 ck	0	w.	.....	0.94	23.9	fair	
New Haven, Connecticut	29.97	761.2	30.09	764.3	41	5.0	57	n.	2	0.9	.....	.....	10 s	.....	sw.	0.38	9.7	cloudy	
New London, Connecticut	30.08	764.0	30.13	765.3	42	5.6	65	w.	7	3.1	.....	.....	10 s	.....	w.	0.70	17.8	cloudy	
New Orleans, Louisiana	30.16	766.1	30.22	767.6	62.5	16.9	86	se.	5	2.2	.....	.....	10 n	.....	se.	0.09	2.3	light rain	
Newport, Rhode Island	30.01	762.2	30.06	763.5	41.0	5.0	73	nw.	4	1.8	.....	.....	10 ks	.....	w.	0.57	14.5	cloudy	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.04	763.0	30.08	764.0	40.2	4.6	82	calm	0	0	.....	7 cs	0	w.	.....	1.40	35.6	fair	
New York, New York	29.94	760.5	30.13	765.3	42	5.6	65	w.	8	3.6	.....	.....	10 s	.....	w.	0.15	3.8	cloudy	
Norfolk, Virginia	30.11	764.8	30.14	765.5	51	10.6	93	ne.	5	2.2	.....	.....	10 n	.....	.....	0.48	12.2	light rain	
North Platte, Nebraska	27.17	690.1	30.27	768.8	21.6	— 5.8	78	w.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Olympia, Washington T'y	30.27	768.8	30.31	769.9	39.0	3.9	94	s.	13	5.8	.....	.....	10 n	.....	calm	0.11	2.8	light rain	
Omaha, Nebraska	28.93	734.8	30.20	767.1	34.8	1.6	56	s.	5	2.2	.....	0	0	.....	.....	0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	30.08	764.0	30.10	764.5	—28.2	—33.4	78	wsw.	18	8.0	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	29.74	755.4	30.09	764.3	35.5	1.9	65	sw.	7	3.1	.....	0	0	.....	.....	0.32	8.1	clear	
Palestine, Texas	29.64	752.8	30.22	767.6	58	14.4	80	calm	0	0	.....	.....	10 s	.....	.....	0.06	1.5	cloudy	
Pensacola, Florida	30.20	767.1	30.23	767.8	60.3	15.7	96	calm	0	0	.....	2 cs	fg	.....	.....	0.27	6.9	fair	
Philadelphia, Pa	30.06	763.5	30.17	766.3	46.5	8.1	62	nw.	6	2.7	.....	.....	10 ks	.....	w.	0.22	5.6	cloudy	
Pike's Peak, Colorado	17.54	445.5	30.26	768.6	— 2	—18.9	79	ne.	14	6.3	.....	0	0	.....	.....	0	0	clear	
Pioche, Nevada	24.27	616.4	30.43	772.9	18	— 7.8	73	nw.	9	4.0	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.39	746.5	30.25	768.3	37.6	3.1	78	nw.	3	1.3	.....	0	fg	.....	.....	0.33	8.4	clear	
Port Eads, Louisiana	30.24	768.1	30.25	768.3	55.4	13.0	100	calm	0	0	.....	.....	fg	.....	.....	0.01	0.3	dense fog	
Port Huron, Michigan	29.43	747.5	30.16	766.1	27.8	— 2.3	86	sw.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Portland, Maine	29.92	760.0	29.97	761.2	40.5	4.7	65	sw.	6	2.7	.....	.....	10 s	.....	sw.	0.05	1.3	cloudy	
Portland, Oregon	30.33	770.4	30.40	772.1	43.2	6.2	93	s.	12	5.4	.....	.....	10 s	.....	sw.	0.14	3.6	cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	58	14.4	86	w.	21	9.4	.....	.....	10 n	.....	w.	0.08	2.0	light rain	
Prescott, Arizona	24.89	632.2	30.25	768.3	15	— 9.4	70	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Punta Rassa, Florida	30.26	768.6	30.27	768.8	66	18.9	93	e.	4	1.8	.....	0	hz	.....	calm	0	0	clear	
Red Bluff, California	30.04	763.0	30.42	772.7	42.0	5.6	74	n.	13	5.8	.....	0	1 s	.....	.....	0	0	clear	
Rio Grande City, Texas	30.00	762.0	30.25	768.3	70	21.1	90	se.	1	0.4	.....	5 c	0	calm	.....	0	0	fair	
Rochester, New York	29.42	747.3	30.13	765.3	33	0.6	68	w.	10	4.5	.....	1 cs	0	.....	.....	0.10	2.5	clear	
Roseburg, Oregon	29.96	761.0	30.53	775.4	38.2	3.4	91	calm	0	0	.....	.....	10 s	.....	.....	inap.	inap.	cloudy	
Sacramento, California	30.27	768.8	30.35	770.9	40.2	4.6	82	n.	4	1.8	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.63	752.6	30.27	768.8	35.0	1.7	79	sw.	7	3.1	.....	3 c	0	.....	.....	0	0	clear	
St. Paul, Minnesota	29.11	739.4	30.05	763.3	23.0	— 5.0	88	se.	3	1.3	.....	0	0	.....	.....	0	0	clear	
St. Vincent, Minnesota	28.70	729.0	29.67	753.6	15	— 9.4	100	s.	19	8.5	.....	.....	10 s	.....	calm	0	0	cloudy	
Salt Lake City, Utah	25.97	659.6	30.53	775.4	19	— 7.2	44	calm	0	0	.....	0	0	.....	.....	inap.	inap.	clear	
San Antonio, Texas	29.45	748.0	30.17	766.3	57.6	14.2	69	ne.	7	3.1	.....	0	9 ks	.....	n.	0	0	cloudy	
San Diego, California	30.07	763.8	30.14	765.5	42.4	5.8	64	ne.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Sandusky, Ohio	29.49	749.0	30.21	767.3	37	2.8	72	s.	10	4.5	.....	0	0	.....	.....	0.11	2.8	clear	
Sandy Hook, New Jersey	30.09	764.3	30.13	765.3	41.5	5.3	82	w.	8	3.6	.....	.....	10 ks	.....	sw.	0.18	4.6	cloudy	
San Francisco, California	30.28	769.1	30.35	770.9	43	6.1	93	w.	3	1.3	.....	0	fg	.....	.....	0	0	clear	
Santa Fé, New Mexico	23.33	592.6	30.37	771.4	18.2	— 7.7	70	n.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Savannah, Georgia	30.12	765.0	30.21	767.3	65	18.3	87	sw.	4	1.8	.....	.....	10 n	.....	.....	0.10	2.5	light rain	
Shreveport, Louisiana	29.95	760.7	30.20	767.1	60	15.6	100	calm	0	0	.....	.....	10 s	.....	.....	0.10	2.5	cloudy	
Silver City, New Mexico	24.33	618.0	30.18	766.6	32	0.0	74	nw.	1	0.4	.....	0	3 s	.....	calm	0	0	clear	
Sitka, Alaska	29.31	744.5	29.38	746.2	27.5	— 2.5	68	ne	6	2.7	.....	.....	10 s	.....	.....	0.35	8.9	threatening	
Smithville, North Carolina	30.14	765.5	30.18	766.6	59	15.0	93	w.	14	6.3	.....	.....	10 s	.....	w.	0.22	5.6	cloudy	
Spokane Falls, Wash. Ter.	28.10	713.7	30.23	767.8	34	1.1	81	sw.	12	5.4	.....	.....	10 s	.....	sw.	0.02	0.5	cloudy	
Springfield, Illinois	29.51	749.5	30.24	768.1	37	2.8	61	sw.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Springfield, Massachusetts	29.94	760.5	30.08	764.0	43.2	6.2	83	w.	1	0.4	.....	4 k	5 s	sw.	sw.	0.13	3.3	cloudy	
Springfield, Mo	28.76	730.5	30.33	770.4	39	3.9	73	se.	7	3.1	.....	.....	10 s	.....	e.	0	0	cloudy	
Stockton, Texas	27.15	689.6	30.28	769.1	47.0	8.3	100	s.	8	3.6	.....	.....	10 n	.....	s.	0.18	4.6	light rain	
Thatcher's Island, Mass	29.98	761.5	30.04	763.0	40.0	4.4	65	w.	5	2.2	.....	.....	10 s	.....	w.	0.05	1.3	cloudy	
Toledo, Ohio	29.46	748.3	30.20	767.1	36	2.2	69	s.	5	2.2	.....	0	0	.....	.....	0.01	0.3	clear	
Tucson, Arizona	27.66	702.6	30.14	765.5	38	3.3	82	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Umatilla, Oregon	29.92	760.0	30.30	769.6	42.0	8.9	56	sw.	32	14.3	.....	.....	10 s	.....	.....	0	0	cloudy	
Uvalde, Texas	29.17	740.9	30.17	766.3	59	15.0	65	n.	8	3.6	.....	.....	10 n	.....	n.	0.02	0.5	light rain	
Vicksburg, Mississippi	29.95	760.7	30.22	767.6	59	15.0	100	calm	0	0	.....	.....	fg	.....	calm	0.43	10.9	dense fog	
Visalia, California	29.94	760.5	30.32	770.1	34.7	1.5	92	nw.	1	0.4	.....	0	0	.....	.....	0	0	clear	
Washington, D. C	30.06	763.5	30.18	766.6	46.5	8.1	55	n.	3	1.3	.....	.....	10 s	.....	nw.	0.52	13.2	cloudy	
West Los Animas, Colorado	26.12	663.4	30.25	768.3	13	—10.6	83	w.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Wickenburg, Arizona	.....	.....	.....	.....	29	— 1.7	76	nw.	.....	.....	1	0	0	.....	.....	0	0	clear	
Williamsport, Pa	29.54	750.3	30.17	766.3	35	1.7	89	w.	1	0.4	.....	hz	7 k	.....	w.	0.50	12.7	fair	
Wilmington, N. Carolina	30.10	764.5	30.16	766.1	63	17.2	93	w.	11	4.9	.....	.....	10 s	.....	sw.	0.04	1.0	cloudy	
Winnemucca, Nevada	25.98	659.9	30.50	774.7	14	—10.0	66	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Yankton, Dakota	28.71	729.2	30.13	765.3	27	— 2.8	77	w.	11	4.9	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	30.01	762.2	30.16	766.1	46.8	8.2	40	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.04	559.8	.....	.....	50.5	10.3	84	calm	0	0	.....	2 k	1 s	.....	.....	0.44	11.2	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.05	763.3	30.06	763.5	77	25.0	82	e.	.....	.....	.....	5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C	30.06	763.5	30.08	764.0	77	25.0	86	calm	0	0	.....	.....	10 ks	.....	calm	0.15	3.8	cloudy	J. I. Plume.
Guadeloupe, W. I	29.98	761.5	30.00	762.0	75	23.9	90	e.	.....	.....	.....	5 ck	2 ks	.....	.....	0.079	2.0	.....	B. Bigar.
Havana, Cuba, W. I	30.23	767.8	30.28	769.1	72	22.2	90	e.	1.2	0.5	.....	0	1 ks	.....	calm	0	0	clear	A. Van Caneghem.
Kingston, Jamaica, W. I	30.13	765.3	30.14	765.5	70.3	21.3	96	calm	0	0	.....	0	4 s	.....	.....	0.01	0.3	fair	Robert Johnstone
Navassa, W. I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Everett.
Paramaribo, S. A	30.05	763.3	30.05	763.3	76	24.4	91	e.	.....	.....	2	5 ck	5 k	e.	.....	0	0	.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.55	750.6	30.01	762.2	79	26.1	89	calm	.....	.....	0	0	2 s	.....	calm	0.60	15.2	clear	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	100	ne.	.....	.....	2	0	4 ks	.....	ne.	0.02	0.5	fair	Earl Flint.
Santiago de Cuba, W. I	30.16	766.1	30.19	766.8	73	22.8	71	n.	4.8	2.1	.....	0	0	.....	.....	0	0	clear	Robert Mason.
St. Thomas, W. I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A	29.53	750.0	29.58	751.3	—15.0	—26.1	72	e.	8	3.6	.....	4 k	5 s	e.	e.	0	0	cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Vigo, Gallicia, Spain	30.54	775.7	55	12.8	87	ese.			1		4	ssw.				2	ssw	d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 22° 12′, E. 113° 35′	30.06	763.5	63	17.2		ese.			4		10					2	e.	overcast	Capt. A. J. Errington.
H. M. S Alert, N. 6° 32′, E. 82° 40′	29.85	758.2	81	27.2	87	e.			1-2		5							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.50	774.7	60	15.6	66	ne.			2		6	ne.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 11° 19′, E. 61° 00′	29.94	760.5	79	26.1	73	n.			4		9	n.				2	n.	d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.84	757.9	83	28.3	66	calm			0		0							blue sky	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S 39° 11′, E. 21° 15′	30.05	763.3	70	21.1	75	ne.			5		4	n.				3	ene.	d. clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 13° 09′, W. 61° 14′	30.06	763.5	77	25.0		ene.			2-4		6	ne.				2	e.	showery	Capt. C Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.45	773.4	64	17.8	73	ese.			1-2		6	ese.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 42° 05′, W. 58° 42′	29.96	761.0	61.2	16.2	92	nnw.			1-2		7					1-2	n.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 6° 56′, E. 40° 15′	29.90	759.4	84	28.9		calm			0		5					1	ene.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt C. A. G. Bridge.
H. M. S. Fawn, Aden, Arabia	29.90	759.4	82	27.8	69	e.			2		2							d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.14	765.5	44	6.7	75	nnw.			1		6							misty	Capt. R. F. Roskyn.
H. M S. Gannet, S. 12° 57′, W. 78° 36′	30.00	762.0	75	23.9	81	se.			3-4		10					1 2	se. s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.56	750.8	54	12.2	61	wsw.			6		3							squally	Capt. L. F. Jones.
H. M. S. Inconstant, N. 15° 30′, E. 110° 00′	29.94	760.5	76	24.4	86	e.			1-2		3	ese.				1	e.	d. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′, E. 113° 24′	29.98	761.5	63	17.2	100	calm			0		10							d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	30.09	764.3	63	17.2		ne.			1		8								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	30.36	771.1	58	14.4	76	s.			2-3		1	s.						blue sky	Capt. J. E. Erskine.
H. M. S. Northampton, N. 9° 52′, W. 78° 58′	29.97	761.2				nne.			3		7	nne.				3	nne.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 9° 21′, E. 47° 40′	29.83	757.7	84.5	29.2	84	ssw.			1		10					1	sw.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 34° 30′, W. 33° 01′	30.13	765.3	64.5	18.1	97	se.			5		10					4	se.	misty	Capt. F. R. Dicken.
H M. S. Phœnix, N. 12° 10′, W. 83° 22′	30.05	763.3	78	25.6	90	ne.			3		3	ne.				3	ne.	d. clouds	Capt. H. H. Grenfell.
H. M. S. Rambler, Cape Coast Castle, Guinea	29.89	759.2	80	26.7	100	ese.			1		0							hazy	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.15	765.8	54	12.2		nw.			3-5		0							blue sky	Capt. W. H. Edwards.
H. M S. Rocket, Esquimalt, Vancouver Id	30.16	766.1	43	6.1	91	wsw.			2		3							raining	Lieut. V. B. Orlebar.
H. M. S. Sea Gull																			Capt. E. T. Church.
H. M. S. Thalia, N. 46° 02′, W. 9° 09′	30.40	772.1	56.5	13.6		sw.			4		10					4	wsw.	misty	
H. M. S Triumph, S. 13° 00′, E. 78° 07′	29.99	761.7	74	23.3	85	se.			3		9	se.				2	s.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 20° 32′ E. 114° 13′	29.98	761.5	72	22.2	95	ene.			2		3	ne.				3	ne.	d. clouds	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.12	765.0	76	24.4		n.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Muscat, Arabia	29.99	761.7	69.5	20.8	48	nw.			6		4	n.				6-7		squally	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Brava, Cape Verd Ids	30.00	761.9	72.5	22.5	78	ne.			2		7		sw.			2	ne.	d. clouds	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 10° 14′, W. 79° 34′	29.98	761.6	77.7	25.4	83	ne.			5		6							misty	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla.	30.20	767.1	64	17.8	94	ene.	2	0.9			2		sw.	0.38	9.7			misty	
N. Yard, Portsmouth, N. H.	30.01	762.2	38	3.3		w.	4	1.8			8		w.	0.20	5.1			fair	
Naval Hospital, Yokohama, Japan	29.91	759.7	39	3.9	50	calm			0		0			0	0			clear	
Adams, Callao, Peru	29.75	755.6	68	20.0	95	sse.			2		5			0	0	gr'd		fair	
Alaska, Valparaiso, Chili	29.94	760.5	66	18.9	54	calm			0		0			0	0	sm'h		clear	
Alert, Singapore, India*	29.76	755.9	81	27.2	83	nne.			3		2		calm			sm'h		hazy	
Alliance, Norfolk, Va.	30.07	763.8	58	14.4	76	ne.			2		10			rain	rain			raining	
Ashuelot, Tientsin, China	30.30	769.6	34	1.1	69	e.			1		10		calm					overcast	
Brooklyn, S. 51° 54′, W. 68° 05′	29.59	751.6	50	10.0	93	wsw.	40	17.9			0			0	0	mod.	wsw.	clear	
Colorado, New York, N. Y.	30.10	764.5	44	6.7	68	wnw.	2	0.9			10			0.17	4.3			overcast	
Enterprise, Norfolk, Va*	30.13	765.3	54	12.2	67	nne.			2		10		calm					raining	
Essex, Santa Cruz, Marocco, Africa	30.26	768.6	65	18.3	68	ene.			4		8		e.			short	e.	cloudy	
Franklin, Norfolk, Va.	30.12	765.0	51	10.6	93	nne.	6	2.7			10			0.23	5.8			raining	
Galena, Villafranca, France	30.57	776.5	59	15.0	65	calm			0		0					sm'h		clear	
Independence, N. Yard, Mare I'd, Cal	30.21	767.3	43	6.1	75	calm	0	0			0			0.26	6.6			clear	
Kearsarge, New Orleans, La.	30.20	767.1	62	16.7	88	calm			0		10		sw.					cloudy	
Lackawanna, Valparaiso, Chili*	29.92	760.0	64	17.8	89	calm			0		2							clear	
Lancaster, Alexandria, Egypt	30.33	770.4	66	18.9	94	wsw.			2		0					sm'h		clear	
Marion, S. 30° 44′, E. 33° 31′	29.93	760.2	82	27.8	67	ese.			1		2		calm	0	0	sm'h		fair	
Michigan, Erie, Pa.	30.12	765.0	34	1.1	90	wsw.			5		0							clear	
Minnesota, Newport, R. I.	30.06	763.5	42	5.6	91	nnw.			1		10							overcast	
Monocacy, Yokohama, Japan	30.11	764.8	41	5.0	82	nnw.			2		0							clear	
Nipsic, Gibraltar, Mediterranean.	30.30	769.6	60	15.6	70	ese.			4		8		e.			sm'h		fair	
Onward, Callao, Peru†	30.07	763.8	66	18.9	100	sse.			3		8		nnw.			long	w.	cloudy	
Palos, Hong Kong, China	30.04	763.0	58	14.4	?	e.			4		10		e.					raining	
Passaic, Washington, D. C.	30.16	766.1	46	7.8	100	nw.			1		2?		calm					cloudy ?	
Pensacola, S. 34° 22′, W. 72° 42′	30.05	763.3	64	17.8	73	s.			3		2		e.	0	0	mod.	s.	fair	
Powhatan, N. 18° 55′, W. 65° 59′	30.26	768.6	72	22.2	90	ene.			4		10		e.			r'gh	e.	cloudy	
Quinnebaug, N. 34° 01′, E. 23° 02′	30.42	772.7	50	10.0	72	nne.			4		5		ne.			long	ne.	fair	
Ranger, N. 19° 34′, W. 105° 07′*	29.97	761.2	64	17.8	83	e.			0-1		0			0	0	sm'h		clear	
Richmond, N. 21° 18′, E. 157° 30′*	29.94	760.5	73	22.8	85	n.			3		10			0	0	light	ne.	cloudy	
Shenandoah, S. 25° 39′, W. 36° 30′*	30.02	762.5	77	25.0	86	ene.			4		10		e.			r'gh	e.	cloudy	
St. Louis, League Island, Pa.	30.37	771.4	38	3.3	90	wnw.	2	0.9			8		wnw.	0.15	3.8			cloudy	
Swatara, Yokohama, Japan*	29.93	760.2	45	7.2	53	n.			2		0					sm'h		clear	
Tennessee, Fort Monroe, Va.	30.15	765.8	51	10.6	100	nne.	12	5.4			10							rain & fog	
Vandalia, Aspinwall, Panama*†	30.08	764.0	78	25.6	82	nne.			3		8		n; e.					fair	
Wabash, Boston, Mass.	30.02	762.5	41	5.0	57	w.	3	1.3			10		w.	0	0			hazy	
Wachusetts, Esquimalt, B. C.	30.18	766.6	47	8.3	92	sse.			3		10		se.			sm'h		squally	
Wyoming, Port Royal, S. C.	30.21	767.3	63	17.2	89	ssw.	7	3.1			10		sw.	0.20	5.1			rainy	
Yantic, Aspinwall, Panama*	29.98	761.5	77	25.0	91	nne.			3		5		ne.					fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, Boston, Mass*	29.84	757.9	41	5.0		s.	2		9		sw.	5 h'r	5 h'r			cloudy	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen. Glasgow, Scotland*	29.92	760.0	39	3.9		wnw.	5		8		wnw.					showery	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 52° 01′, W. 27° 32′*	30.18	766.6	42	5.6		w.	6		5?		w.	1 h'r	hail	high	w.	clear.?	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth,																	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 51° 00′, W. 20° 00′	30.01	762.2	48	8.9	92	sw.	7		2?		w.			r'gh	w.	overcast?	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, Eng†	30.09	764.3	50	10.0	78	w.	4		5?		w.	0	0			clear?	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, N. 41° 05′ W. 57° 48′*†	30.24	768.1	47	8.3	92	s.	5		10		se.			chop	ssw.	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,																	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young,																	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 31° 03′, W. 74° 05′*	30.35	770.9	69	20.6		s.	6		4		sse.	½ h'r	½ h'r	mod.	sse.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Savanilla, U. S. C.*†	29.83	757.7	72	22.2													W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Maracaibo, Venezula, S. A.						ne.	2									fine	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 18° —′, W. 77° —′	29.63	752.6				e.	4		0			0	0	sm'h		clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
R. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S.†	29.93	760.2	53	11.7		nnw.						0	0				S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 52° 52′, W. 46° 25′	29.66	753.4	46	7.8		nnw.	4		10							misty	
Baroda, Capt. C. J. Russell, S. 5° 52′, W. 30° 46′	29.96	761.0	80.8	27.1	82	se.	4		3							d. clouds	
Caldew, Capt. W. Peterson, S. 47° 47′, W. 42° 44′	29.98	761.5	54.5	12.5		n.	6		10							overcast	
S. S. Cipero, Capt. W. N. Lailey, Georgetown, British Guiana	30.03	762.7	79.8	26.6	74	ne.	2		9							showery	
S. City of Agra, Capt. Thos. Young, N. 48° 22′, W. 14° 30′	30.22	767.6	53.5	11.9		wsw.	4		10							overcast	
Coppename. Capt. James Buchan																	
Bk. Glaramara, Capt. R. Morton,																	
Glencairn, Capt. R. S. Tannock, S. 4° 00′, E. 90° 14′	29.84	757.9	84	28.9	87	se.	3		7							showery	
S. S. Gordon Castle, Capt. W. Waring,																	
Bg. Hermine, Capt. S. G. Jones, S. 48° 53′, W. 47° 03′	29.77	756.1	50.4	10.2	98	n.	5		10							drizzling	
Hope, Capt. James Campbell																	
S. S. Humboldt, Capt. A. W. Jeffery, N. 1° 00′, W. 43° 49′	29.98	761.5	79.2	26.2	90	n.	5		3							squally	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 24° 28′, E. 5° 15′	30.06	763.5	76.8	24.9	69	se.	2		3							d. clouds	
May Hulse, Capt. H. Youlden, S. 57° 25′, W. 75° 30′	29.23	742.4	45.5	7.5	76	wsw.	6		5							showery	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	29.94	760.5	79.1	26.2	90	nnw.	2		5							d. clouds	
Naiad, Capt. John Smith, N. 31° 59′, W. 43° 27′	30.43	772.9	56.7	13.7	87	nne.	6		7							showery	
Pole Star, Capt. F. Norman,																	
Queen of Cambria, Capt. M. Parry, S. 14° 03′, E. 78° 48′	29.84	757.9	82.8	28.2	74	e.	6		9							overcast	
S. S. Strathleven, Capt. C. W. Pearson,																	
S. Superb, Capt. Berridge																	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 43° 50′. W. 54° 50′*†	30.20	767.1				sw.	6		9		ssw.	snow	sq'lls	mod.	sw.	cloudy	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman,																	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 31° 50′. W. 80° —′*†	30.30	769.6	70	21.1		s.			5?		s.			mod.	e.	cloudy?	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,																	E. F. Stembridge, 3d off.
S. S. Gallia, Capt. W. H. P. Hains, N. 41° 19′, W. 65° 11′†	29.96	761.0	48	8.9	92	wsw. to wnw.	5		10			6 h'r	6 h'r	mod.	sw.	heavy rain	J. H. Mills, 3d officer.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, N. 41° 18′, W. 66° 22′	30.15	765.8	50.0	10.0	.....	wsw.	4	.....	10	.....	wnw.	3 h'r	3 h'r	h'vy	wsw.	covered	.....
S. S. France, Capt. Périer d'Hauterive,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. St. Laurent, Capt. A. Sérvan, N. 48° —′, W. 31° 40′*†	30.39	772.0	41.0	5.0	.....	w.	2	.....	.....	.....	.....	light	light	sm'h	.....	.....	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Silesia, Capt. A. Albers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Wieland, Capt. C. Hebich, N. 47° 11′, W. 44° 35′*	30.20	767.1	37	2.8	.....	ssw.	4	.....	10	.....	sw.	0	0	3	ne.	.....	Jorgensen, Wolkowots
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Inch.
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, N. 33° —′, W. 50° —′*†	30.16	766.1	76	24.4	.....	se.	1	.....	2	.....	e.	0	0	sm'h	.....	clear	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, Nem York.*																	
S. S. Colorado, Capt. M. B. Crowell, New York, N. Y*†	30.30	769.6	41	5.0	.....	w.	2	.....	8	.....	w.	light	light	.....	.....	cloudy	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. C. Miller, 2d offi.
S. S. Santiago, Capt. S. F. Phillips, N. 20° 25′, W. 79° 15′†	30.24	768.1	75	23.9	.....	ene.	3	.....	2	.....	ene.	0	0	mod.	se.	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom N. 15° 20′, W. 76° 30′† [man	30.09	764.3	78	25.6	.....	ne.	4	.....	.....	.....	.....	.....	.....	.....	ne.	fine	.....
S. S. City of Alexandria, Capt. L. F. Timmer-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. City of Washington, Capt. J. W. Rey-	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Elbe, Capt. W. Willigerod [nolds N. 44° 44′, W. 44° 58′*	30.31	769.9	44.6	7.0	.....	ssw.	3	.....	.....	.....	.....	.....	.....	mod.	.....	hazy	.....
S. S. Lessing, Capt. B. Voss, N. 42° 20′ W. 60° 32′*†	30.04	763.0	50	10.0	.....	sse	5	.....	.....	.....	.....	.....	.....	4	wsw.	hazy	.....
S. S. Maas, Capt. T. H. Bonjer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. New York, Capt. R. B. Quick,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Olbers, Capt. J. Clarke, N. 49° 41′, W. 21° 00′*†	30.20	767.1	53	11.7	.....	nw. to sw.	6–7	.....	.....	.....	.....	.....	.....	high cross	nw to sw.	showery	.....
S. S. P. Caland, Capt. E Deddes, N. 47° 53′, W. 41° 53′	30.32	770.1	44.6	7.0	.....	wsw.	5	.....	.....	.....	.....	.....	.....	4	w.	.....	.....
S. S. Schiedam, Capt. E. M. Chevalier, N. 42° 00′, W. 63′ 21′	29.91	759.7	46	7.8	.....	sw.; w	5	.....	.....	.....	.....	.....	.....	.....	w.	raining	.....
S. S. Scythia, Capt. M Murphy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Christoffers.
S. S. Hermann, Capt. H. Baur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Lose, 3d offi.
S. S. Leipzig, Capt. F. Pfeiffer,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sander & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	30.00	762.0	44.6	7.0	.....	sw.	6–7	.....	8	.....	sw.	0	0	.....	.....	cloudy	.....
S. S. Mosel, Capt. F. Hesse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Hesse.
S. S. Neckar, Capt. R. Bussius	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, S. 31° 31′, W. 48° 35′*	29.98	761.5	78.8	26.0	86	ne.	1	.....	1	.....	ne.	0	0	1	ne.	clear	.....
S. S. Oder, Capt. Undeutsch, N. 49° 43′, W. 5° 45′*	30.30	769.6	59.0	15.0	.....	sw.	3	.....	9	.....	sw.	0	0	sm'h	sw.	hazy	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, N. 32° 37′, W. 49° 54′	30.64	778.2	.....	.....	.....	nne.	4	.....	3	.....	nne.	½ hr	½ hr	long	ne.	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 35′, E. 152° 40′†	29.86	758.4	55	12.8	80	nw.	5	.....	5	.....	wnw.	0	0	high	wnw.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, San Francisco, Cal	.....	.....	46	7.8	76	ne.	2	.....	5?	.....	se.	.....	.....	.....	.....	cloudy?	.....
S. S. Oceanic, Capt. J. Metcalfe, N. 35° 37′, E. 141° 17′..*	30.03	762.7	49	9.4	50	nnw.	6	.....	2	.....	nw.	.....	.....	3	nw.	fine	.....
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Tybee Roads, Ga*†	29.96	761.0	.....	.....	.....	sw.	1	.....	10	.....	.....	.....	.....	.....	.....	rain & fog	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, N. 35° 40′, W. 77° 40′†	30.22	767.6	66	18.9	90	wsw.	3	.....	8	.....	nw.	6 h'r	6 h'r	long r'gh	se;s	rainy	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.	Character.	Direction.		
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO.																	
John L. Howard, Agent, San Francisco.																	
S. S. Mississippi, Capt. E. W. Holmes,																	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer,																	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO.																	
K. Van Otterendorp, Agent, San Francisco.																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d offl.
S. S. Columbia, Capt. F. Bolles, N. 40 55′, W. 124° 30′†	30.49	774.4	45.5	7.5	76	n.	2		0					light	n.	clear	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†	30.41	772.4	49	9.4	100	calm	0		0							clear	G. Roese.
PACIFIC COAST S. S. CO.																	
Goodall, Perkins & Co., Agents, San Francisco.																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	30.28	769.1	41	5.0	83	w.	1		0							clear	
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†	30.01	762.2	42	5.6		wsw.	3		8		sw.	light	light	sm'h		cloudy	
S. S. Idaho, Capt. H. M. Hayward, San Francisco, Cal†	30.18	766.6	45	7.2	60	wsw.	1		2							clear	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 24′, W. 118° 14′†	30.12	765.0	59	15.0	44	nw.	2		1		nw.			sm'h	nw.	clear	Harisson & McCullum.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal†	30.49	774.4	43	6.1	75	calm	0		0			0	0			clear	
S. S. State of California, Capt. G. Debney, Portland, Oregon†	30.40	772.1	44	6.7	84	sse.	3		10		se.	0	0			cloudy	
S. S. Victoria, Capt. W. E. Plummer, San Francisco, Cal†	30.34	770.5	43	6.1	83	calm	0		0							clear	J. C. Hunter.
PACIFIC MAIL S. S. CO.																	
Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.																	
S. S. Australia, Capt. A. N. M. Tulloh																	
S. S. City of New York, Capt. W. B. Cobb, N. 15° 30′, W. 160° —†	30.13	765.3	76	24.4	86	ene.	5		8		ne.	sq'lls	sq'lls	mod.	ne.	raining	W. H. Hawes, 2d offl.
S. S. City of Rio de Janeiro, Capt. Cavarly,																	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, Sydney, N. S. W†	30.17	766.3	71	21.7	75	se.	2		2		e.	0	0	sm'h		clear	E. Le Salk.
S. S. City of Tokio, Com. J. Maury,																	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 23° 30′, W. 110° 55′†	30.05	763.3	65	18.3	78	ne.	2		7		se.	0	0	small	n.	cloudy	
S. S. Grenada, Capt. M. Connolley, Panama, Panama†	29.96	761.0	72	22.2	?	nw.	2		0			1 h'r	light			clear	
S. S. South Carolina, Capt. W. J. Russell, Panama, Panama†	30.07	763.8	78	25.6	73	ene.	2		2		ne.	0	0	sm'h		fair	A. W. Hart, 2d offl.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	30.09	764.3	70	21.1	75	calm	0		0							fine	
QUEBEC S. S. CO																	
A. E. Outerbridge & Co., Agents, New York.																	
S. S. Bermuda, Capt. F. M. Faircloth																	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 29° 57′, W. 67° 46′						se.	3		0			0	0	long	se.	fair	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes N. 49° 36′, W. 8° 10′*†	30.34	770.6	52	11.1		ssw.	3		2		s.	0	0	h'vy	wnw.	fair	
S. S. Nederland, Capt J. Ueberweg, Antwerp, Belgium			49	9.4		ssw.	3		8		sw.	mist	mist			cloudy	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, N. 43° 33′ W. 55° 55′*.	30.26	768.6	49	9.4	85	ssw.	4		10		ssw.	0.05	1.3	light	ssw.	cloudy	C. H. Grant, 2d offl.
S. S. Switzerland, Capt. J. C. Jamison,																	
S. S. Vaderland, Capt. W. A. Beynon,																	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels. N. 49° 32′, W. 13° 00′*	30.04	763.0	52	11.1		sw.	6		5		w.	2 h'r	light	r'gh	wsw.	fair	Olsen & Assfeld.
ROTTERDAM LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. I. Vis. New York, N. Y.*	29.98	761.5	49.1	9.5	93	nw.	3		5		nw.	7 h'r	7 h'r				
THINGVALLA LINE.																	
Funch, Edye, & Co., Agents, New York.																	
S. S. Thingvalla, Capt. S. T. Laub, N. 50° 02′, W. 40° 29′†	30.27	768.8	41.9	5.5		sw.	2		5?		sw.	2 h'r	snow	r'gh	wsw.	clear?	J. T. Eberling
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters.																	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agent, New York.																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 49° 33′, W. 32° 57′*†	30.00	762.0	44	6.7		wnw.	4		5		nw.			mod.	n.	hailing	W. Brownless, 4th offl.
S. S. Celtic, Capt. Benjamin Gleadell New York, N. Y.*†	29.98	761.5	43	6.1	75	nw.	2		10		nw.	18 h'r	light			cloudy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy																	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving, N. 46° 17′, W. 39° 52′†	30.47	773.9	50	10.0	71	e.	1		2		ne.	snow	&hail	sm'h	ne.	fair	H. Goulden, 4th officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell, N. 47° 58′, W. 23° 00′*	30.18	766.6	49	9.4		sw.	3		7?		n.	sq'lls	sq'lls	mod.	sw.	clear?	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, Pensacola, Florida†	30.32	770.1	61	16.1	93	calm	0	0	0			0.26	6.6			clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 34° 15′, W. 64° 39′*†	30.44	773.2	69	20.6		ssw.	4		4		se.	0	0	r'gh	sse.	fair	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 20° 10′, W. 35° 40′*†	30.12	765.0	78	25.6		e.	3		3		e.	0	0	sm'h		fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 51° 02′ W. 8° 30′*†	30.24	768.1	54	12.2	79	s.	4		5		ssw.	½ h'r	light	con.	wsw.	threatening.	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewi Ponce, Porto Rico, W. 1*†	30.14	765.5	77	25.0		ne.	1		2		e.	2 h'r	h'vy			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 3° 40′, W. 25° 05′*†	29.94	760.5	84	28.9		ne.	2		3		ne.	0	0	sm'h	se.	fair	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 43°35′, W. 31° 40′*†	30.22	767.6				nw.	3				n.	sh's	sh's	long mod.	nnw.	clear	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 46° 30′, W. 61° 52′†	29.90	759.4				w.	3		0			0	0	sm'h	w.	clear	A. J. Pettingill.
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	29.96	761.0				sw.	6		10		sw.	sh's	sh's			stormy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr																	J. C. Andreson, Jr.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.27	768.8	52	11.1	66	calm	0		10		calm	0.44	11.2			cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison.																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 22° 37′, W. 33° 47′			77	25.0		e.	2		2		e.	0	0	sm'h		fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 16° 43′, W. 59° 02′*†	29.08	738.6				ne.	7		0			0	0	high r'gh	var.	clear	
Bk. Geo. Booth, Capt. D. Williams N. 11° 40′, E. 34° 00′*†	29.80	756.9	79	26.1		e.	1					0	0	sm'h		hazy	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 37° 29′, W. 64° 10′*†	30.60	777.2	64	17.8		ssw.	3				ssw.	0	0	mod.		cloudy	
Schr. Henry Denison, Capt. Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 40° 03′, E. 44° 50′*	30.08	764.0				ese.	5		3		e.	0	0	long	e.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith																	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte,																	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen. Cape Huerta, Spain*†	30.55	776.0				e.	6				e.	0	0	h'vy	e.	cloudy	Sorensen & Arvessen
Bk. Pawashick, Capt. Edwin Fry, N. 32° 59′, W. 18° 32′*†	30.60	777.2	63	17.2	88	e.	6		2		e.			mod.	e;nw		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.44	773.2	59	15.0	44	ne.	1										G. S. d'Ancona.
Bk Pilgrim, Capt. J. Connolly S. 20° 23′, W. 12° 39′*†	30.00	762.0				var.						0	0				J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	30.21	767.3	65	18.3		calm	0		8			rain	rain	sm'h		rainy	H. Mehaffey, 2d mate.
Bk. Stella, Capt. H. N. T. Sommer, S. 16° 47′, W. 34° 04′*	29.87	758.7	81.1	27.3	96	nne.	3		4		ne.			mod.	ne.	d clouds	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 28° 15′, W. 26° 58′*†	30.21	767.3	67	19.4	90	se.	6		8		s.	2 h'r	light	mod.	se.	cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert,																	
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 46° 05′, W. 23° 49′*†	30.03	762.7	52	11.1	86	wsw.	6				w.			mod.	wnw.	covered	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton. S. 3° 37′, W. 30° 00′*†	29.95	769.7				se.					se.			light	se.	rainy	N. P. Dutton.

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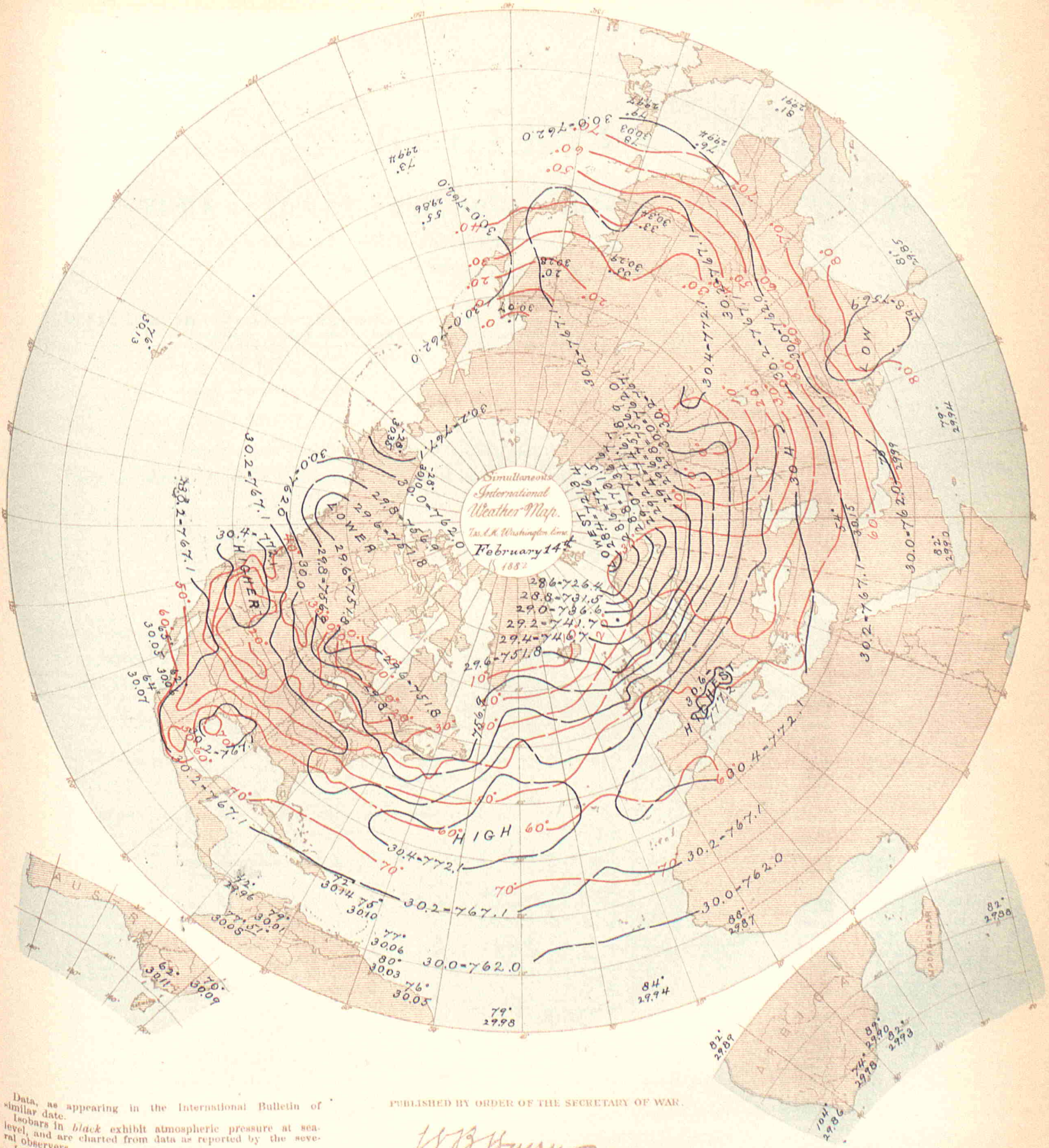
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

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Heliotype Printing Co Boston

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 15, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.37	771.4	61.9	16.6	81	w.			2		2			0.787	20.0	fair	Moiroud.
Algiers			30.39	772.0	56.8	13.8	91	nw.			1		10			0	0	covered	Nicolas.
La Calle			30.31	769.9	58.6	14.8	68	sw.			3		3			0	0	pretty fair	Fonfréde.
Tunis			30.27	768.8															Jacques.
Sfax																			Gau.
Saida			30.34	770.6	51.4	10.8	63	n.			1		4			0.138	3.5	cloudy	Dumas.
Tebessa			30.32	770.2	49.6	9.8	64	se.			4		5			inap.	inap.	cloudy	Derché.
Gerlville					44.6	7.0	69	e.			5		10			0.282	6.4	covered	Lonchamp.
Laghouat			30.37	771.3	50.0	10.0	62	e.			1		2			0.079	2.0	fair	Herbin.
Biskra			30.36	771.1	64.4	18.0	46	se.			1		8			0	0	very cloudy	Mahau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.88	758.9	29.97	761.2	65.0	18.3	77	sw.	3	1.3			3			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.79	756.7	30.35	771.0	50.0	10.0	45	s.			3		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.41	747.0	30.19	766.8	48.9	9.4	69	wsw.	4.3	1.9			10			0.039	1.0		Dr. Wierzbiski.
Eperies	29.38	746.2	30.29	769.4	39.9	4.4	68	calm			0	5 cs	0			0	0		Julius Mikolik.
Gratz	29.03	737.3	30.30	769.5	50.0	10.0	42	se.			2		3			0	0		Andreas Rospini.
Hermannstadt	28.90	734.0	30.39	772.0	38.1	3.4	73	se.			2		1			0	0		Prof. A. Gottschling.
Kremsmuenster, Obs'y	28.86	733.0	30.22	767.7	48.2	9.0	60	calm			0		9			0	0	cloudy	The Staff.
Lemberg	29.20	741.7	30.22	767.5	43.0	6.1	56	nw.			2		0			0	0		Dr. T. Stanecki.
Pola	30.40	772.1	30.52	775.1	46.9	8.3	71	w.			1		2			0	0		I. R. Hydrographic Office.
Szathmar	29.87	758.7	30.31	770.7	45.5	7.5	42	s.			2		0			0	0		Joseph Midliuszky, S. J.
Szegedin	30.05	763.3	30.34	770.7	47.5	8.6	68	s.			1		4			0	0		Karl Stancel.
Trieste	30.41	772.5	30.52	775.1	46.0	7.8	69	calm			0		2			0	0		Rieder.
Vienna	29.51	749.5	30.23	767.8	56.1	13.4	36	se.			2		4			0	0		I. R. Central Met. Obs'y
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.72	754.9	29.82	757.4	36.0	2.2	80	nnw.	8	3.6			10			0.015	0.4	snowing	W. Boswell.
Armagh, Observatory	29.75	755.6	30.01	762.2	36.5	2.5	92	wnw.	10	4.5			8					gloomy	S. Call.
Bidston, Liverpool Obs'y			29.91	759.7	41.7	5.4	79	w.	33	14.8			10					overcast	John Hartnup
Bolton, Sharples	29.34	745.2	29.88	758.9	39.4	4.1	81	wnw.	12	5.4			10					raining	Thomas Mackereth (A.S.
Bradford, Yorkshire	29.48	748.8	29.88	758.9	42.3	5.7	85	sw.			3		6			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	80.0	26.7	71	ne.			2		3					d. clouds	Corpl. J. Surgenor, A.H.C.
Cardington			29.87	758.7	40.0	4.4	95	n.			0.6		10					rain & snow	John McLaren.
Chatham, School M. E.	29.74	755.4	29.88	758.9	38.1	3.4	94	sw.			1		10					raining	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.87	758.7	30.11	764.8	43.9	6.6	67	nw.			6		7					squally	The Staff.
Fort Napier, Natal	27.63	701.8	29.85	758.2	92.0	33.3	10	e.			2		0					blue sky	Pvt. E. K. Annis, A. H.O.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	89.0	31.7	63	w.			1		3						Sergt. John Robinson.
Galway, Queen's College			30.08	764.0	40	4.4	73	w.			3		6					d. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.46	773.7	30.51	774.9	61.6	16.4	77	ne.			3		5					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	29.64	752.8	29.85	758.2	35.9	2.2	90	wsw.			3		7 n					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.70	754.4	29.88	758.9	40.1	4.5	89	n.			1		8					raining	The Staff.
Guernsey	29.63	752.6	29.94	760.5	45.0	7.2	92	wnw.			4		10					raining	A. Collenette, F. M. S.
Kew, Observatory	29.86	758.4	29.90	759.4	40.9	4.9	82	n.	11	4.9			10					threatening	The Staff.
Leicester, Museum	29.63	752.6	29.89	759.2	42.0	5.6	91	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.50	774.7	30.58	776.7	57.0	13.9	69	ne.			3		4					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.33	770.4	30.37	771.4	72.0	22.2	81	e.			1		7					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	29.68	753.9	29.91	759.7	40.4	4.7	87	wnw.			3		10					drizzling	The Staff.
Plymouth	29.97	761.2	30.04	763.0	40.2	4.6	98	nw.			4		10					raining	John Merrifield.
Sandwick Manse, Orkneys			29.87	758.7	34	1.1	74	n.	15	6.7			0					blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.32	770.1	30.38	771.6	45.8	7.7	67	sw.			2		2					d. clouds	W. H. Lyne.
Sheffield	29.61	752.1	29.90	759.4	43.3	6.3	72	nw.			2		10			0.01	0.3	d. clouds	W. F. Cooper.
Silloth Rectory	29.83	757.7	29.86	758.4	38.4	3.6	85	nw.			4		8			0.080	2.0	gloomy	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.89	759.2	41.5	5.3	69	nw.	22	9.8			7			blank	blank	d. clouds	I. New.
Stratfield Turgiss	29.69	754.1	29.92	760.0	41.3	5.2	90	nw.			1–5		10					raining	Rev. O. H. Griffiths, F.M.S.
Truro, Royal Institution	30.14	765.5	30.19	766.8	47	8.3	69	nw.			8		5					d. clouds	W. Newcombe.
Valencia, Observatory	30.22	767.6	30.24	768.1	43.5	6.4	67	wnw.	23	10.3			6			blank	blank	squally	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Co mmission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.81	757.2	29.84	757.9	78.0	25.6	63	w.	12.0	5.4			9 k			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.86	758.4	29.90	759.4	77.0	25.0	67					0	2			0	0		The Staff, for D. Gill.
Worcester†																			O. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.11	764.8	30.15	765.8	17	— 8.3	100	calm	0	0		0	0			0	0	clear	H. J. Cundall, C. E.
Chatham, N. B*	30.09	764.3	30.15	765.8	7	—13.9	100	calm	0	0		5 c	hz	calm		0	0	fair	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.94	760.5	29.96	761.0	21	— 6.1	84	sw.	10	4.5		5 k	5 s	w.	w.	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.02	737.1	29.94	760.5	— 2	—18.9	100	n.	13	5.8			10 n			0.020	0.5	light snow	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S*	30.06	763.5	30.19	766.8	23	— 5.0	88	w.	3	1.3		0	0			0	0	clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.68	753.9	30.03	762.7	32	0.0	88	sw.	7	3.1		2 cs	0	w.		0	0	fair	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.79	756.7	30.01	762.2	30	—1.1	74	sw.	20	8.9		0	0			0	0	clear	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.17	740.9	29.89	759.2	34	1.1	79	s.	12	5.4		0	2 ks		sw.	0	0	fair	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.37	746.0	30.09	764.3	35	1.7	90	s.	3	1.3		0	0			0	0	clear	H. Morgan.
Port Stanley, Ontario	29.40	746.7	30.08	764.0	32	0.0	100	w.	8	3.6		2 ck	0	w.		0	0	clear	M. Payne.
Quebec, Quebec*	29.70	754.4	30.04	763.0	21	— 6.1	91	w.			1	0	2 s			0	0	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.35	745.5	29.84	757.9	14	—10.0	83	calm	0	0		0	8 ks		nw.	0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.19	741.4	29.93	760.2	36	2.2	75	sw.	24	10.7		2 cs	0			0	0	clear	
St. Andrews, N. B.	30.10	764.5	30.15	765.8	26	— 3.3	95	calm	0	0		0	0			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.14	765.5	30.20	767.1	16	— 8.9	100	calm	0	0		0	0			0	0	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.63	752.6	30.03	762.7	34	1.1	74	sw.	12	5.4		5 cs	hz	w.		0	0	fair	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.12	765.0	30.19	766.8	27	—2.8	74	calm	0	0		0	hz			0	0	hazy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.09	764.3	30.35	770.6	26	— 3.3		w.	1	0.4		0	0			0.50	12.7	fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow																†2.65	†67.3		N. Titoushkin.
Sung-shu-chwang†	24.54	623.4			29.7	—1.3		calm			0		9			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	29.93	760.3	29.96	760.9	38.3	3.5	92	wnw.	9.4	4.2			10			1.39	35.3	covered	M. Marc Dechevrens, S. J
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.47	748.6	29.52	749.8	41.5	5.3	94	w.	16	7			10					raining	Oversergent Fischer.
Fanöe	29.56	750.9	29.58	751.4	40.5	4.7	92	w.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	28.85	732.9	28.90	734.0	27.7	— 2.4	67	e.			3		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.80	757.0	29.85	758.1	13.3	—10.4		e.			7		10					snowing	A. O. Thorlacius.
Thorshavn	29.96	760.9	29.99	761.8	25.0	— 3.9	69	n.	11	5			3						Overloerer Bergh.
Vestervig	29.37	746.1	29.47	748.4	41.4	5.2	75	wnw.			7		9						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.77	756.2	30.45	773.3	52.2	11.2	73	sw.			1	2 c	0			0	0	slightly cl'dy	M. Labroue, Director.
Alençon, Normal School	29.51	749.5	30.06	763.5	50.0	10	95	s.			3		10 n	nw.	nw.	0.008	0.2	raining	M. Nicot, Director.
Arras, Engineer School	29.64	752.9	29.90	759.5	48.9	9.4	95	sse.			6		10 n			0.122	3.1	raining	M. Klein, Commandant.
Avignon, Normal School	30.47	774.0	30.55	776.0	52.2	11.2	61	s.			1		5		s.	0	0	cloudy	M. Giraud, Director.
Bar-sur-Seine	29.62	752.4	30.19	766.7	50.4	10.2	64	sw.			2		10		sw.	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.67	753.5	29.93	760.3	51.1	10.6	82	sw.			3		10		sw.	0.16	4.	raining	M. Frère Eugène Marié
Besançon, Normal School			30.25	768.4	51.8	11	97	sw.			3		10 n		s.	0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	30.15	765.7	30.41	772.4	57.7	14.3	36	sw.			3		8		sw.	0	0	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.64	752.9	30.19	766.9	57.2	14	52	sw.			2		n		sw.	0	0		M. Postel, Director.
Brest, Naval Observatory	29.97	761.1	30.21	767.3	48.2	9.0	81	nw.			3		9		nw.	0.079	2.0	raining	M. de Kennaree, Dir.
Caen, Normal School	29.90	759.5	29.98	761.4	50.7	10.4	82	w.			2		10			0.154	3.9	raining	M. Borson, Director.
Châlons-sur-Marne, N. Sch'l	29.71	754.7	30.04	763.0	51.8	11.0	75	sw.			8		8	sw.	sw.	0	0	very cloudy	M. Jadot, Director.
Charleville, Normal School	29.47	748.6	29.99	761.8	50.0	10	66	wsw.			3		10			0.12	3.	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.96	735.6	30.32	770.2	55.9	13.3	33	ssw.			3		8		sw.	0	0	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.52	749.8	30.43	773.0	51.6	10.9	64	ne.			3		fg		n.	0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School.	29.27	743.5	30.15	765.8	51.6	10.9	50	sw.			4		5 n	sw.	sw.	0	0	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.92	709.2	30.50	774.8	50.9	10.5	60					c	0			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.38	746.2	30.51	775.1	53.1	11.7	57	w.			1		2		sw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.65	753.0	30.43	773.0	51.3	10.7	59	nw.			2	cs	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.70	729.0	30.31	769.9	52.5	11.4	14	sw.			1	ck	0	sw.		0	0		M. Rivoire, Director.
Lamballe, Normal School	29.82	757.3	30.10	764.4	47.3	8.5	80	w.			8		5					rain & hail	M. Ollitrault, Director.
Lescar, Normal School	29.90	759.5	30.47	773.9	61.5	16.4	42	w.			3					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.11	764.8	30.21	767.4	51.8	11.0	75	wnw.			9		2		nw.	0.039	1.0	¼ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.33	745.0	30.41	772.5	49.5	9.7	59	s.			3	10 c	0	wsw.		0	0	covered	M. André, Director.
Mans, Normal School	29.80	756.9	30.10	764.6	51.4	10.8	82	w.			4		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.28	769.0	30.55	775.9	55.0	12.8	57	sw.			1		7		sw.	0	0		M. Stephan, Director
Montlouis l'Instituteur	25.16	639.0	30.00	762.0	44.6	7.0	30	s.	5.6	2.5			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.40	772.2	30.54	775.7	54.7	12.6	79	ne.			3		5		se.	0	0	foggy	M. Galzin, Director.
Nancy, Normal School	29.36	745.8	30.15	765.8	51.8	11	90	sse.			3		10 kn		sw.	0.008	0.2	covered	M. Hasse, Director
Nantes, Observatory	30.05	763.2	30.21	767.4	51.4	10.8	85	sw.			2–4		10 n		sw.	0.130	3.3	rainy	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.41	772.5	30.53	775.4	53.2	11.8	66	se.	3.8	1.7			1		nnw.	0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.49	545.9			29.5	—1.4		sw.			3		1		sw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.46	748.2	30.56	776.3	46.4	8	86	s.			1		10 k	s.	s	0	0	covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.23	640.9			35.4	1.9	76	wsw.			9		8		wsw.	0.004	0.1	stormy	M. Allnard, Director.
Rochefort, Naval Obs'y	30.33	770.3	30.36	771.1	55.2	12.9	81	sw.			4		10			0.087	2.2	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.93	760.1	30.19	766.8	52.2	11.2	93	w.			1		10			0.051	1.3	raining	M. Mouillot, Director.
Rodez, Normal School	28.30	718.7	30.50	774.6	52.2	11.2	41	w.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	29.93	760.1	29.97	761.3	48.9	9.4	84	sw.			3		10			0.217	5.5	covered	M. Platrier, Director.
Saint Lô, Normal School	29.84	758.0	30.00	762.0	47.3	8.5	89	w.			4		8		wsw.	0.146	3.7	very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.85	758.2	30.02	762.6	52.5	11.4	71	sw.			4		10		sw.	0.016	0.4	covered	M. Renou, Director.
Toulouse, Observatory	29.80	756.9	30.53	775.5	55.9	13.3	73	se.			2		2		w.	0	0	slightly cl'dy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.52	749.7	30.01	762.2	51.1	10.6	80	sw.			6					0.386	9.8		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.76	756.0	30.06	763.4	52.5	11.4	72	ssw.			4		10		sw.	inap.	inap.	covered	M. Marié Davy, Director

† Total rainfall for 13th and 14th.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.30	744.2	30.16	766.0	48.7	9.3	63	s.			2	0	8 ks		sw.	0.051	1.3		Prof. Dr. Hoh.
Berlin	29.63	752.6	29.81	757.1	50.4	10.2	64	sw.			4		9			0.142	3.6		Prof. Dr. Arndt.
Breslau	29.54	750.3	30.07	763.8	48.9	9.4	70	sw.			2		10			0.016	0.4		Royal University Obs'y.
Carlsruhe	29.70	754.4	30.14	765.6	51.8	11.0	56	sw.			10		10	sw.		0.327	8.3		Albert Senz.
Cassel	29.12	739.6	29.83	757.8	45.0	7.2	89	s.			6		10 n		s.	0.024	0.6		Dr. H. Möhl.
Frankfort on the Main	29.68	753.9	30.05	763.3	48.6	9.2	75	ssw.			2		10			0.059	1.5		Physical Society.
Friedrichshafen	28.81	731.7	30.28	769.2	44.6	7.0	72	se			1		10	sw.		0.177	4.5		Wilhelm, Chief Tel.
Hamburg	29.56	750.7	29.65	753.1	48.2	9.0	91	sw.			7		10			0.220	5.6	raining	E. Preller.
Kiel	29.65	753.0	29.66	753.4	40.5	4.7	90	w.			5		8			1.110	28.2		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.52	749.8	29.95	760.7	49.3	9.6	76	sw.			5		9	sw.		0.031	0.8	stormy	H. Leppig, Asst.
Magdeburg	29.66	753.4	30.24	768.2	51.4	10.8	72	ssw.			6		10 ks		wsw.	0.043	1.1		Dr. Assmann.
Memel	29.80	756.8	29.84	758.0	37.2	2.9	82	sw.			5		10 s						Issermann.
Munich	28.38	720.9	30.26	768.6	50.2	10.1	42	nw.			1		8	w.		0	0		Central Station
Neufahrwasser	29.76	755.9	29.78	756.3	41.2	5.1	73	s.			5		10	wsw.		0.063	1.6	raining	A. Lothes.
Neustadt, Palatinate	29.56	750.9	30.09	764.3	52.7	11.5	72	s.			4		6	w.		0.480	12.2		Dicknether.
Stuttgart	29.22	742.2	30.12	765.1	52.7	11.5	50	sw.			6		9	w.		0.150	3.8		Prof. Dr. Schoder
Wustrow	29.67	753.6	29.70	754.3	41.0	5.0	100	sw.			5		10 s			0.020	0.5		Profs. Brandes & Reimer.
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.04	762.9	30.43	772.9	55.0	12.8		nw.			1.0		0			0	0	clear	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurnachee	29.87	758.7	29.92	760.0	72.1	22.3	42	sw.	22	9.8			0			0	0	blue sky	
Deesa	29.33	745.0	29.81	757.1	77.5	25.3	22	wsw.	16.5	7.4			0			0	0	blue sky	
Bombay	29.84	758.0	29.88	758.9	79.9	26.6	71	wnw.	10	4.5			8	nw.		0	0	d. clouds	
Poona, Yarrowda.	27.98	710.6	29.81	757.1	84.8	29.3	22	w.	17	7.6			0			0	0	blue sky	
Belgaum	27.32	693.8	29.84	758.0	78.1	25.6	50	wsw.	7	3.1			0			0	0	blue sky	
Lahore	29.13	739.8	29.91	759.7	55.6	13.1	81	w.	2.5	1.1			10			0.09	2.3	raining	
Roorkee	28.91	734.4	29.85	758.1	62.2	16.8	60	se.	3.4	1.5			8			0.16	4.1		
Agra	29.22	742.0	29.78	756.5	77.2	25.1	32	nw.	6.1	2.7			4		n.	0	0		
Nagpur	28.73	729.8	29.76	755.8	89.0	31.7	25	sw.	4.1	1.8			0			0	0	blue sky	
Jubbulpore	28.50	723.8	29.85	758.2	80.7	27.1	39	calm	4.0	1.8			4			0	0	d. clouds	
Lucknow	29.49	749.1	29.88	758.9	68.3	20.2	72	sse.	2.0	0.9			10			0.10	2.5	thud'r storm	
Allahabad	29.53	750.0	29.85	758.2	69.8	21.0	70	e.	2.7	1.2			10		sw.	0.11	2.8	overcast	
Patna	29.71	754.6	29.90	759.5	64.6	18.1	76	calm	2.2	1.0			6			0	0	d. clouds	
Hazaribagh	27.85	707.3	29.90	759.5	67.8	19.9	44	n.	6.2	2.8			6		n.	0	0		
Cuttack	29.73	755.2	29.82	757.3	77.8	25.4	73	se.	3.9	1.7			3			0.56	14.2	d. clouds	
Calcutta, Alipore	29.86	758.3	29.88	758.9	74.0	23.3	63	e.	8.0	3.6			9		ne.	0.14	3.6	gloomy	
Dhubri	29.76	756.0	29.89	759.2	63.5	17.5	71	calm	2.0	0.9			4	w.		0	0	d. clouds	
Chittagong	29.82	757.3	29.91	759.6	70.1	21.2	90	w.	5.2	2.3			10			0.12	3.0	overcast	
Sibsagar	29.58	751.4	29.93	760.3	64.5	18.1	76	ne.	4.7	2.1			8	w.	w.	0	0	d. clouds	
Jeypore	28.32	719.3	29.78	756.4	72.4	22.4	31	wnw.	7.3	3.3			4		wnw.	0	0	d. clouds	
Zanzibar, Africa	29.82	757.4			83.2	28.4	76	nnw.	3.9	1.7			8			0	0	d. clouds	
Trichinopoly	29.59	751.6			89.5	31.9	35	se.	2	0.9			10			0	0	overcast	
Bellary	28.32	719.3			94.5	34.7	15	w.	2.7	1.2			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	30.07	763.8	30.50	774.6	47.1	8.4	58	sw.	0.7	0.3			6			0	0		Prof. Giovanni Clodig.
Milan	29.97	761.1	30.50	774.8	44.6	7.0	71	sw.	1.3	0.6			9	ssw.		0	0		Prof. Schiaparelli.
Padua	30.37	771.5	30.49	774.4	44.1	6.7	66	ssw.	1.3	0.6			2			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.56	750.9	30.50	774.8	43.7	6.5	64	e.	1.8	0.8			7	n.		0	0		Prof. P. F. Denza.
Genoa	30.34	770.6	30.54	775.6	53.2	11.8	60	s.	7.4	3.3			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.50	723.8	30.48	774.3	42.3	5.7	60	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.43	772.9	30.48	774.2	46.9	8.3	65	ne.	3.1	1.4			0			0	0		Prof. Luigi Guidi.
Florence	30.30	769.6	30.56	776.3	46.4	8.0	50	nw.			2		10	sw.		0	0		Prof. Costantino Pitter.
Leghorn	30.41	772.3	30.49	774.5	48.2	9.0	61	ne.	0.7	0.3			8			0	0		Prof. P. Monte.
Rome	30.37	771.5	30.56	776.1	54.3	12.4	49	nw.	0	0			8	w.		0	0		Prof. P. S. Ferrari.
Lecce	30.23	767.8	30.49	774.4	53.2	11.8	53	nne.	12.5	5.6			0			0	0		Prof. C. de Giorgi.
Cosenza	29.65	753.1	30.57	776.4	52.9	11.6	73	ese.	5.6	2.5			0			0	0		Prof. D. Conti.
Cagliari	30.35	771.0	30.55	776.0	55.0	12.8	47	se.			2		0			0	0		Prof. A. Pacinotti.
Palermo	30.34	770.7	30.60	777.2	56.3	13.5	51	ne.	4.3	1.9			1			0	0		Prof. G. Cincciatore.
Syracuse	30.52	775.2	30.57	776.4	53.8	12.1	68	sw.	8.1	3.6			0			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	30.02	762.6	30.57	776.4	53.8	12.1	56	w.	1.8	0.8			1	nw.		0	0		Prof. T. Brioschi.
Stelvio	22.28	565.9			20.7	— 6.3	51	sw.			4		8			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.35	567.7			29.3	— 1.5	46	nw.			2		10			0	0	covered	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.09	764.3	30.13	765.3	26.0	— 3.3	72	sw.	2.6	1.2		0	0			0	0	clear	
Hakodate	30.12	765.0	30.13	765.3	24.7	— 4.1	64	calm	0	0			0			0	0	clear	
Hiroshima, I. M. Obs'y	30.03	762.7	30.05	763.3	44 9	7.2	71	nne.	3.3	1.5			10 n			0.612	15.5	light rain	K. Sasaki.
Kanazawa	30.20	767.1	30.31	769.9	34.4	1.3	85	ese.	3.9	1.7		7ck;cs	0			0.300	7.6	cloudy	S. Endo.
Kioto	29.89	759.2	30.07	763.8	42.8	6.0	71	n.	3.9	1.7			10 s			0.100	2.5	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.67	753.6	29.87	758.7	54.7	12.6	82	se.	10.9	4.9			10 n			0.930	23.6	raining	S. Takehayashi.
Niigata	30.10	764.5	30.14	765.5	35.0	1.7	81	ese.	2.7	1.2		1 ck	0			0	0	clear	
Nobiru	30.12	765.0	30.14	765.5	32.6	0.3	65	nnw.	6.2	2.8		0	0			0	0	clear	H. Midzushina.
Sapporo					27.3	— 2.6	85	nw.	8.4	3.8			10			0.390	9.9	covered	
Tokei Obs'y, Yeddo	30.08	764.0	30.15	765.8	34.5	1.4	87	sse.	2.0	0.9		0	0			0.120	3.0	clear	The Staff.
Wakayama	30.01	762.2	30.07	763.8	41.4	5.2	80	calm	0	0		10 ck	0			0.205	5.2	cloudy	Y. Kuwamura.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.49	621.9	30.28	769.1	50.2	10.1	72	n.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.88	758.9	30.14	765.6	62.0	16.7	94	nnw.	1.6	0.8		0	1 s			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.19	589.2	30.41	772.4	43.7	6.5	50	calm	0	0		0	0			0	0		The Staff.
Morelia	24.43	620.5	30.68	779.2	52.2	11.2	74	sw.			4	3 c	3k	w.	sw.	0	0	½ cloudy	M. Tena, M. D.
Pabellon, Aguascalientes	24.04	610.4	30.15	765.9	47.3	8.5	66									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.49	596.6	30.45	773.4	42.8	6.0	60	calm	0	0		0	0			0	0	very fine	Prof. P. Spina.
San Luis Potosi	24.31	617.6	30.47	774.0	49.3	9.6	57	e.			1	2	6	w.	w.	0	0	cloudy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.63	574.7	30.35	770.9	50.1	10.2	67	wsw.	4.9	2.2		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.68	753.9	29.87	758.7	82.5	28.1	66	ese.	22.0	9.8		0	4 ks;k		ese.	0.22	5.6	fair	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.75	755.6	29.75	755.6	48.4	9.1		sw.			6					0.102	2.6		
Groningen	29.67	753.5	29.72	754.9	42.1	5.6		n.			6					0.992	25.2		
Helder	29.72	754.9	29.72	754.9	38.1	3.4		n.			4					0.433	11.0		
Hellevoetsluis	29.73	755.1	29.73	755.1	46.9	8.3	95	sw.			6					0.354	9.0		
Utrecht	29.69	754.0	29.73	755.2	50.5	10.3	84	ssw.			5		8			0.547	13.9	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.25	742.9	29.31	744.5	32.0	0.0	63	nnw.	29	13			9			0.142	3.6		
Brono	29.00	736.7	29.04	737.7	24.8	— 4.0	91	w.	27	12			10			0.035	0.9	snowing	
Christiania	28.93	734.9	29.08	738.6	38.8	3.8	73	ssw.	13	6			3			0	0		
Gjæsvær	28.60	726.4	28.62	727.0	30.9	— 0.6		ene.			4		10						
Lodingen	28.71	729.1	28.75	730.3	27.3	— 2.6	67	wsw.			8		9			0	0		
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.7	15.4	87	ese.	12.5	5.6			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.55	750.6	30.57	776.4	60.4	15.8	50	e.	6.3	2.8			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.35	770.9	30.44	773.2	65.7	18.7	57	ese.	2.5	1.1			1			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.25	768.3	30.62	777.7	54.5	12.5	69	ne.	8.7	3.9			0			0	0		The Staff.
Ponta Delgada, Azores	30.45	773.4	30.52	775.2	61.2	16.2	79	ese.	9.8	4.4			3			0	0		
Saint Paul de Loando	29.70	754.3	29.90	759.4	83.3	28.5	79	nw.	1.3	0.6			9			0	0		
Serra da Estrella	25.71	653.0	30.61	777.4	40.8	4.9	67	nw.	7.4	3.3			2			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.71	729.1	29.90	759.5	— 2.7	—19.3		sw.	27	12			10 n			0.059	1.5		Major K. Lasarew.
Archangel	29.01	736.8	29.03	737.3	25.5	— 3.6	71	sw.	22	10		3 cs	0			0	0		Capt. Sselliwerstow.
Astrakhan	30.18	766.6	30.10	764.5	31.6	— 0.2	81	w.	16	7			10 ks			0	0		Capt. Wisganow.
Barnaul	29.67	753.5	30.22	767.7	0.9	—17.3	67	calm	0	0			9			0	0	light clouds	Meteorological Obs'y.
Dorpat	29.40	746.7	29.65	753.0	35.2	1.8	44	w.	13	6		0	0			0.008	0.2		Observatory.
Ekaterinburg	28.35	720.1	29.35	745.4	22.8	— 5.1	76	wsw.	27	12			10			0	0		Meteorological Obs'y.
Kasan	29.20	741.6	29.48	748.7	34.7	1.5	81	wsw.	4	2			10			0.012	0.3		Observatory.
Kertch	30.19	766.9	30.21	767.4	40.8	4.9	75	sw.	13	6			9 n			0	0		Lagorio & Sastyrez.
Kieff	29.37	746.0	30.02	762.6	40.8	4.9	55	wnw.	11	5		0	5 k;ks			0	0		Observatory.
Lugan	29.72	754.8	29.93	760.2	34.9	1.6	85	wsw.	22	10			10			0.031	0.8		Meteorological Obs'y.
Moscow	28.94	735.0	29.42	747.3	37.4	3.0	71	s.	7.8	3.5			10 s			0.008	0.2	light snow	Meteorological Obs'y.
Nikolaiev	30.18	766.5	30.25	768.3	43.7	6.5	78	w.	9	4		0	8 n			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.98	761.5	30.07	763.7	— 0.4	—18.0	80	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	29.85	758.3	30.00	761.9	33.4	0.8	65	calm	0	0		2 cs	0			0	0		Physical Observatory.
St. Petersburg	29.40	746.8	29.42	747.2	31.3	— 0.4	59	wnw.	25	11		0	1 ks			0.020	0.5		Central Physical Obs'y.
Tashkend, Laboratory	28.73	729.8	30.42	772.6	26.6	— 3.0	96	calm	0	0			2			0	0		Teich, A. M.
Tiflis	28.85	733.0	30.34	770.6	39.6	4.2	54	nw.	18	8		0	2 k			0	0		Physical Observatory.
Vladivostok	29.93	760.3	30.00	762.0	19.9	— 6.7	60	calm	0	0			10 k			0	0		
Warsaw	29.63	752.7	30.07	763.7	43.2	6.2	65	ssw.	16	7		cs	10 ks					solar corona	Astronomical Obs'y.
Wilna	29.53	750.0	29.96	761.0	37.6	3.1	79	sw.	4	2			10			0.136	3.5	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.04	762.9	30.36	771.2	— 7.6	—22.0	73	e.	4	2			0			0	0		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.90	759.4	42	5.6	83	ne.			4	5	5	nw.		0.2	5.	light clouds.	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.39	771.9	30.50	774.6	54.3	12.4	67	w.	2.5	1.1			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.48	774.1	30.54	775.6	60.8	16.0	84	s.	2.2	1.0		2	7	nw.		0	0	almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.53	699.3	30.60	777.1	48.7	9.3	61	sw.	9.6	4.3		0	7			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.31	719.0	30.61	777.6	50.4	10.2	67	calm	1.6	0.7		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.43	773.0	30.59	776.9	58.8	14.9	64	wnw.	1.6	0.7		0	3			0	0	clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.64	752.8	30.56	776.1	55.4	13.0	78	sw.	3.1	1.4			10					sprinkling	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.19	766.9	30.26	768.6	65.9	18.8	85	ese.	2.2	1.0		1 c	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.89	759.1	29.95	760.6	77.3	25.2	68	se.	13.2	5.9		0	s			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.46	773.6	30.56	776.1	62.2	16.8	55	ese.	3.3	1.5		0	4		e.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.08	764.1	30.17	766.4	70.9	21.6	95	calm	0	0		7 k	4 kn	e.	e.	0.110	2.8	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.81	757.2	29.94	760.5	80.3	26.8	69	ssw.	2.2	1.0		0	3 ks		ssw.	0	0	fair	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	28.89	733.7	28.93	734.7	26.2	— 3.2	57	w.			4		5			0	0		
Umea	29.12	739.7	29.17	741.0	29.1	— 1.6	64	w.			4		5			0.016	0.4		
Hernosand	29.15	740.3	29.20	741.6	27.9	— 2.3	77	ssw.			2		10			0	0		
Stockholm	29.18	741.1	29.35	745.6	33.8	1.0	89	ssw.			4		10					snowing	
Wisby	29.49	749.1	29.55	750.6	37.0	2.8	86	ssw.			6		10			0.047	1.2		
Sub-Series.																			
Upsala	29.18	741.2	29.27	743.4	31.8	— 0.1	92	s.	21.3	9.5			10			0.035	0.9		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.93	734.9	30.37	771.4	50.0	10.0	27	sw.			3					0.075	1.9	clouds	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.41	772.5	43.2	6.2	69	sw.	9	4.0			0			0	0		The Observatory.
Valona			30.48	774.1	55.8	13.2		nw.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.15	765.7	64.0	17.8	54	wsw.			2	9 c	0	sw.		0	0		Prof. C. V. A. van Dyck

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

Stations.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Albany, New York	30.08	764.0	30.18	766.6	40.3	4.6	57	s.	3	1.3		0	0			0	0	clear	
Alpena, Michigan	29.20	741.7	29.91	759.7	36	2.2	61	w.	12	5.4		0	0			0	0	clear	
Atlanta, Georgia	29.07	738.4	30.29	769.4	58.5	14.7	93	s.	9	4.0			10 n		calm	0.27	6.9	light rain	
Atlantic City, New Jersey	30.25	768.3	30.26	768.6	38.2	3.4	88	sw.	6	2.7		0	0			0	0	clear	
Augusta, Georgia	30.09	764.3	30.29	769.4	60.3	15.7	93	s.	4	1.8			10 n			0.28	7.1	light rain	
Baltimore, Maryland	30.22	767.6	30.27	768.8	39	3.9	73	s.	2	0.9		0	fg.			0	0	clear	
Barnegat, New Jersey	30.23	767.8	30.25	768.3	35.2	1.8	96	sw.	6	2.7		0	0			0	0	clear	
Bismarck, Dakota	27.80	706.1	29.78	756.4	39	3.9	50	nw.	2	0.9		hz.	8 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.17	690.1	30.13	765.3	35	1.7	89	se.	4	1.8			10 s		calm	0	0	cloudy	
Boston, Massachusetts	30.02	762.5	30.18	766.6	36.0	2.2	53	sw.	9	4.0		5 cs	0	w.		0	0	fair	
Brownsville, Texas	30.06	763.5	30.11	764.8	73	22.8	97	se.	8	3.6		0	0			0	0	clear	
Buffalo, New York	29.31	744.5	30.11	764.8	37.8	3.2	76	sw.	21	9.4		3 cs	sk.	sw.		0	0	clear	
Burlington, Vermont	29.79	756.7	30.10	764.5	33.7	0.9	79	s.	9	4.0		0	c			0	0	clear	
Cairo, Illinois	29.79	756.7	30.21	767.3	47.5	8.6	84	s.	4	1.8		3 cs	0			0	0	clear	
Campo, California	27.50	698.5	30.14	765.5	25.5	— 3.6	88	e.	4	1.8		0	0			0	0	clear	
Camp Thomas, Arizona	27.24	691.9	30.07	763.8	48.5	9.2	95	calm			0		10 n			0.07	1.8	heavy rain	
Cape Henry, Virginia	30.28	769.1	30.30	769.6	42	5.6	82	nw.	1	0.4		0	7 s			0.11	2.8	fair	
Cape May, New Jersey	30.25	768.3	30.28	769.1	46	7.8	83	s.	8	3.6		0	0			0	0	clear	
Castroville, Texas	29.33	745.0	30.17	766.3	58	14.4	93	e.	4	1.8			10 s			0.23	5.8	threatening	
Cedar Keys, Florida	30.26	768.6	30.28	769.1	66	18.9	90	w.	3	1.3		4 ck	0			0.04	1.0	fair	
Champaign, Illinois	29.24	742.7	30.11	764.8	35.0	1.7	79	s.	4	1.8		0	0			0	0	clear	
Charleston, S. Carolina	30.21	767.3	30.27	768.8	59	15.0	93	ne.	2	0.9			10 n		calm	0.10	2.5	light rain	
Charlotte, N. Carolina	29.36	745.7	30.25	768.3	50.0	10.0	100	ne.	2	0.9			fg.			0.29	7.4	dense fog	
Chattanooga, Tennessee	29.40	746.7	30.26	768.6	59.0	15.0	87	sw.	4	1.8			10ks;fg		sw;c	0.04	1.0	cloudy	
Cheyenne, Wyoming	23.89	606.8	30.14	765.5	35.3	1.8	36	w.	8	3.6			10 s			0	0	cloudy	
Chicago, Illinois	29.30	744.2	30.04	763.0	38.8	3.8	80	sw.	7	3.1		0	0			0	0	clear	
Chincoteague, Virginia	30.26	768.6	30.28	769.1	37.8	3.2	100	calm	0	0		0	2 s		w.	0.03	0.8	clear	
Cincinnati, Ohio	29.53	750.0	30.22	767.6	38	3.3	82	se.	2	0.9			10 s			0	0	cloudy	
Cleveland, Ohio	29.39	746.5	30.18	766.6	39	3.9	43	s.	6	2.7		0	0			0	0	clear	
Coleman City, Texas	28.36	720.3	30.24	768.1	47	8.3	93	se.	1	0.4		0	8 n			0.03	0.8	light rain	
Columbus, Ohio	29.31	744.5	30.21	767.3	39	3.9	65	s.	8	3.6		0	0			0	0	clear	
Concho, Texas	28.18	715.8	30.20	767.1	48	8.9	93	calm	0	0		0	3 s			0	0	fair	
Davenport, Iowa	29.33	745.0	30.03	762.7	41	5.0	65	sw.	3	1.3		hz.	4 s	calm	sw.	0	0	clear	
Dayton, Washington T'y	28.13	714.5	29.94	760.5	41.3	5.2	72	s.	15	6.7		0	1 k		sw.	0	0	clear	
Deadwood, Dakota	25.10	637.5	30.02	762.5	30	— 1.1	80	sw.	2	0.9		0	0			0	0	cloudy	
Decatur, Texas					54	12.2	55	s.	6	2.7			10 s			0	0	clear	
Delaware Breakwater, Del.	30.25	768.3	30.27	768.8	38	3.3	82	s.	8	3.6		0	1 s			0	0	cloudy	
Denison, Texas	29.34	745.2	30.18	766.6	53.0	11.7	80	sw.	6	2.7			10 s			0	0	clear	
Denver, Colorado	24.62	625.3	30.14	765.5	31.4	— 0.3	52	s.	9	4.0		0	0			0	0	clear	
Des Moines, Iowa	29.04	737.6	30.01	762.2	35	1.7	64	w.	3	1.3		0	0			0	0	clear	
Detroit, Michigan	29.37	746.0	30.12	765.0	42.1	5.6	65	sw.	8	3.6		0	0			0	0	clear	
Dodge City, Kansas	27.31	693.7	30.05	763.3	36.2	2.3	46	s.	6	2.7		0	0			0	0	clear	
Dubuque, Iowa	29.24	742.7	30.00	762.0	36.5	2.5	53	s.	5	2.2		0	fg.		calm	0	0	clear	
Duluth, Minnesota	29.02	737.1	29.78	756.4	32	0.0	68	sw.	1	0.4		0	0			0	0	clear	
Eagle Pass, Texas	29.35	745.5	30.19	766.8	59.0	15.0	87	calm	0	0			10 s			0.08	2.0	cloudy	
Eagle Rock, Idaho	25.33	643.4	30.23	767.8	24	— 4.4	76	sw.	6	2.7			10 s			0	0	cloudy	
Eastport, Maine	30.10	764.5	30.17	766.3	32	0.0	77	sw.	3	1.3		0	0			0	0	clear	
El Paso, Texas	26.36	669.5	30.24	768.1	46.7	8.2	93	calm	0	0			10 n		se.	0.19	4.8	light rain	
Erie, Pennsylvania	29.38	746.2	30.14	765.5	41	5.0	57	sw.	5	2.2		0	0			0	0	clear	
Escanaba, Michigan	29.15	740.4	29.87	758.7	30	— 1.1	77	s.	5	2.2		0	0			0	0	clear	
Fort Apache, Arizona	25.13	638.3	30.23	767.8	35	1.7	72	e.	2	0.9		0	5 s		calm	inap.	inap.	fair	
Fort Assinnaboine, Montana	26.73	678.9	29.77	756.1	39	3.9	50	sw.	25	11.2		0	5 s		sw.	0	0	fair	
Fort Bennett, Dakota	28.09	713.5	29.82	757.4	34	1.1	51	calm	0	0		0	4 s			0	0	cloudy	
Fort Benton, Montana	26.79	680.5	29.79	756.7	41	5.0	59	sw.	28	12.5			9 ks		calm	0	0	clear	
Fort Buford, Dakota	27.60	701.0	29.78	756.4	37	2.8	64	s.	4	1.8		0	0			0	0	fair	
Fort Custer, Montana	26.54	674.1	29.90	759.4	40	4.4	59	s.	3	1.3		0	4 s		calm	0	0	clear	
Fort Davis, Texas	25.19	639.8	30.15	765.8	44	6.7	86	nw.	4	1.8		0	0			0.21	5.3	clear	
Fort Elliott, Texas	27.21	691.1	30.11	764.8	32	0.0	62	s.	12	5.4		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.52	749.8	30.12	765.0	50.4	10.2	72	se.	6	2.7			10 s		s.	0	0	cloudy	
Fort Grant, Arizona	25.16	639.1	30.02	762.5	36	2.2	82	e.	2	0.9			10 n			0.63	16.0	light rain	
Fort Griffin, Texas	28.84	732.5	30.21	767.3	50	10.0	86	sw.	6	2.7		2 cs	0	calm		0	0	clear	
Fort Keogh, Montana	27.16	689.9	29.84	757.9	40	4.4	50	w.	9	4.0		3 c	0	nw.		0	0	clear	
Fort Macon, North Carolina	30.25	768.3	30.26	768.6	50	10.0	100	n.	5	2.2			10 n		n.	0.38	9.7	light rain	
Fort McKavett, Texas	27.73	704.3	30.11	764.8	51.8	11.0	86	sw.	5	2.2		8 cs	0			0.08	2.0	cloudy	
Fort Missoula, Montana	26.42	671.1	29.85	758.2	34	1.1	89	w.	4	1.8		0	0			0	0	clear	
Fort St. Michaels, Alaska	30.32	770.1	30.35	770.9	—10	—23.3	100	e.	7	3.1		0	8 s		e.	0	0	fair	
Fort Shaw, Montana	25.98	659.9	29.83	757.7	34	1.1	65	sw.	16	7.2		4 cs	0			0	0	fair	
Fort Sill, Indian Territory	28.85	732.8	30.16	766.1	47.3	8.5	88	s.	1	0.4		4 ck	6 s	w.		0	0	cloudy	
Fort Stevenson, Dakota	27.72	704.1	29.74	755.4	35	1.7	72	w.	2	0.9		0	0			0	0	clear	
Fort Verde, Arizona					30	— 1.1	80	sw.			1		10 s			0	0	cloudy	
Fort Washakie, Wyoming	24.29	617.0			20.0	— 6.7	64	n.	3	1.3		0	0			0	0	clear	
Fredericksburg, Texas	28.37	720.6	30.17	766.3	55	12.8	86	calm	0	0			10 s			0	0	cloudy	
Galveston, Texas	30.14	765.5	30.18	766.6	65.5	18.6	100	s.	8	3.6			fg			0	0	dense fog	
Grand Haven, Michigan	29.30	744.2	30.01	762.2	39.0	3.9	89	s.	16	7.2		0	0			0	0	clear	
Hatteras, North Carolina	30.25	768.3	30.27	768.8	51	10.6	80	ne.	7	3.1			10 s		ne.	0.12	3.0	cloudy	
Helena, Montana	25.48	647.2	29.88	758.9	39	3.9	65	sw.	12	5.4		0	0			0	0	clear	
Henrietta, Texas	29.13	739.9	30.18	766.6	50	10.0	86	s.	6	2.7		0	3 s			0	0	fair	
Huron, Dakota	28.33	719.6	29.85	758.2	30	— 1.1	81	se.	6	2.7		0	1 s			0	0	clear	
Indianapolis, Indiana	29.29	744.0	30.14	765.5	38	3.3	72	s.	3	1.3		0	0			0	0	clear	
Indianola, Texas	30.12	765.0	30.16	766.1	67.5	19.7	100	se.	5	2.2		0	5 k		s.	0	0	fair	
Jacksboro, Texas	28.96	735.6	30.20	767.1	48	8.9	86	sw.	3	1.3		2 cs	0	sw.		0	0	clear	
Jacksonville, Florida	30.23	767.8	30.28	769.1	67	19.4	90	sw.	3	1.3			10 s			0	0	cloudy	
Keokuk, Iowa	29.34	745.2	30.04	763.0	39.5	4.2	67	sw.	6	2.7		0	0			0	0	clear	
Key West, Florida	30.25	768.3	30.28	769.1	71.0	21.7	82	e.	4	1.8		0	3 k;s			0.06	1.5	cloudy	
Kittyhawk, North Carolina	30.26	769.1	30.30	769.6	46	7.8	93	ne.	7	3.1		9cs;ck	0	w.		0	0	cloudy	
Knoxville, Tennessee	29.20	741.7	30.28	769.1	51	10.6	95	calm	0	0			10s;fog		sw.	0	0	clear	
La Crosse, Wisconsin	29.07	738.4	29.91	759.7	40	4.4	48	s.	9	4.0		0	0			0.20	5.1	light rain	
La Mesilla, New Mexico	26.17	664.7	30.18	766.6	44.5	6.9	95	calm	0	0			10 n			0	0	clear	
Leavenworth, Kansas	29.15	740.4	30.10	764.5	33	0.6	60	s.	3	1.3		3 cs	0			0	0	cloudy	
Lewiston, Idaho	29.02	737.1	29.90	759.4	45	7.2	60	se.	2	0.9			10 s		calm	0	0	dense fog	
Little Rock, Arkansas	29.85	758.2	30.18	766.6	53	11.7	93	sw.	2	0.9			fg.			0	0	clear	
Los Angeles, California	29.74	755.4	30.14	765.5	47.3	8.5	77	nw.	5	2.2		0	0			0	0	dense fog	
Louisville, Kentucky	29.59	751.6	30.18	766.6	41	5.0	82	s.	1	0.4			fg.			0.01	0.3	dense fog	
Lynchburg, Virginia	29.56	750.8	30.28	769.1	40.0	4.4	89	calm	0	0			fg.						
Mackinac City, Michigan																0	0	clear	
Madison, Wisconsin	28.91	734.3	30.00	762.0	34	1.1	72	s.	9	4.0		0	0			0	0	clear	
Marquette, Michigan	29.05	737.9	29.83	757.7	31	— 0.6	68	w.	1	0.4		0	0			0	0	clear	
Mason, Texas	28.48	723.4	30.21	767.3	52	11.1	86	calm	0	0		0	3 s		calm	0	0	cloudy	
Memphis, Tennessee	29.86	758.4	30.21	767.3	55	12.8	93	sw.	2	0.9			10s;fg			0	0	clear	
Milwaukee, Wisconsin	29.20	741.7	30.00	762.0	38	3.3	62	sw.	10	4.5		1 cs	fg.						

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.22	767.6	30.26	768.6	62	16.7	93	w.	2	0.9	.....	2 ck	3ks;fg	w.	w.	0	0	fair	
Montgomery, Alabama	30.05	763.3	30.29	769.4	60.8	16.0	85	e.	8	3.6	.....	.....	10 s	.....	.....	0.74	18.8	threatening.	
Moorhead, Minnesota	28.63	727.2	29.73	755.1	28.3	— 2.1	88	s.	4	1.8	.....	.....	10 s	.....	s.	0	0	cloudy	
Morgantown, W. Virginia	29.21	741.9	30.28	769.1	34.0	1.1	79	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Mt. Washington, N. H.	23.60	599.4	30.22	767.6	11.8	—11.2	89	nw.	54	24.1	.....	.....	fg	.....	nw.	0	0	light fog	
Nashville, Tennessee	29.65	753.1	30.21	767.3	50.8	10.4	85	calm	0	0	.....	5 ck	0	sw.	.....	0	0	fair	
New Haven, Connecticut	30.11	764.8	30.23	767.8	30	— 1.1	88	calm	0	0	.....	0	sk	.....	.....	0	0	dense smoke	
New London, Connecticut	30.19	766.8	30.24	768.1	33	0.6	100	calm	0	0	.....	.....	fg	.....	.....	0	0	dense fog	
New Orleans, Louisiana	30.18	766.6	30.24	768.1	66.0	18.9	97	se.	3	1.3	.....	.....	fg	.....	.....	0.06	1.5	dense fog.	
Newport, Rhode Island	30.18	766.6	30.23	767.8	37.6	3.1	77	sw.	6	2.7	.....	1 cs	1 s; sk	calm	calm	0	0	clear	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd.	30.21	767.3	30.24	768.1	37.2	2.9	82	sw.	9	4.0	.....	0	0	.....	.....	0	0	clear	
New York, New York	30.06	763.5	30.24	768.1	36	2.2	89	sw.	5	2.2	.....	2 cs	0	.....	.....	0	0	clear	
Norfolk, Virginia	30.27	768.8	30.30	769.6	45	7.2	76	calm	0	0	.....	.....	10 s	.....	.....	0.13	3.3	cloudy	
North Platte, Nebraska	26.94	684.3	30.04	763.0	25.6	— 3.6	78	calm	0	0	.....	0	0	.....	.....	0	0	clear	
Olympia, Washington T'y	29.95	760.7	29.99	761.7	43.0	6.1	83	sw.	10	4.5	.....	0	5 s	.....	calm	0.49	12.4	fair	
Omaha, Nebraska	28.77	730.7	30.04	763.0	36.5	2.5	50	sw.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	30.19	766.8	30.22	767.6	—22.4	—30.2	80	ssw.	20	8.9	.....	hz	7 s	.....	.....	0	0	cloudy	
Oswego, New York	29.73	755.1	30.08	764.0	38.0	3.3	53	s.	6	2.7	.....	4 c	0	w.	.....	0	0	fair	
Palestine, Texas	29.56	750.8	30.14	765.5	60	15.6	70	se.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
Pensacola, Florida	30.23	767.8	30.26	768.6	65.2	18.4	97	sw.	2	0.9	.....	.....	10 s	.....	w.	0	0	cloudy	
Philadelphia, Pa	30.15	765.8	30.26	768.6	39	3.9	73	sw.	4	1.8	.....	0	hz	.....	.....	0	0	clear	
Pike's Peak, Colorado	17.54	445.5	30.26	768.6	7	—13.9	69	nw.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Pioche, Nevada	24.11	612.4	30.27	768.8	19	— 7.2	73	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.37	746.0	30.23	767.8	40.0	4.4	65	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Port Eads, Louisiana	30.25	768.3	30.26	768.6	60.2	15.7	100	n.	5	2.2	.....	.....	fg	.....	.....	0.01	0.3	dense fog.	
Port Huron, Michigan	29.35	745.5	30.08	764.0	34.0	1.1	82	sw.	8	3.6	.....	2 cs	0	calm	.....	0	0	clear	
Portland, Maine	30.10	764.5	30.15	765.8	33	0.6	78	sw.	7	3.1	.....	.....	10 s	.....	sw.	0	0	cloudy	
Portland, Oregon	29.99	761.7	30.06	763.5	45.0	7.2	93	sw.	9	4.0	.....	.....	10 n	.....	sw.	0.14	3.6	light rain	
Portsmouth, N. Carolina	.....	.....	.....	.....	52	11.1	80	ne.	10	4.5	.....	.....	10 s	.....	ne.	0.02	0.5	cloudy	
Prescott, Arizona	24.78	629.4	30.14	765.5	24	— 4.4	67	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Provincetown, Mass	30.19	766.8	30.22	767.6	34	1.1	88	sw.	4	1.8	.....	2 c	2 s	w.	.....	0	0	fair	
Punta Rassa, Florida	30.28	769.1	30.29	769.4	66.5	19.2	92	ne.	5	2.2	.....	1 c	1 s	w.	calm	0	0	clear	
Red Bluff, California	29.83	757.7	30.21	767.3	39.0	3.9	96	nw.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Rio Grande City, Texas	29.87	758.7	30.12	765.0	65	18.3	84	nw.	6	2.7	.....	.....	10 s	.....	calm	0	0	cloudy	
Rochester, New York	29.40	746.7	30.11	764.8	36	2.2	69	sw.	8	3.6	.....	3 cs	0	nw.	.....	0	0	clear	
Roseburg, Oregon	29.62	752.3	30.19	766.8	44.5	6.9	82	s.	1	0.4	.....	.....	10 s	.....	.....	0	0	cloudy	
Sacramento, California	30.09	764.3	30.17	766.3	41.0	5.0	82	se.	5	2.2	.....	0	0	.....	.....	0	0	clear	
St. Louis, Missouri	29.50	749.3	30.14	765.5	42.0	5.6	80	s.	9	4.0	.....	0	0	.....	.....	0	0	clear	
St. Paul, Minnesota	28.89	733.8	29.83	757.7	34.0	1.1	66	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	
St. Vincent, Minnesota	28.85	732.8	29.82	757.4	5	—15.0	100	n.	17	7.6	.....	.....	10 n	.....	calm	inap.	inap.	light snow	
Salt Lake City, Utah	25.70	652.8	30.26	768.6	20	— 6.7	46	nw.	4	1.8	.....	.....	10 s	.....	.....	0	0	cloudy	
San Antonio, Texas	29.43	747.5	30.15	765.8	56.6	13.7	93	ne.	5	2.2	.....	.....	10 n	.....	.....	0.34	8.6	light rain	
San Diego, California	30.03	762.7	30.10	764.5	46.6	8.1	55	n.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Sandusky, Ohio	29.43	747.5	30.15	765.8	39	3.9	65	s.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Sandy Hook, New Jersey	30.21	767.3	30.25	768.3	35.5	1.9	79	sw.	7	3.1	.....	0	0	.....	.....	0	0	clear	
San Francisco, California	30.12	765.0	30.19	766.8	47	8.3	93	sw.	6	2.7	.....	.....	10 s	.....	sw.	0	0	cloudy	
Santa Fé, New Mexico	23.23	590.0	30.27	768.8	23.3	— 4.8	46	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Savannah, Georgia	30.19	766.8	30.28	769.1	58.5	14.7	85	ne.	8	3.6	.....	.....	10 ks	.....	ne.	0.01	0.3	cloudy	
Shreveport, Louisiana	29.95	760.7	30.20	767.1	59	15.0	93	s.	1	0.4	.....	.....	10 s	.....	.....	0.11	2.8	cloudy	
Silver City, New Mexico	24.23	615.4	30.08	764.0	39	3.9	92	s.	4	1.8	.....	.....	10 n	.....	s.	0.28	7.1	light rain	
Sitka, Alaska	30.07	763.8	30.14	765.5	14	—10.0	64	ne.	16	7.2	.....	0	0	.....	.....	0	0	clear	
Smithville, North Carolina	30.23	767.8	30.27	768.8	54	12.2	100	ne.	5	2.2	.....	.....	10 n	.....	.....	0.25	6.3	heavy rain	
Spokane Falls, Wash. Ter.	27.73	704.3	29.86	758.4	36	2.2	82	sw.	25	11.2	.....	.....	10 s	.....	sw.	0	0	cloudy	
Springfield, Illinois	29.38	746.2	30.11	764.8	40	4.4	73	s.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Springfield, Massachusetts	30.07	763.8	30.21	767.3	28.3	— 2.1	84	e.	2	0.9	.....	0	fg	.....	.....	0	0	clear	
Springfield, Mo	28.66	728.0	30.23	767.8	40.5	4.7	82	s.	5	2.2	.....	0	7 s	.....	s.	inap.	inap.	fair	
Stockton, Texas	27.06	687.3	30.20	767.1	49.0	9.4	100	calm	0	0	.....	.....	10 s	.....	sw.	0.11	2.8	cloudy	
Thatcher's Island, Mass	30.15	765.8	30.21	767.3	35.5	1.9	84	sw.	10	4.5	.....	5 ck	0	.....	.....	0	0	fair	
Toledo, Ohio	29.39	746.5	30.13	765.3	38	3.3	62	s.	10	4.5	.....	0	0	.....	.....	0	0	clear	
Tucson, Arizona	27.53	699.2	30.01	762.2	51	10.6	93	calm	0	0	.....	.....	10 n	.....	.....	0.14	3.6	light rain	
Umatilla, Oregon	29.58	751.3	29.96	761.0	43.6	6.4	70	w.	2	0.9	.....	0	4 s	.....	w.	0	0	fair	
Uvalde, Texas	29.16	740.7	30.16	766.1	56	13.3	93	e.	4	1.8	.....	.....	10 s	.....	calm	0.32	8.1	cloudy	
Vicksburg, Mississippi	29.94	760.5	30.21	767.3	60	15.6	93	se.	2	0.9	.....	.....	10 s	.....	se.	0.15	3.8	cloudy	
Visalia, California	29.78	756.4	30.16	766.1	38	3.3	86	se.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Washington, D. C	30.15	765.8	30.27	768.8	37.0	2.8	89	calm	0	0	.....	0	fg	.....	.....	0	0	clear	
West Los Animas, Colorado	25.94	658.9	30.08	764.0	17	— 8.3	70	nw.	8	3.6	.....	0	1 s	.....	calm	0	0	clear	
Wickenburg, Arizona	.....	.....	.....	.....	35	1.7	81	calm	.....	.....	0	5 k	0	nw.	.....	0	0	fair	
Williamsport, Pa	29.60	751.8	30.22	767.6	27	— 2.8	88	calm	0	0	.....	.....	10 ks	.....	nw.	0	0	cloudy	
Wilmington, N. Carolina	30.20	767.1	30.26	768.6	57	13.9	93	s.	1	0.4	.....	.....	10 n	.....	calm	0.15	3.8	light rain	
Winnemucca, Nevada	25.66	651.8	30.18	766.6	23	— 5.0	73	s.	9	4.0	.....	0	0	.....	.....	0	0	clear	
Wood's Holl, Mass	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Yankton, Dakota	28.51	724.1	29.93	760.2	34	1.1	61	sw.	13	5.8	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	29.89	759.2	30.04	763.0	52.8	11.6	34	n.	5	2.2	.....	0	1 s	.....	n.	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1	.....	.....	49.0	9.4	87	calm	0	0	.....	.....	10 s	.....	.....	0	0	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.10	764.5	30.11	764.8	76	24.4	85	e.	.....	.....	.....	2 k	5 ks	e.	e.	0.80	20.3	fair	J. A. Racker.
Buenaventura, U. S. C.	30.02	762.5	30.04	763.0	76	24.4	90	calm	0	0	.....	.....	10 ks	.....	s.	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.98	761.5	30.00	762.0	75	23.9	90	e.	.....	.....	.....	2 c	0	.....	.....	0.394	10.0	clear	B. Bigar.
Havana, Cuba, W. I.	30.26	768.6	30.31	769.9	72	22.2	76	se.	1.2	0.5	.....	0	2 ks	.....	calm	0	0	fair	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.14	765.5	30.15	765.8	70.7	21.5	88	n.	1	0.4	.....	0	1 s	.....	e.	0.01	0.3	fair	Robert Johnstone
Navassa, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Everett.
Paramaribo, S. A.	30.07	763.8	30.07	763.8	77	25.0	86	e.	.....	.....	2	5 k	6 ps	e.	e.	0.090	2.3	.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.55	750.6	30.01	762.2	80	26.7	80	calm	.....	.....	0	1 ck	2 ks	calm	calm	0	0	fair	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.02	0.5	.....	Earl Flint.
Santiago de Cuba, W. I.	30.16	766.1	30.19	766.8	73	22.8	76	n.	4.8	2.1	.....	3 c	0	.....	.....	0	0	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.89	759.2	29.95	760.7	—29.0	—33.9	.....	e.	37	16.5	.....	.....	10 n	.....	e.	0.10	2.5	.....	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Vigo, Spain	30.54	775.7	56	13.3	87	ene.			1		0	wsw.				2	w.	d. clouds	Capt. E. H. Murray.
H. M. S. Albatross, N. 22° 12′, E. 113° 50′	30.00	762.0	67	19.4		ese.			1-2		10							foggy	Capt. A. J. Errington.
H. M. S. Alert, N. 6° 04′, E. 81° 18′	29.86	758.4	80	26.7	84	ne.			var.		7							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.57	776.5	58	14.4	64	ne.			2-3		5	ene.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 12° 02′, E. 58° 11′	29.97	761.2	77	25.0	90	n.			5		9	n.				5	nnw.	misty	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.86	758.4	76	24.4	69	wsw.			3-4		3	w.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S. 39° 42′, E. 24° 02′	29.72	754.9	70.2	21.2	93	n.			2-3		1	nw.				2	ene.	misty	Capt. A. T. Dale.
H. M. S. Dido, N. 13° 09′, W. 61° 14′	30.10	764.5	77	25.0		e.			1-3		4	ne.						showery	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.22	767.6	66	18.9	86	ssw.			2-3		9	ssw.						gloomy	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 40° 00′, W. 58° 14′	29.95	760.7	63.5	17.5	97	ne.			1		10					1-2	ne.	misty	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 8° 50′, E. 41° 23′	29.80	756.9	83	28.3		calm			0		5					1	wsw.	raining	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt. C. A. G. Bridge.
H. M. S. Fawn, Aden, Arabia	29.96	761.0	73.5	23.1	95	e.			3		9							d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.06	763.5	46.5	8.1	81	calm			0		10	nw.						misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 13° 35′, W. 79° 30′	30.00	762.0	75	23.9	74	se.			3		5					1 2	se. s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.84	757.9	51	10.6	86	w.			3		10							overcast	Capt. L. F. Jones.
H. M. S. Inconstant, N. 14° 00′, E. 110° 00′	29.87	758.7	77.5	25.3	92	se.			2-3		0					2	se.	blue sky	Capt. E. H. Seymour.
H. M. S. Iris																			
H. M. S. Iron Duke, N. 22° 57′, E. 113° 24′	29.80	756.9	65	18.3	83	sse.			3		9	se.				1		d. clouds	Capt. R. E. Tracey. Lieut. C. F. Oldham
H. M. S. Lark																			
H. M. S. Liffey, Coquimbo, Chili	30.01	762 2	63	17.2		calm			0		10							overcast	Capt. J. T. R. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.95	760.7	59	15.0	87	e.			1-2		1	w.						blue sky	Capt. J. E. Erskine.
H. M. S. Northampton, N. 10° 00′, W. 76° 40′	29.93	760.2	78	25.6	84	nne.			6		4	nne.				3	nne.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 12° 26′, E. 44° 40′	29.77	756.1	81.5	27.5	92	ssw.			1		10							d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 37° 07′, W. 30° 59′	30.37	771.4	62.5	16.9	97	e.			4		4					3	ese.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix, N. 12° 45′, W. 83° 12′	30.06	763.5	79	26.1	86	ne.			3		5	ne.				4	ne.	d clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, Cape Coast Castle; Africa	29.91	759.7	82	27.8	100	ssw.			1		1							blue sky	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.17	766.3	55	12.8		nw.			1		0							blue sky	Capt. W. H Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id.	29.91	759.7	38	3.3	?	wsw.			4		4							squally	Lieut. V. B. Orlebar. Capt. M. Byles.
H. M. S. Sea Gull																			
H. M. S. Thalia, N. 44° 26′, W. 10° 23′	30.53	775.4	53	11.7		wnw.			5		3					4	wsw.	d. clouds	
H. M. S. Triumph, S. 13° 28′, W. 79° 16′	30.05	763.3	74	23.3	81	se.			2		3	se.				3	se.	d. clouds	Capt. A. H. Markham. Capt. J. E. Stokes.
H. M. S. Tyne																			Com. W. S. Brown.
H. M. S. Urgent, Port Royal, Jamaica W. I.	30.09	764.3	74	23.3		calm			0		4							d. clouds	
H. M. S. Woodlark, Muscat, Arabia	30.00	762.0	69.5	20.8	40	nw.			4-6		5	nw.				4-5	nw.	squally	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon																			
Quanza																			C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 9° 22′, W. 79° 54′	29.97	761.2	74.8	23.8	98	ne.			2		6							misty	Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.20	767.1	66	18.9	89	sw.	5	2.2			10		sw.	0	0			cloudy	
N. Yard, Portsmouth, N. H.	30.16	766.1	27	— 2.8		calm	0	0			9		sw.	0	0			cloudy	
Naval Hospital																			
Yokohama, Japan	29.95	760.7	43.5	6.4	72	calm			0		5		w.	0	0			clearing	
Adams,																			
Callao, Peru	29.76	755.9	69	20.6	95	sse.			1		8			0	0	gr'd		cloudy	
Alaska,																			
Valparaiso, Chili	29.99	761.7	63	17.2	72	calm			0		0			0	0	sm'h		clear	
Alert,																			
S. 0° 07′, E. 105° 05′*	29.76	755.9	83	28.3	83	ne.			3		2		ne.			sm'h		hazy	
Alliance,																			
Norfolk, Va	30.23	767.8	47	8.3	77	calm			0		8			0	0			cloudy	
Ashuelot,																			
Tientsin, China	30.01	762.2	30	— 1.1	100	sw.			1		0							clear	
Brooklyn,																			
S. 52° 40′, W. 69° 53′	29.73	755.1	52	11.1	86	wsw.	15	6.7			2		sw.	0	0	sm'h		fair	
Colorado,																			
New York, N. Y	30.24	768.1	34	1.1	?	sw.	1	0.4			0			0	0			clear	
Essex,																			
Teneriffe, Canary Id	30.35	770.9	66	18.9	74	se.			3		2		se.			sm'h	se.	clear	
Franklin,																			
Norfolk, Va	30.30	769.6	46	7.8	84	ese.	1	0.4			8		w.	0.01	0.3			cloudy	
Galena,																			
Villafranca, France	30.49	774.4	54	12.2	74	s.			1		0					sm'h		clear	
Independence,																			
N. Yard, Mare I'd, Cal	30.15	765.8	45	7.2	84	calm	0	0			0			0	0			clear	
Kearsarge,																			
New Orleans, La	30.22	767.6	66	18.9	94	calm			0									foggy	
Lackawanna,																			
Valparaiso, Chili*	29.93	760.2	60	15.6	94	calm			0		2		n.					clear	
Lancaster,																			
Alexandria, Egypt	30.33	770.4	54	12.2	87	nw.			2–5		8		nw.			sm'h		fair	
Marion,																			
S. 32° 22′, E. 30° 36′	29.75	755.6	79	26.1	86	nne.			6		0					r'gh	nne.	clear	
Michigan,																			
Erie, Pa	30.10	764.5	41	5.0	74	s.			3		0							clear	
Minnesota,																			
Newport, R. I	30.23	767.8	39	3.9	100	sw.	6	2.7			2		calm					fair	
Monocacy,																			
Yokohama, Japan	30.17	766.3	43	6.1	92	calm			0		5							fair	
Nipsic,																			
Gibraltar, Mediterranean.	30.55	776.0	59	15.0	70	nw.			4		8		e.			sm'h		squally	
Onward,																			
Callao, Peru†	30.09	764.3	68	20.0	95	sse.			3		10		nnw.			long	w.	cloudy	
Palos,																			
Hong Kong, China	29.89	759.2	65	18.3	100	calm			0		8		wnw.					cloudy	
Passaic,																			
Washington, D. C	30.26	768.6	35	1.7	100	calm			0		0							clear	
Pensacola,																			
S. 36° 35′, W. 73° 02′	30.09	764.3	63	17.2	78	se.			1		0			0	0	long	s.	clear	
Powhatan.																			
San Juan; Porto Rico, W. I	30.22	767.6	71	21.7	90	ene.			2		5?		e.					cloudy?	
Quinnebaug,																			
N. 33° 15′, E. 25° 45′	30.30	769.6	55	12.8	56	nnw.	8	3.6			8		nnw.			long r'gh	nnw.	fair	
Ranger,																			
N. 19° 34′, W. 105° 07′*	29.99	761.7	66	18.9	79	wsw.			1		0			0	0	sm'h		clear	
Richmond,																			
N. 21° 56′, E. 156° 08′*	29.98	761.5	72	22.2	71	nne.			3		5		ne.	0.055	1.4	mod.	ne.	fair	
Shenandoah,																			
S. 25° 36′, W. 35° 06′*	30.08	764.0	77	25.0	82	ene.			4		10		ene.			r'gh	ne.	cloudy	
St. Louis,																			
Leagne Island, Pa	30.45	773.4	36	2.2	80	sw.	2	0.9			0			0	0			clear	
Swatara,																			
Yokohama, Japan*	29.98	761.5	47	8.3	70	calm			0		0					sm'h		hazy	
Tennessee,																			
Fort Monroe, Va	30.30	769.6	44	6.7	92	ene.	2	0.9			8			0	0	sm'h		fair	
Vandalia,																			
Aspinwall, Panama*†	30.08	764.0	78	25.6	86	nne.			2		5		nne.					fair	
Wabash,																			
Boston, Mass	30.17	766.3	34	1.1	89	wsw.	4	1.8			5		w.	0	0			fair	
Wachusetts.																			
Esquimalt, B. C	29.91	759.7	42	5.6	91	wsw.			1		10		calm					squally	
Wyoming,																			
Port Royal, S. C	30.26	768.6	59	15.0	88	ne.	10	4.5			10			0.30	7.6			raining	
Yantic,																			
N. 10° 35′, W. 80° 10′*	29.97	761.2	77	25.0	86	ne.			5		5		ne.			mod.	nne.	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 43° 25′, W. 67° 15′	30.43	772.9	35	1.7	100	sw.	3	.....	3	.....	sw.	0	0	sm'h	.....	d. clouds	C. Gapon, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, Boston, Mass*	29.96	761.0	32	0.0	.....	ssw.	2	.....	3	.....	sw.	0	0	.....	.....	clear	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, Greenock, Scotland*	29.82	757.4	37	2.8	.....	w.	6	.....	9	.....	w.	.....	.....	sm'h	.....	snowy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 50° 44′, W. 31° 28′*	30.52	775.2	45	7.2	.....	sw.	5	.....	8	.....	wsw.	0	0	high	wsw.	cloudy	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 50° 01′, W. 26° 04′	30.52	775.2	46	7.8	92	wsw.	6	.....	2?	.....	wsw.	.....	.....	mod.	wsw.	overcast?	Chauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	29.87	758.7	45	7.2	67	wnw.	3	.....	5	.....	w.	0	0	.....	.....	fine	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, N. 41° 49′, W. 50° 21′*†	30.04	763.0	47	8.3	92	s.	4	.....	9	.....	sse.	.....	.....	chop	sw.	overcast	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 40° 30′, W. 70° 10′*†	30.36	771.1	44	6.7	.....	s.	1	.....	0	.....	.....	.....	.....	light	s.	very fine	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Daw, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 27° 18′, W. 74° 08′*	30.39	771.9	70	21.1	.....	calm	0	.....	7	.....	se.	0	0	mod.	ese.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Cartagena, U. S. C*†	29.81	757.2	75	23.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. F. de Echevarrieta, Maracaibo, Venezula, S. A.	.....	.....	.....	.....	.....	ne.	2	.....	.....	.....	.....	.....	.....	.....	.....	fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 18° —′, W. 77° —′	29.68	753.9	.....	.....	.....	e.	4	.....	0	.....	.....	0	0	sm'h	.....	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 50° 37′, W. 43° 59′	29.91	759.7	48	8.9	.....	w.	4	.....	7	.....	.....	.....	.....	.....	.....	blue sky	.....
Baroda, Capt. C. J. Russell, S. 8° 35′, W. 31° 00′	30.01	762.2	81.6	27.6	78	ese.	3	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Caldew, Capt. W. Peterson S. 46° 48′, W. 40° 04′	30.00	762.0	54.2	12.3	.....	ssw.	6	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Cipero, Capt. W. N. Lailey Georgetown, British Guiana, S. A.	30.08	764.0	80	26.7	66	ne.	3	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. City of Agra, Capt. Thos. Young, N. 48° 46′, W. 9° 50′	30.33	770.4	48.5	9.2	.....	wnw.	6	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Coppename, Capt. James Buchan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Gordon Castle, Capt. W. Waring, N. 43° 27′, W. 10° 18′	30.59	777.0	55.5	13.1	75	nne.	4	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Hermine, Capt. S. G. Jones	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hope, Capt. James Campbell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery, N. 3° 36′, W. 45° 10′	29.99	761.7	79.2	26.2	86	n.	5	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 22° 55′, E. 3° 10′	30.09	764.3	75.6	24.2	76	se.	3	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 57° 02′, W. 75° 35′	29.35	745.5	46	7.8	92	wsw.	6	.....	10	.....	.....	.....	.....	.....	.....	squally	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	29.96	761.0	78.9	26.1	78	ne.	3	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. J. Smith, N. 31° 58′, W. 41° 45′	30.22	767.6	58.7	14.8	93	nnw.	5	.....	9	.....	.....	.....	.....	.....	.....	showery	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry, S. 11° 26′, E. 78° 49′	29.78	756.4	83	28.3	74	e.	4	.....	9	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Strathleven, Capt. H. W. Pearson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 43° 00′, W. 58° 08′*†	30.22	767.6	.....	.....	.....	wnw.	4	.....	3	.....	n.	0	0	long	s.	clear	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 28° 00′, W. 80° 00′†*	30.30	769.6	72	22.2	.....	w.	.....	.....	2	.....	se.	.....	.....	mod.	e.	clear	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Stembridge, 3d offi.
S. S. Gallia, Capt. W. H. P. Hains, N. 40° 32′, W. 72° 21′†	30.32	770.1	44	6.7	100	w.	3	.....	0	.....	.....	0	0	sm'h	.....	clear	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul, N. 40° 27′, W. 71° 00′	30.19	766.9	41.0	5.0		sw.	2		0			0	0			clear	
S. S. France, Capt. Périer d'Hauterive,																	
S. S. St. Laurent, Capt. A. Sérvan, N. 49° —′, W. 23° 40′*†	30.71	780.0	50.0	10.0		sw.	4					0	0	sm'h	sw.		A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein,																	
S. S. Silesia, Capt. A. Albers																	
S. S. Wieland, Capt. C. Hebich, N. 49° 16′, W. 37° 16′*	30.17	766.3	53	11.7		ssw.	6		8		ssw.	0	0	5	sw.	stormy	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch																	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt. Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 30° —′, W. 47° —′*†.	30.22	767.6	82	27.8		ene.	3		4		ene.	1 h'r	1 h'r	high	se.	clear.	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, New York, N. Y.*†	30.38	771.6	32	0.0		nw.	2		6			0	0			clear	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann,																	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,																	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, Santiago, Cuba, W. I†	30.22	767.6	73	22.8		nne.	2		0			0	0			clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Alisa, Capt. J. W. Sansom, N. 18° 32′, W. 74° 42′† [man	30.16	766.1	79	26.1		var.	2–3								n.	fine	
S. S. City of Alexandria, Capt. L. F. Timmer-																	
S. S. City of Washington, Capt. J. W. Rey- N. 23° 00′, W. 85° 00′*† [nolds	30.40	772.1	80	26.7		e.	3								w.	fine	
S. S. Elbe, Capt. W. Willigerod N. 43° 06′, W. 52° 15′*	30.04	763.0	38.3	3.5		nne.	3							high	w.	rainy	
S. S. Lessing, Capt. B. Voss, N. 41° 12, W. 65° 59′*†	30.17	766.3	38	3.3		wsw.	2							4	wsw.	clear	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke N. 50° 15′, W. 15° 00′*†	30.50	774.7	53.5	11.9		nnw.	6								nw.	showery	
S. S. P. Caland, Capt. E. Deddes, N. 47° 11′, W. 46° 16′	30.15	765.8				wsw.	2								w.	cloudy	
S. S. Schiedam. Capt. E. M. Chevalier, N. 40° 52′, W. 67° 50′	30.24	768.1	46	7.8		ssw.	3							sm'h		clear	
S. S. Scythia, Capt. M. Murphy																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur																	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 50° 38′, W. 0° 39′*?	29.89	759.2	44.4	6.9		sw.	6		10		sw.	rain	rain	r'gh	sw.		G. H. Lose, 3d officer. Sander & Walter.
S. S. Leipzig, Capt. Fritz. Pfeiffer,																	
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	29.76	755.9	43.7	6.5		ssw.	6		8		ssw.	10 h'r	10 h'r			raining	
S. S. Mosel, Capt. F. Hesse,																	J. Hesse.
S. S. Neckar, Capt. R. Bussius, N. 49° 34′, W. 5° 58′	30.18	766.6	43.7	6.5		nw.	8		7		nw.	2 h'r	2 h'r	high	wnw.	squally.	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger, S. 34° 12′, W. 51° 18′*	29.89	759.2	77.0	25.0	86	ene.	3		0			0	0	2	ene.	clear	
S. S. Oder, Capt. C. Undeutsch, Dungeness, Eng*	29.91	759.7	43.4	6.3		nw.	5		9		nw.	rain	rain	mod.	n.	misty	Montz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, N. 32° 12′, W. 54° 50′	30.49	774.4				sw.	3		2		s.	0	0			fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch																	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 33° 03′, E. 148° 40′†	30.04	763.0	60	15.6	76	nnw.	6		5		nnw.	0	0	high	nw.	fair	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, San Francisco, Cal			45	7.2	92	ne.	2		5?		se.					cloudy?	
S. S. Oceanic, Capt. J. Metcalfe, N. 36° 46′, E. 148° 00′*	30.01	762.2	42	5.6	65	nw.	6		7?		nw.			7	nne.	overcast?	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*	30.32	770.1				ne.	2		10							threatening.	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Tybee Roads, Ga*	30.37	771.4	64	17.8	89	var.	1		10		ne.					rainy	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes,																	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer N. 40° 00′, W. 124° 20′*†	30.28	769.1	46	7.8	92	nnw.	2		7		n.			long	wnw.	drizzling	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d off.
S. S. Columbia, Capt. Fred. Bolles N. 45° 58′, W. 124° 10′†	30.08	764.0	46	7.8	85	wnw.	3		8		nnw.			mod.	nw.	cloudy	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†.	30.15	765.8	51	10.6	86	s.	1		10		se.					hazy	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†.	30.13	765.3	47	8.3	92	sw.	1		10							gloomy	
S. S. Geo. W. Elder, Capt. H. G. Morse, Puget Sound†	29.98	761.5	42	5.6		sse.	2		10		s.	light	light	sm'h		cloudy	
S. S. Idaho, Capt. H. M. Hayward, San Francisco, Cal†.	29.97	761.2	48	8.9	85	sw.	2		10							overcast	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 34° 26′, W. 120° 28′†	30.07	763.8	54	12.2	38	nw.	5		1		w.			sm'h	nw.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace. San Francisco Cal†	30.31	769.9	48	8.9	85	s.	1		10			0	0			hazy	
S. S. State of California, Capt. G. Debney, Portland, Oregon†	30.05	763.3	45	7.2	?	se.	4		10		se.					raining	
S. S. Victoria, Capt. W. E. Plummer, San Francisco, Cal.†	30.18	766.5	47	8.3	92	sw.	3		10							cloudy	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh																	
S. S. City of New York, Capt. W. B. Cobb, N. 19° 10′, W. 158° 30′†	30.14	765.5	74	23.3	85	ene.	5		8		ne.	0	0	h'vy	ne.	cloudy	W. H. Hawes, 2d offi.
S. S. City of Rio de Janeiro, Capt. Cavarly.																	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, Sydney, N. S. W.†	30.19	766.8	83	28.3	64	ene.	3		5		ene.	0	0	sm'h		fair	E. Le Saik.
S. S. City of Tokio, Com. J. Maury Hong Kong, China			69	20.6	84	calm	0		10			0	0			cloudy	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 23° 05′, W. 106° 58′†	30.09	764.3	66	18.9	94	ne.	3		3		ne.	0	0	sm'h	ne.	hazy	
S. S. Grenada, Capt. M. Connolley, N. 7° 12′, W. 80° 04′†	29.96	761.0	77	25.0	100	nnw.	2		0			0	0			clear	
S. S. South Carolina, Capt. W. J. Russell, Panama, Panama..†	30.09	764.3	77	25.0	77	ne.	2		5		e.	0	0	sm'h		fair	A. W. Hart, 2d offi.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.00	762.0	75	23.9	76	calm	0		0							fine	
QUEBEC S. S. CO. *E. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M. Faircloth																	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 27° 34′, W. 66° 26′						se.	2		0			0	0	long	se.		G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes, Antwerp, Belgium*†	29.98	761.5	46	7.8		wnw.	5		6		wnw.	5 h'r	driz	sm'h		cloudy	
S. S. Nederland, Capt. J. Uberweg, Antwerp, Belgium			47	8.3		wsw.	5		10		sw.	4 h'r	h'vy			overcast	Athrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, N. 45° 04′, W. 48° 55′*	30.30	769.6	33	0.6		ne.	1		10			0.3	8.	mod.	ssw.	rainy	C. H. Grant, 2d offi.
S. S. Switzerland, Capt. J. C. Jamison,																	Egmond & Ludder.
S. S. Vaderland. Capt. W. A. Beynon																	
S. S. Waesland, Capt. H. Nickels, N. 49° 22′, W. 18° 08′*	30.46	773.7	48	8.9		wnw.	5		8		wnw.	5 h'r	rain hail	long	nw.	cloudy	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, New York, N. Y*	30.13	765.3	55.4	13.0	87	sw.	4		1		w.	0	0	sm'h			
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 49° 10′, W. 43° 47′†	30.18	766.6	36.5	2.5		sw.	2		10		sw.	3 h'r	3 h'r	long r'gh	sw.	covered	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters																	S. Walters.
WHITE STAR LINE. *R. J. Cortts, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 47° 31′, W. 40° 12′*†	30.08	764.0	55	12.8		wsw.	6		8		sw.	0	0	r'gh	sw.	d. clouds	W. Brownless, 4th offi.
S. S. Celtic, Capt. Benjamin Gleadell, New York, N. Y*†	30.05	763.3	41	5.0	73	w.	2		2		nw.	0	0			fair	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy,																	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving. N. 48° 27′, W. 32° 25′†	30.55	776.0	53	11.7	79	s.	5		5		s.	0	0	mod.	s.	fair	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 47° 11′, W. 27° 38′*	30.57	776.5	50	10.0		ssw.	4		6?		sw.	0	0	mod.	sw.	clear†	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.34	770.6	66	18.9	94	nnw.	1		10s			0	0			overcast	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 34° 15′, W. 60° 35′*†	30.23	767.8	68	20.0		sw.	6		10		sw.	rain	rain	r'gh	ssw.	overcast	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 19° 45′, W. 37° 40′.*†	30.12	765.0	77	25.0		ene.	4		5		e.	0	0	long	nw.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 50° 20′, W. 80 13′*†	30.40	772.1	49	9.4	85	nw.	6		3		sw.	3 h'r	h'vy	high cross	nw.	squally	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. Ponce, Porto Rico, W. I.†*	30.16	766.1	76	24.4		ne.	1		2		e.	0	0			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 2° 52′ W. 25° 05′*†	29.95	760.7	86	30.0		se.	2		1		se.	0	0	sm'h	nnw.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia.																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 43° 29′, W. 34° 10′*†.	30.37	771.4				sse.	1				sw.	shr's	shr's	long mod.	nne.		G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill. S. 48° 30′, W. 63° 12′†	29.90	759.4				w.	3		2		w.	0	0	sm'h	s.	clear	A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	29.68	753.9				nnw.	6		10		nnw.	h'vy	h'vy			rain & hail	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.,																	J. C. Andersen, Jr.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., Washington, D. C†	30.30	769.6	49	9.4	57	calm	0		1		calm	0	0			clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison,																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 22° 30′, W. 35° 14′			76	24.4		s.	2		8		s.	2 h'r	light	sm'h		fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 19° 24′, W. 61° 28′*†	30.00	762.0				ne.	7		10		ne. se.	2 h'r	h'vy	high r'gh	var.	cloudy	
Bk. Geo. Booth, Capt D. Williams, N. 9° 00′, W. 32° 25′*†	29.85	758.2	82	27.8		e.	3					0	0	sm'h		hazy	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 36° 18′, W. 58° 23′*†	30.50	774.7	65	18.3		s.	4				ssw.	rain	rain	r'gh	ssw.	squally	
Schr Henry Denison, Capt. Jno. Fehring,																	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt, S 39° 07′, E. 47° 41′*	30.24	768.1				ene.	3		2		ne.	0	0	mod	e.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte.																	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen, N. 38° 13′. W. 0° 10′*†	30.70	779.8				ese.	4				ese.	2 h'r	light	long	e.	fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 30° 45′ W. 21° 17′*†	30.60	777.2	65	18.3	89	e.	6		5		e.			mod.	e.		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.40	772.1	58	14.4	53	calm	0										G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 22° 07′. W. 28° 58′*†	30.00	762.0				ene.			5		ene.	0	0				J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	30.31	769.9	60	15.6		calm	0		10			½ h'r	½ h'r			rainy	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 18° 47′, W. 34° 43′*	29.87	758.7	81.1	27.3	96	nne.	4		6		e.			mod.	se.	squally	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 27° 10′. W. 28° 38′*†	30.16	766.1	70	21.1	84	sse.	5		5		s.	1 h'r	light	mod.	nw.	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert,																	
S. Wm. Woodbury Capt. H. T. Schmidt, N. 46° 45′, W. 20° 59′*†	30.40	772.1	55	12.8	80	nnw.	4				nw.			mod.	wnw.	clear	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, S. 6° 00′, W. 30° 35′*†	30.00	762.0				se.					se.			light	se.		N. P. Dutton.

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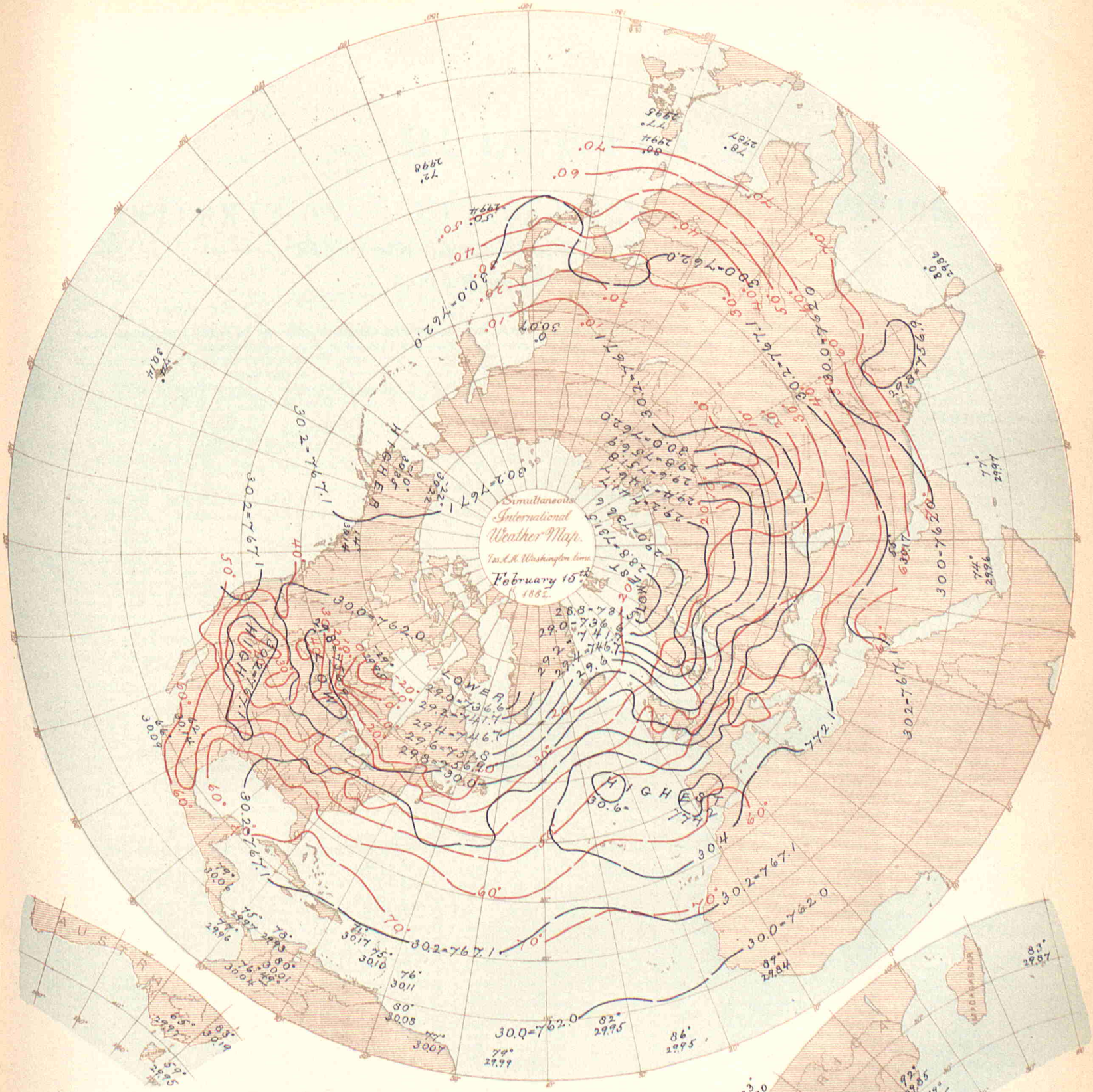
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 16, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.35	770.9	63.0	17.2	80	sw.			4		4			0.024	0.6	cloudy	Moiroud.
Algiers			30.35	770.8	56.5	13.6	93	ne.			1		10			0.677	17.2	covered	Nicolas.
La Calle			30.23	767.9	63.0	17.2	50	n.			1		4			0.039	1.0	cloudy	Fonfrède.
Tunis			30.17	766.2															Jacques.
Sfax																			Gau.
Saida			30.31	769.8	44.6	7.0	82	ne.			2		3			0	0	pretty fair	Dumas.
Tebessa			30.23	767.8	47.1	8.4	62	ene.			1		9			inap.	inap.	covered	Derché.
Geriville					45.7	7.6	69	ne.			8		3			0.244	6.2	pretty fair	Louchamp.
Laghouat			30.31	769.9	48.2	9.0	73	n.			2		4			inap.	inap.	cloudy	Herbin.
Biskra			30.28	769.2	55.8	13.2	75	se.			1		10			0	0	covered	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.85	758.2	29.94	760.5	60.7	15.9	83	sse.	5	2.2			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.74	755.3	30.31	769.8	42.8	6.0	49	ne.			3		10			0.130	3.3		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.43	747.4	30.22	767.7	36.3	2.4	65	wnw.	23.7	10.6			3			0.126	3.2		Dr. Wierzbiski.
Eperies	29.24	742.6	30.14	765.6	40.3	4.6	41	nw.			5	8 cs	0			0	0		Julius Mikolik.
Gratz	29.01	736.9	30.29	769.4	46.4	8.0	38	sw.			2		7			0	0		Andreas Rospini.
Hermannstadt	28.61	726.8	30.08	763.9	44.1	6.7	63	wnw.			6		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.01	736.9	30.43	772.9	33.8	1.0	89	wsw.			1		5			0.063	1.6	fair	The Staff.
Lemberg	29.00	736.7	30.03	762.7	34.9	1.6	61	ne.			4		8			0.024	0.6		Dr. T. Stanecki.
Pola	30.13	765.3	30.24	768.2	48.9	9.4	66	s.			1		10			0	0		I. R. Hydrographic Office.
Szathmar	29.65	753.0	30.11	764.9	37.4	3.0	57	nw.			2		10			0	0		Joseph Midlinszky, S. J.
Szegedin	29.91	759.6	30.20	767.0	41.5	5.3	78	w.			4		10			0	0		Karl Stancel.
Trieste	30.19	766.9	30.30	769.5	44.6	7.0	79	ne.			3		10			0.276	7.0		Rieder.
Vienna	29.61	752.2	30.36	771.2	40.6	4.8	44	nw.			3		1			0.024	0.6		I. R. Central Met. Obs'y
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.61	752.1	29.71	754.6	48.2	9.0	56	w.	17	7.6			4			0	0	blue sky	W. Boswell.
Armagh, Observatory	29.92	760.0	30.17	766.3	46.3	9.1	85	w.	21	9.4			10			blank	blank	squally	S. Call.
Bidston, Liverpool Obs'y			30.19	766.8	47.5	8.6	89	wsw.	43	19.2			10					raining	John Hartnup.
Bolton, Sharples	29.62	752.3	30.17	766.3	45.5	7.5	97	wsw.	36	16.1			10					raining	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.67	753.6	30.07	763.8	47.6	8.7	94	w.			6		10			0.10	2.5	raining	J.McLandsborough, F. R.
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	80.0	26.7	74	ne.			2		6					gloomy	Corpl.J.Surgenor,A.H.C.
Cardington			30.29	769.4	44.0	6.7	88	sw.			2.0		10					overcast	John McLaren.
Chatham, School M. E.	30.26	768.6	30.40	772 1	44.9	7.2	77	sw.			2		10					drizzling	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.30	769.6	30.54	775.7	49.2	9.6	87	w.			4		9					overcast	The Staff.
Fort Napier, Natal	27.47	697.7	29.68	753.9	93.3	34.1	27	calm			0		0					blue sky	Pvt. E. K.Anniss,A.H.C.
Free Town, Sierra Leone	29.57	751.1	29.80	756.9	88.0	31.1	66	w			1		3					d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.27	768.8	50	10.0	93	wsw.			3		10			0.05	1.3	showery	J. O'Donaghue.
Gibraltar, Mediterranean	30.38	771.6	30.44	773.2	62.7	17.1	77	ne.			4		6					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	29.69	754.1	29.89	759 2	48.3	9.1	88	w			7		10					squally	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.19	766.8	30.37	771.4	42.7	5.9	89	sw.			4		10					raining	The Staff.
Guernsey	30.25	768.3	30.56	776.2	51.0	10.6	93	wnw.			2		5					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.35	770.9	30.39	771.9	42.9	6.1	81	sw.	19	8.5			10					threatening	The Staff.
Leicester, Museum	30.00	762.0	30.26	768.6	49.6	9.8	93	sw.			3		8					d clouds	J. C. Smith.
Malta, Mediterranean	30.30	769.6	30.37	771.4	58.2	14.6	67	se.			1		7					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.29	769.4	30.33	770.4	72.2	22.3	84	ne.			3		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	30.11	764.8	30.34	770.6	46.3	7.9	81	wsw.			6		10					squally	The Staff.
Plymouth	30.43	772.9	30.50	774.7	47.7	8.7	94	wnw.			2		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			29.50	749.3	43.5	6.4	79	w.	50	22.4			7					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.10	764.5	30.17	766.3	48.8	9.3	52	sw.			1		1					blue sky	W. H. Lyne.
Sheffield	29.84	757.9	30.12	765.0	46.6	8.1	98	wsw.			3		10			0.06	1.5	drizzling	W. F. Cooper.
Silloth Rectory	30.00	762.0	30.03	762.7	45.8	7.7	94	sw.			5		10			0.140	3.6	raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.15	765.8	45.0	7.2	95	w.	26	11.6			10					raining	I. New.
Stratfield Turgiss	30.20	767.1	30.42	772.7	42.3	5.7	90	w.			1.4		9					squally	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.46	773.7	30.51	774 9	53	11.7	79	nw.			6		10					raining	W. Newcombe.
Valencia, Observatory	30.44	773.2	30.47	773.9	48.5	9.2	89	w.	26	11.6			10					drizzling	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.89	759.2	29.92	760.0	74.0	23.3	70	w.	12.1	5.4		0	6s			0.100	2.5	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	30.02	762.5	30.06	763.5	75.0	23.9	55	ssw.	22	9.8		9	9			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.14	765.5	30.18	766.6	29	— 1.7	100	ssw.	2	0.9			10 s			0	0	fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.13	765.3	30.19	766.8	26	— 3.3	96	s.	3	1.3			10 s		s.	0	0	cloudy	G. A. Blair.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.13	765.3	30.15	765.8	27	— 2.8	88	sw.	3	1.3			10 s		calm	0.04	1.0	threatening.	J. McWilliams.
Fort Garry, Manitoba*	29.60	751.8	30.57	776.5	—16	—26.7	100	n.	22	9.8		0	0			0.262	6.6	clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S*	30.12	765.0	30.26	768.6	30	— 1.1	100	w.	3	1.3		2 cs	hz			0	0	fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.74	755.4	30.09	764.3	36	2.2	72	s.	7	3.1		2 c	2 s	w.		0	0	fair	A. P. Knight, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.89	759.2	30.10	764.5	34	— 1.1	72	w.	6	2.7		2 ck	2 ks	w.		0	0	fair	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.24	742.7	29.96	761.0	32	0.0	81	se.	8	3.6		2 cs	0	sw.		0	0	fair	Rev. R. Mosley.
Peterboro, Ontario																			J. Dixon, B. A.
Port Dover, Ontario	29.38	746.2	30.02	762.5	38	3.3	81	s.	3	1.3		5 k	0	s.		0	0	fair	H. Morgan.
Port Stanley, Ontario	29.35	745.5	30.02	762.5	36	2.2	89	e.	8	3.6			10 n		sw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.79	756.7	30.13	765.3	31	— 0.6	88	w.			1	0	2 s			0	0	clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.51	749.5	29.99	761.7	25	— 3.9	88	calm	0	0			10 ks			0	0	cloudy	W. H. McIntyre.
Sangeen, Ontario*	29.20	741.7	29.93	760.2	35	1.7	89	s.	10	4.5		7 cs	0		w.	0	0	cloudy	
St. Andrews, N. B.	30.12	765.0	30.17	766.3	32	0.0	95	calm	0	0		hz	hz			0	0	clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. I. Macgregor, M. A.
Sydney, C. B*	30.14	765.5	30.20	767.1	24	— 4.4	96	sw.	4	1.8		8 c	0	w.		0	0	fair	T. C. Hill, C. E.
Toronto, Ontario*	29.65	753.1	30.04	763.0	33	0.6	96	e.	2	0.9			8 s			0	0	fair	Magnetic Observatory.
Windsor, N. S.																			Prof. W. R. Butler.
Woodstock, Ontario																			Prof. Wolverton
Yarmouth, N. S*	30.16	766.1	30.23	767.8	35	1.7	96	s.	2	0.9		8 k	0	sw.		0	0	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.04	763.0	30.31	769.9	21	— 6.1		w.	1	0.4		0	0			0	0	fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Com't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.01	762.2	30.30	769.6	38.1	3.4	84	wnw.			1		0			0	0		N. Titoushkin.
Sung-shu-chwang†	24.60	624.9			21.0	— 6.1		calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.03	762.8	30.06	763.5	35.6	2.0	82	wnw.	2.7	1.2			10			0	0	covered	M. Marc Dechevrens, S. J.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.87	758.6	29.91	759.8	36.1	2.3	77	nw.	27	12			4						Oversergent Fischer.
Fanöe	29.90	759.4	29.92	759.9	39.4	4.1	84	w.			6		9						Overloerer Lauridsen.
Godthaab, Greenland	29.60	751.9	29.65	753.0	19.4	— 7.0	97	wsw.			5		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.24	742.6	29.28	743.7	23.5	— 4.7		calm			0		8						A. O. Thorlacius.
Thorshavn	29.06	738.1	29.10	739.0	40.6	4.8	78	w.	29	13			8					rain & sleet.	Overloerer Bergh.
Vestervig	29.69	754.0	29.78	756.3	37.9	3.3	80	wsw.			6		10						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	30.02	762.6	30.71	779.9	46.0	7.8	66	nw.			1		kn			0	0		M. Labroue, Director.
Alençon, Normal School	30.06	763.6	30.61	777.6	41.0	5	94	sw.			4		s		ne.	0.165	4.2		M. Nicot, Director.
Arras, Engineer School	30.21	767.4	30.48	774.3	43.3	6.3	76	se.			2		k			0.075	1.9		M. Klein, Commandant.
Avignon, Normal School	30.33	770.4	30.41	772.4	48.2	9	55	n.			4		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.99	761.8	30.58	776.6	41.0	5.0	81	nw.			2		8			0.24	6.	very cloudy	M. Saillard, Director.
Beauvais, Normal School	30.26	768.5	30.54	775.6	45.1	7.3	65	wnw.			1		5		wnw.	0.480	12.2	cloudy	M. Frère Eugène Marié
Besançon, Normal School			30.49	774.5	41.0	5	84	s.			1		10 n		s.	0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	30.38	771.6	30.65	778.5	46.8	8.2	55	nw.			1		5			0.031	0.8	cloudy	M. Rayet, Director.
Bourges, Normal School	29.95	760.8	30.52	775.3	46.4	8	86	w.			1		10 k		w.			raining	M. Postel, Director.
Brest, Naval Observatory	30.39	772.0	30.64	778.2	55.4	13.0	77	wnw.			1		6		wnw.	0.047	1.2		M. de Kennaree, Dir.
Caen, Normal School	30.48	774.1	30.55	776.0	49.6	9.8	76	w.			1		2			0.295	7.5	slightly cl'dy.	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.15	765.8	30.48	774.3	43.2	6.2	73	w.			1		5		wsw.	0.413	10.5	cloudy	M. Jadot, Director.
Charleville, Normal School	29.93	760.3	30.47	773.9	41.4	5.2	67	nw.			1		8			0.20	5.	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.17	741.0	30.60	777.2	39.6	4.2	55	n.			2		8		n.	0.075	1.9	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.71	754.6	30.59	777.0	38.3	3.5	74	n.			2		fg			0.177	4.5	foggy	M. de Villemontée, Dir.
Commercy, Normal School	29.65	753.1	30.56	776.2	39.4	4.1	80	w.			1		5 kn	w.	w.	0.366	9.3	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.70	703.5	30.26	768.7	52.5	11.4	61					c	0			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.10	739.1	30.26	768.7	44.2	6.8	44	nw.			4		2		nw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.64	752.9	30.45	773.4	39.2	4	77	wnw.			4		kn			0.283	7.2		M. Ablard, Director.
Guéret, Normal School	28.96	735.5	30.61	777.5	39.2	4	87	ne.			1		kn		ne.	0.138	3.5		M. Rivoire, Director.
Lamballe, Normal School	30.34	770.5	30.61	777.6	49.1	9.5	67	w.			2		5		w.	0.20	5.	cloudy	M. Olliffrault, Director.
Lescar, Normal School	30.06	763.6	30.65	778.4	50.0	10	50	n.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.58	776.7	30.68	779.3	53.6	12.0	65	wsw.			1		2		nw.	0.118	3.0	¼ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.47	748.4	30.58	776.7	37.9	3.3	66	nnw.			2		10 n		n.	0.098	2.5	covered	M. André, Director.
Mans, Normal School	30.31	769.9	30.63	778.1	44.1	6.7	61	nw.			3		5		nw.	0	0	cloudy	M. Piboen, Director.
Marseille, Observatory	30.00	762.1	30.28	769.1	47.7	8.7	44	n.			4		3		nne.	0	0		M. Stephan, Director
Montlouis l'Instituteur	25.07	636.7	29.91	759.7	29.8	— 1.2	45	nw.	7.4	3.3			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.32	770.0	30.45	773.4	50.4	10.2	40	w.			4		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.72	754.8	30.54	775.6	39.6	4.2	74	sw.			1		10 kn		w.	0.248	6.3	covered	M. Hasse, Director
Nantes, Observatory	30.51	774.9	30.67	779.0	49.3	9.6	56	nw.			0-1	2 c	2 kn	nw.		0.12	3.		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.41	772.4	30.52	775.3	48.7	9.3	41	n.	26.2	11.7			1		nw.	0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.46	545.2			6.4	—14.2		nne.			3		10		nne.	0.244	6.2	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.46	748.2	30.57	776.5	39.2	4	67	n.			3		0			0	0	clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.45	646.4			21.7	— 5.7	98	nnw.			3		8		nnw.	0.138	3.5	foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.62	777.8	30.65	778.6	48.6	9.2	84	w.			1		5		ne.	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.28	769.1	30.50	774.7	47.5	8.6	63	nw.			1		5		nw.	0.08	2.	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.31	719.1	30.56	776.2	38.5	3.6	87	nw.			2		1		sw.	0	0	clear	M. Serger, Director.
Rouen, Normal School	30.49	774.5	30.54	775.7	44.6	7	74	sw.			1		8			0.39	10.	very cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.39	771.8	30.54	775.8	49.6	9.8	79	w.			2		5		nw.	0.295	7.5	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.39	771.8	30.55	776.0	46.0	7.8	61	w.			1		1		nw.	0.291	7.4		M. Renou, Director.
Toulouse, Observatory	29.91	759.7	30.65	778.4	47.7	8.7	66	nw.			3		2		nw.	0.039	1.0	slightly cl'dy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.04	762.9	30.53	775.4	44.2	6.8	62	nw.			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.27	768.8	30.56	776.2	45.5	7.5	62	wnw.			1		2		nw.	0.425	10.8		M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.56	750.8	30.43	772.8	37.4	3.0	60	ssw.			3	0	2 k		sw.	0.315	8.0		Prof. Dr. Hoh.
Berlin	30.01	762.2	30.19	766.8	39.2	4.0	39	nw.			6		4			0.197	5.0		Prof. Dr. Arndt.
Breslau	29.71	754.5	30.24	768.1	35.6	2.0	66	w.			5		2			0.083	2.1		Royal University Obs'y.
Carlsruhe	30.04	763.0	30.50	774.8	42.1	5.6	72	wsw.			4		10	nw.		0.110	2.8		Albert Senz.
Cassel	29.54	750.4	30.26	768.5	38.1	3.4	76	s.			4	0	7 k		s.	0.339	8.6		Dr. H. Möhl.
Frankfort on the Main	30.03	762.7	30.41	772.4	43.7	6.5	64	w.			2		7			0.232	5.9		Physical Society.
Friedrichshafen	29.00	736.5	30.50	774.6	39.6	4.2	84	s.			2		9	wsw.		0.067	1.7		Wilhelm, Chief Tel.
Hamburg	30.09	764.3	30.19	766.7	39.2	4.0	64	sw.			6		3	nnw.		0.441	11.2		E. Preller.
Kiel	30.04	763.0	30.06	763.4	38.7	3.7	64	sw.			6		8			0.327	8.3		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.90	759.5	30.34	770.7	35.6	2.0	66	wsw.			3		1			0.260	6.6		H. Leppig, Asst.
Magdeburg	30.06	763.6	30.26	768.6	39.7	4.3	57	w.			4	3 cs	0	nnw.		0.106	2.7		Dr. Assmann.
Memel	29.63	752.7	29.68	753.9	30.2	— 1.0	52	nw.			7	0	8 k						Issermann.
Munich	28.56	725.3	30.45	773.3	37.2	2.9	65	nw.			2		6	nw.		0.039	1.0		Central Station
Neufahrwasser	29.85	758.2	29.87	758.6	33.3	0.7	32	nw.			6		6			0.083	2.1		A. Lothes.
Neustadt, Palatinate	29.92	759.9	30.45	773.4	42.3	5.7	71	wnw.			4		6	w.		0	0		Dicknether.
Stuttgart	29.49	749.0	30.42	772.7	41.9	5.5	65	w.			1		5	w.		0.028	0.7		Prof. Dr. Schoder
Wustrow	30.03	762.8	30.06	763.5	38.1	3.4	97	w.			6	0	5 s			0.197	5.0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.87	758.7	30.26	768.7	56.1	13.4		sw.			1.0		0			0	0	clear	Schmidt & Wourlisch
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurracnee	29.93	760.2	29.98	761.6	66.6	19.2	50	nw.	28	12.5			0			0	0	blue sky	
Deesa	29.41	746.9	29.89	759.2	71.5	21.9	32	w.	13.5	6.0			0			0	0	blue sky	
Bombay	29.88	758.9	29.92	759.9	77.6	25.3	58	nnw.	17	7.6			1	nw.		0.04	1.0	d. clouds	
Poona, Yarrowda.	27.99	710.9	29.84	757.9	79.8	26.6	40	wnw.	20	8.9			0			0	0	blue sky	
Belgaum	27.31	693.6	29.81	757.2	83.4	28.6	31	wsw.	4	1.8			2	n.		0	0	d. clouds	
Lahore	29.12	739.6	29.91	759.7	51.7	10.9	66	n.	3.6	1.6			6			0.14	3.6	blue sky	
Roorkee	28.90	734.0	29.85	758.3	51.8	11.0	100	se.	5.0	2.2			10			0.64	16.3		
Agra	29.21	742.0	29.78	756.4	76.2	24.6	21	ne.	7.2	3.2			3			0	0		
Nagpur	28.76	730.4	29.79	756.6	85.9	29.9	29	sw.	4	1.8			0			0	0	blue sky	
Jubbulpore	28.52	724.3	29.87	758.8	79.0	26.1	35	calm	2.9	1.3			0			0	0	blue sky	
Lucknow	29.43	747.5	29.81	757.2	76.7	24.8	42	wnw.	1.8	0.8			2			0	0	d. clouds	
Allahabad	29.50	749.2	29.81	757.2	75.8	24.3	49	w.	2.5	1.1			0			0	0	blue sky	
Patna	29.65	753.1	29.84	757.9	73.9	23.3	60	n.	1.7	0.8			0			0.07	1.8	blue sky	
Hazaribagh	27.79	705.8	29.81	757.3	73.8	23.2	48	n.	5.9	2.6			3			0	0		
Cuttack	29.72	754.9	29.80	757.0	82.8	28.2	65	s.	1.1	0.5			7			0	0		
Calcutta, Alipore	29.80	757.0	29.83	757.6	77.0	25.0	75	ese.	1.0	0.4			0			0.17	4.3	blue sky	
Dhubri	29.73	755.1	29.85	758.3	67.8	19.9	70	calm	0.8	0.4			3		w.	0	0	d. clouds	
Chittagong	29.79	756.6	29.88	759.0	74.6	23.7	85	calm	2.5	1.1			2			0	0	blue sky	
Sibsagar	29.55	750.7	29.90	759.5	63.0	17.2	84	ne.	3.0	1.6			6	w	w.	0.02	0.5	d. clouds	
Jeypore	28.37	720.5	29.84	758.0	66.7	19.3	26	w.	7.1	3.2			6		w.	0	0	d. clouds	
Zanzibar, Africa	29.75	755.6			86.2	30.1	57	ne.	9.1	4.1			2			0	0	d. clouds	
Trichinopoly	29.59	751.6			88.4	31.3	41	ne.	1	0.4			4			0	0	d. clouds	
Bellary	28.35	720.1			90.8	32.7	17	nw.	7.2	3.2			1			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.84	757.8	30.26	768.6	50.0	10.0	53	se.	2.5	1.1			10			0	0		Prof. Giovanni Clodig.
Milan	29.72	755.0	30.26	768.7	45.7	7.6	75	nw	4.3	1.9			8	ne.		0.012	0.3		Prof. Schiaparelli.
Padua	30.11	764.9	30.23	767.8	46.4	8.0	73	nne.	5.0	2.5			10	sw.		0.031	0.8		Prof. Dott. Lorenzoni.
Moncalieri	29.30	744.3	30.24	768.2	46.6	8.1	63	sse.	1.8	0.8			0			0	0		Prof. P. F. Denza.
Genoa	29.97	761.1	30.16	766.1	53.6	12.0	35	n.	11.9	5.3			4	n.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.28	718.4	30.27	768.9	46.9	8.3	33	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.12	765.1	30.17	766.4	45.1	7.3	93	sw.	13.6	6.1			10	sw.		0	0		Prof. Luigi Guidi.
Florence	29.94	760.5	30.21	767.2	50.4	10.2	81	nw.			2		10	wsw.		0.079	2.0		Prof. Costantino Pitter.
Leghorn	30.02	762.5	30.11	764.7	52.9	11.6	57	sw.	13.0	5.8			10			0.366	9.3		Prof. P. Monte.
Rome	30.10	764.4	30.28	769.0	52.9	11.6	62	ssw.	9.8	4.4			10			0	0		Prof. P. S. Ferrari.
Lecce	30.05	763.3	30.31	769.9	56.8	13.8	59	ene.	11.2	5.0			5			0	0		Prof. C. de Giorgi.
Cosenza	29.42	747.2	30.34	770.5	53.2	11.8	74	sse.	3.8	1.7			3	se.		0	0		Prof. D. Conti.
Cagliari	30.07	763.7	30.26	768.7	55.9	13.3	52	sse.			2		5	wnw.		0	0		Prof. A. Pacinotti.
Palermo	30.09	764.3	30.35	770.8	57.2	14.0	47	ne.	4.9	2.2			0			0	0		Prof. G. Cincciatore.
Syracuse	30.30	769.6	30.35	770.8	55.6	13.1	62	wsw.	9.4	4.2			9	sw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.78	756.4	30.32	770.1	50.0	10.0	75	ne.	0.7	0.3			8	nne.		0.012	0.3		Prof. T. Brioschi.
Stelvio	22.19	563.7			13.5	—10.3	41	ne.			6		2			0.079	2.0	misty	Prof. P. F. Denza.
Valdobbia	22.25	565.2			20.7	— 6.3	66	ne.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.71	754.6	29.74	755.4	37.9	3.3	77	e.	4.1	1.8			10 n		se.	0.026	0.7	light rain	
Hakodate	29.82	757.4	29.83	757.7	32.0	0.0	85	e.	9.6	4.3			10		e.	0.255	6.5	overcast	
Hiroshima, I. M. Obs'y	29.67	753.6	29.69	754.1	49.2	9.6	95	nne.	1.8	0.8		ck	8 s			0	0	very cloudy	K. Sasaki.
Kanazawa	30.16	766.0	30.26	768.6	52.4	11.3	82	ssw.	7.9	3.5		ck	9s;ks		nw.	0.275	7.0	overcast	S. Endo.
Kioto	29.50	749.3	29.67	753.6	48.0	8.9	97	nnw.	0.5	0.2			10 s			0.770	19.6	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.60	751.8	29.81	757.2	50.3	10.2	91	w.	5.6	2.5			10 n			0.070	1.8	raining	S. Takehayashi.
Niigata	29.59	751.6	29.62	752.3	45.5	7.5	81	se.	6.4	2.9		10 ck	0			0.385	9.8	covered	
Nobiru	29.72	754.9	29.74	755.4	33.6	0.9	96	nnw.	9.2	4.1			10 n			0.450	11.4	raining	H. Midzushina.
Supporo					29.5	— 1.4	90	se.	12.0	5.4			10			0	0	covered	
Tokei Obs'y, Yeddo	29.61	752.1	29.68	753.9	38.7	3.7	97	nnw.	7.7	3.4			10 n			0.515	13.1	raining	The Staff.
Wakayama	29.63	752.6	29.68	753.9	53.4	11.9	90	ese.	1.3	0.6		10 ck	0			0.547	13.9	cloudy	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.49	622.0	30.28	769.2	50.4	10.2	80	ssw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.82	757.4	30.08	764.2	62.5	16.9	91	nw.	0.9	0.4		3 cs	0	sw.		0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.18	589.0	30.37	771.5	46.0	7.8	51	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.34	618.3	30.48	774.2	52.9	11.6	73				3	1c	2 k	s.	s.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.04	610.5	30.16	766.0	46.9	8.3	66									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.45	595.7	30.40	772.0	41.0	5.0	60	n.	0	0		0	0			0	0	very fine	Prof. P. Spina.
San Luis Potosi	24.30	617.3	30.45	773.6	50.7	10.4	59	w.			1	1	0	w.		0	0	hazy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.64	575.1	30.38	771.6	48.5	9.0	67	nw.	10.0	4.4		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.60	751.8	29.79	756.7	81.9	27.7	64	ese.	23.0	10.3		1 c	3 k	w.	se.	0.03	0.8	fair	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.38	771.6	30.38	771.6	43.5	6.4		wsw.			5					0.110	2.8		
Groningen	30.12	765.1	30.18	766.5	39.6	4.2		sw.			5					0.106	2.7		
Helder	30.20	767.1	30.20	767.1	41.0	5.0		ssw.			5					0.307	7.8		
Helievoetsluis	30.32	770.2	30.32	770.2	42.3	5.7	83	sw.			6					0.173	4.4		
Utrecht	30.26	768.6	30.31	769.8	44.1	6.7	73	sw.			5		8			0.248	6.3	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.50	749.2	29.56	750.8	32.0	0.0	81	sse.	20	9			10			0.606	15.4	snowing	
Brono	29.08	738.5	29.11	739.5	30.2	— 1.0	92	wnw.	31	14			10			0.020	0.5	snowing	
Christiania	29.44	747.8	29.60	751.7	31.3	— 0.4	42	sw.	13	6			9			0.024	0.6		
Gjæsvær	28.89	733.7	28.91	734.3	26.8	— 2.9		ene.			2		10						
Lodingen	28.91	734.2	28.95	735.4	27.3	— 2.6	74	nw.			2		10					snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.4	15.2	87	ese.	11.2	5.0			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.44	747.7	30.45	773.5	59.7	15.4	51	nne.	7.4	3.3			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.36	771.1	30.45	773.3	64.8	18.2	52	e.	3.1	1.4			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.15	765.8	30.52	775.1	57.0	13.9	61	nne.	16.1	7.2			0			0	0		The Staff.
Ponta Delgada, Azores	30.42	772.7	30.49	774.5	62.2	16.8	81	ese.	15.4	6.9			3			0	0		
Saint Paul de Loando	29.69	754.2	29.90	759.4	78.4	25.8	82	wsw.	1.8	0.8			6	s.		0	0		
Serra da Estrella	25.63	651.1	30.55	775.9	37.6	3.1	68	sse.	13.0	5.8			1			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.83	732.2	29.99	761.7	13.1	—10.5		sw.	45	20		0	7 k			0.059	1.5		Major K. Lasarew.
Archangel	28.77	730.7	28.79	731.2	20.1	— 6.6	87	ese.	13	6			6 ks			0.055	1.4		Capt. Sseliwerstow.
Astrakhan	30.20	767.1	30.12	765.0	35.6	2.0	85	wsw.	11	5			10 s			0	0		Capt. Wisganow.
Barnaul	29.52	749.8	30.06	763.6	10.8	—11.8	82	sw.	22	10			10			0.008	0.2		Meteorological Obs'y.
Dorpat	28.76	730.5	29.01	736.8	27.3	— 2.6	77	nw.	18	8			10 n			0.031	0.8	snowing	Observatory.
Ekaterinburg	28.50	724.0	29.50	749.3	24.6	— 4.1	89	sw.	7	3			10			0.012	0.3	snowing	Meteorological Obs'y.
Kasan	29.27	743.4	29.55	750.5	25.3	— 3.7	65	s	7	3			10			0.004	0.1		Observatory.
Kertch	30.07	763.8	30.09	764.3	43.0	6.1	74	s.	9	4		0	6 k			0	0		Lagorio & Sastyrez.
Kieff	29.01	736.8	29.66	753.3	36.9	2.7	62	w.	20	9		c	10 ks			0	0		Observatory.
Lugan	29.68	753.8	29.89	759.1	39.9	4.4	71	wsw.	34	15			8			0	0		Meteorological Obs'y.
Moscow	28.52	724.5	29.00	736.7	35.1	1.7	90	s.	7.8	3.5		0	7 ks			0.098	2.5	snowing	Meteorological Obs'y.
Nikolaiev	29.88	758.9	29.95	760.7	45.3	7.4	69	sw.	31	14		0	0			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor.	29.86	758.4	29.95	760.6	— 2.2	—19.0	84	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	29.71	754.6	29.85	758.2	40.8	4.9	42	nw.	4	2		3 cs	0			0	0		Physical Observatory.
St. Petersburg	28.70	729.0	28.72	729.4	31.8	— 0.1	94	w.	13	6			10 n			0.114	2.9		Central Physical Obs'y.
Tashkend, Laboratory	28.71	729.3	30.40	772.2	24.8	— 4.0	73	calm	0	0			1			0	0		Teich, A. M.
Tiflis	28.82	732.0	30.29	769.4	40.1	4.5	47	wnw.	45	20		0	0			0	0		Physical Observatory.
Vladivostok	29.68	753.9	29.75	755.6	25.7	— 3.5	91	calm	0	0		0	0			0	0		
Warsaw	29.53	750.0	29.97	761.3	29.5	— 1.4	78	wnw.	27	12			10 ks						Astronomical Obs'y.
Wilna	29.09	738.9	29.53	750.0	28.2	— 2.1	70	w.	20	9			10			0.008	0.2		Berg, Assistant.
Yeniseisk	29.75	755.7	30.07	763.8	4.6	—15.2	72	e.	7	3			4			0	0		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.78	756.4	46	7.8	85	wnw.			8		10			0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burner.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.29	769.4	30.39	772.0	54.0	12.2	65	se.	0.7	0.3			9			0.008	0.2		Antonio Rave, Director
Bilbao, Met. Obs'y	30.60	777.2	30.66	778.7	51.1	10.6	79	ne.	2.0	0.9		2	7	n.		0.409	10.4	almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.54	699.6	30.65	778.6	41.9	5.5	69	ne.	7.2	3.2		0	7			0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.22	716.7	30.52	775.1	49.8	9.9	49	ne.	13.0	5.8		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.28	769.0	30.43	772.9	57.4	14.1	63	n.	1.8	0.8		4	5	w.		0	0	almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.67	753.7	30.61	777.4	48.7	9.3	68	n.	18.1	8.1		0	7			0.063	1.6	cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.17	766.2	30.23	767.9	66.9	19.4	85	e.	1.1	0.5		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.83	757.7	29.89	759.2	78.4	25.8	60	ese.	12.8	5.7		0	1 ks			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.33	770.4	30.43	773.0	57.2	14.0	75	e.	4.5	2.0		0	0			0	0		Capt. O. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.05	763.3	30.14	765.6	74.5	23.6	84	e.	5.8	2.6		6 k	5 kn	e.	e.	0.472	12.0	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.74	755.4	29.87	758.7	76.9	24.9	76	se.	1.4	0.6		0	0			0	0	clear	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	28.82	732.1	28.86	733.1	15.1	— 9.4	81	sw.			2		0			0	0		
Umea	28.76	730.5	28.81	731.8	25.9	— 3.4	70	sw			2		10			0	0		
Hernosand	28.94	735.1	28.99	736.4	28.6	— 1.9	46	w.			7		3			0.126	3.2		
Stockholm	29.24	742.8	29.42	747.3	24.4	— 4.2	68	wnw.			8		0			0.169	4.3		
Wisby	29.52	749.7	29.58	751.2	29.1	— 1.6	52	nw.			8		3			0.039	1.0		
Sub-Series.																			
Upsala	29.30	744.1	29.38	746.3	25.9	— 3.4	47	wnw.	13.6	6.1			0			0	0		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.02	737.0	30.48	774.2	41.4	5.2	50	ne.			3					0.004	0.1	clouds	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.21	767.3	47.7	8.7	46	s.	10	4.5			0			0	0		The Observatory.
Valona			30.32	770.2	55.8	13.2		nw.			1		2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.19	766.9	58.5	14.7	62	n.			3	0	0			0.10	2.5		Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Albany, New York	30.14	765.5	30.23	767.8	48.8	9.3	50	calm	0	0		0	sk.			0	0	clear	
Alpena, Michigan	29.19	741.4	29.90	759.4	34	1.1	89	se.	6	2.7		5 cs	1 s	w.		0	0	fair	
Atlanta, Georgia	29.02	737.1	30.24	768.1	58.0	14.4	93	s.	9	4.0			fg.			0.05	1.3	dense fog	
Atlantic City, New Jersey	30.28	769.1	30.29	769.4	43.3	6.3	94	s.	9	4.0		8 cs	2 s	nw.		0	0	cloudy	
Augusta, Georgia	30.11	764.8	30.31	769.9	58.0	14.4	86	s.	2	0.9			10 s			0.19	4.8	cloudy	
Baltimore, Maryland	30.22	767.6	30.27	768.8	45	7.2	93	s.	1	0.4			fg.			inap.	inap.	dense fog	
Barnegat, New Jersey	30.26	768.6	30.28	769.1	41.0	5.0	92	sw.	9	4.0		6 cs	0	w.		0	0	fair	
Bismarck, Dakota	28.49	723.6	30.47	773.9	— 4	—20.0	68	nw.	24	10.7		hz.	hz.			inap.	inap.	dense haze	
Block Island, Rhode Island																			
Boise City, Idaho	26.82	681.2	29.78	756.4	33	0.6	88	n.	2	0.9			10 n		calm	0.03	0.8	light snow	
Boston, Massachusetts	30.11	764.8	30.27	768.8	39.0	3.9	82	sw.	9	4.0		0	hz.			0	0	clear	
Brownsville, Texas	29.92	760.0	29.96	761.0	73	22.8	90	s.	20	8.9		0	0			0	0	clear	
Buffalo, New York	29.30	744.2	30.10	764.5	44.3	6.8	57	se.	12	5.4		6ck;cs	4 s	se.	se.	0	0	cloudy	
Burlington, Vermont	29.85	758.2	30.16	766.1	38.5	3.6	64	s.	3	1.3		0	0			0	0	clear	
Cairo, Illinois	29.54	750.3	29.96	761.0	58.5	14.7	95	s.	8	3.6			10 n			0.91	23.1	light rain	
Campo, California	27.51	698.7	30.15	765.8	31.6	— 0.2	52	ne.	3	1.3			10 s		w.	0	0	cloudy	
Camp Thomas, Arizona	27.36	694.9	30.19	766.8	40.5	4.7	94	calm			0		8 ks			0.61	15.5	cloudy	
Cape Henry, Virginia	30.29	769.4	30.31	769.9	48	8.9	86	s.	11	4.9		0	0			0	0	clear	
Cape May, New Jersey	30.25	768.3	30.28	769.1	44	6.7	93	s.	13	5.8		0	2 s		s.	0	0	clear	
Castroville, Texas	29.20	741.7	30.04	763.0	59	15.0	81	nw.	5	2.2			10 s			0	0	threatening.	
Cedar Keys, Florida	30.24	768.1	30.26	768.6	65	18.3	90	e.	6	2.7		0	0			0	0	clear	
Champaign, Illinois	29.03	737.3	29.90	759.4	52.0	11.1	93	s.	2	0.9			10 s		s.	0.38	9.7	cloudy	
Charleston, S. Carolina	30.22	767.6	30.28	769.1	59	15.0	87	calm	0	0		0	9 s		w	0.04	1.0	cloudy	
Charlotte, N. Carolina	29.37	746.0	30.26	768.6	51.0	10.6	100	sw.	5	2.2			fg.			0	0	dense fog	
Chattanooga, Tennessee	29.32	744.7	30.18	766.6	58.0	14.4	93	s.	13	5.8			10 n		s.	inap.	inap.	light rain	
Cheyenne, Wyoming	23.88	606.5	30.13	765.3	23.3	— 4.8	56	w.	4	1.8		0	0			0	0	clear	
Chicago, Illinois	29.08	738.6	29.82	757.4	49.5	9.7	91	sw.	7	3.1			9 k		sw.	0.01	0.3	cloudy	
Chincoteague, Virginia	30.28	769.1	30.30	769.6	46.5	8.1	93	sw.	4	1.8		0	8 s		w.	0	0	cloudy	
Cincinnati, Ohio	29.34	745.2	30.03	762.7	54.9	12.7	86	s.	4	1.8			10 n			0.20	5.1	light rain	
Cleveland, Ohio	29.27	743.4	30.06	763.5	45	7.2	66	se.	12	5.4			10 s			0	0	threatening.	
Coleman City, Texas	28.18	715.8	30.06	763.5	52	11.1	93	w	6	2.7		0	8 s		w.	1.44	36.6	cloudy	
Columbus, Ohio	29.15	740.4	30.05	763.3	48	8.9	86	s.	6	2.7			10 n			0.03	0.8	light rain	
Concho, Texas	28.06	712.7	30.08	764.0	52	11.1	80	sw.	24	10.7		0	0			0.05	1.3	clear	
Davenport, Iowa	29.11	739.4	29.81	757.2	49	9.4	77	sw.	4	1.8		5 cs	0	w.		0	0	fair	
Dayton, Washington T'y	28.06	712.7	29.87	758.7	31.2	— 0.4	84	sw.	4	1.8		0	0			0	0	clear	
Deadwood, Dakota	25.41	645.4	30.33	770.4	1	—17.2	100	ne.	6	2.7			10 n			0.10	2.5	light snow	
Decatur, Texas					58	14.4	87	w.	10	4.5			10 s			1.09	27.7	cloudy	
Delaware Breakwater, Del.	30.26	768.6	30.28	769.1	44	6.7	93	s.	8	3.6		4 cs	4 ks	w.	sw.	0	0	cloudy	
Denison, Texas	29.07	738.4	29.91	759.7	60.0	15.6	100	w.	4	1.8			10 n			1.46	37.1	light rain	
Denver, Colorado	24.61	625.1	30.13	765.3	29.0	— 1.7	54	s.	8	3.6		0	0			0	0	clear	
Des Moines, Iowa	28.86	733.0	29.83	757.7	37	2.8	82	sw.	2	0.9		0	fg.			0	0	clear	
Detroit, Michigan	29.23	742.4	29.98	761.5	49.1	9.5	86	sw.	9	4.0			10 s		sw.	0	0	cloudy	
Dodge City, Kansas	27.22	691.4	29.96	761.0	33.8	1.0	59	n.	15	6.7		c	0			0	0	clear	
Dubuque, Iowa	29.03	737.3	29.79	756.7	41.2	5.1	73	s.	1	0.4		0	1 s		e.	0	0	clear	
Duluth, Minnesota	29.27	743.4	30.03	762.7	32	0.0	88	nw.	3	1.3			10 s		nw.	inap.	inap.	cloudy	
Eagle Pass, Texas	29.23	742.4	30.07	763.8	59.0	15.0	81	ne.	8	3.6		0	0			0	0	clear	
Eagle Rock, Idaho	25.00	635.0	29.90	759.4	20	— 6.7	87	n.	5	2.2			10 s			0	0	cloudy	
Eastport, Maine	30.14	765.5	30.21	767.3	34	1.1	83	sw.	5	2.2		5 c	0	w.		0	0	fair	
El Paso, Texas	26.34	669.0	30.22	767.6	39	3.9	92	w.	16	7.2		0	0			0.18	4.6	clear	
Erie, Pennsylvania	29.30	744.2	30.07	763.8	46	7.8	60	s.	10	4.5			10 s			0	0	cloudy	
Escanaba, Michigan	29.12	739.6	29.84	757.9	33	0.6	79	s.	2	0.9		4 c	4 s			0	0	cloudy	
Fort Apache, Arizona	25.08	637.0	30.18	766.6	39	3.9	76	ne.	1	0.4			10 s		calm	0.17	4.3	cloudy	
Fort Assinnaboine, Montana	27.60	701.0	30.64	778.2	—11	—23.9	54	n.	12	5.4			10 n		n.	0.02	0.5	light snow	
Fort Bennett, Dakota	28.64	727.4	30.37	771.4	5	—15.0	76	n.	18	8.0			10 s			0	0	cloudy	
Fort Benton, Montana	27.58	700.5	30.58	776.7	—12	—24.4	100	ne.	6	2.7			10 n		ne.	0.03	0.8	light snow	
Fort Buford, Dakota	28.43	722.1	30.61	777.5	— 7	—21.7	61	n.	16	7.2			10 s		calm	0.01	0.3	cloudy	
Fort Custer, Montana	27.10	688.3	30.46	773.7	— 3	—19.4	75	nw.	13	5.8			10 n		calm	inap.	inap.	light snow	
Fort Davis, Texas	25.16	639.1	30.12	765.0	38	3.3	76	s.	4	1.8		0	0			0	0	clear	
Fort Elliott, Texas	27.03	686.5	29.93	760.2	45	7.2	71	sw.	10	4.5		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.26	743.2	29.86	758.4	58.0	14.4	93	se.	2	0.3			10 n			0.52	13.2	heavy rain	
Fort Grant, Arizona	25.59	642.4	30.15	765.8	36	2.2	53	se.	2	0.9		0	0			0.31	7.9	clear	
Fort Griffin, Texas	28.63	727.2	30.00	762.0	56	13.3	74	sw.	8	3.6			10 ks		w.	0.20	5.1	cloudy	
Fort Keogh, Montana	27.87	707.9	30.55	776.0	— 6	—21.1	65	n.	16	7.2			10 n		n.	0.05	1.3	light snow	
Fort Macon, North Carolina	30.32	770.1	30.33	770.4	50	10.0	100	n.	2	0.9		9 cs	hz.	n.	calm	inap.	inap.	cloudy	
Fort McKavett, Texas	27.79	705.9	30.17	766.3	53.2	11.8	69	sw.	14	6.3		0	0			0.32	8.1	clear	
Fort Missoula, Montana	26.55	674.4	29.98	761.5	28	— 2.2	88	sw.	12	5.4			10 s			0.03	0.8	cloudy	
Fort St. Michaels, Alaska	29.63	752.6	29.66	753.4	10	—12.2	100	s.	60	26.8			10 s			0	0	cloudy	
Fort Shaw, Montana	26.68	677.7	30.53	775.4	—13	—25.0	100	n.	9	4.0		0	8 n		n.	0.07	1.8	light snow	
Fort Sill, Indian Territory	28.57	725.7	29.88	758.9	55	12.8	83	s.	14	6.3			10 s			0.29	7.4	cloudy	
Fort Stevenson, Dakota	28.53	724.6	30.55	776.0	— 7	—21.7	61	n.	20	8.9			10 s		calm	0.01	0.3	cloudy	
Fort Verde, Arizona					39	3.9	73	se.			1		10 s		s.	0	0	cloudy	
Fort Washakie, Wyoming	24.26	616.2			17.3	— 8.2	83	ne.	6	2.7		0	0			0	0	clear	
Fredericksburg, Texas	28.26	717.8	30.06	763.5	59	15.0	84	calm	0	0			10 ks			0.14	3.6	cloudy	
Galveston, Texas	29.98	761.5	30.02	762.5	67	19.4	95	s.	19	8.5		10 k	0	s.		0.05	1.3	cloudy	
Grand Haven, Michigan	29.14	740.1	29.85	758.2	48.0	8.9	93	s.	16	7.2			10 s		s.	0.05	1.3	cloudy	
Hatteras, North Carolina	30.30	769.6	30.32	770.1	50	10.0	93	calm	0	0		4 k	fg.	s.		0	0	fair	
Helena, Montana	25.94	658.9	30.34	770.6	— 8	—22.2	61	calm	0	0			10 n		nw.	0.10	2.5	light snow	
Henrietta, Texas	28.99	736.3	30.04	763.0	55	12.8	100	se.	6	2.7			10 n			0.38	9.7	light rain	
Huron, Dakota	28.76	730.5	30.28	769.1	6.2	—14.3	60	nw.	26	11.6			10 s			0	0	cloudy	
Indianapolis, Indiana	29.07	738.4	29.92	760.0	53	11.7	93	s.	5	2.2			10 s		s.	0.32	8.1	threatening.	
Indianola, Texas	29.95	760.7	29.98	761.5	69.5	20.8	93	s.	28	12.5		5 k	5 ks	s.	s.	inap.	inap.	cloudy	
Jacksboro, Texas	28.71	729.2	29.95	760.7	54	12.2	100	sw.	8	3.6			10 n		sw.	0.98	24.9	heavy rain	
Jacksonville, Florida	30.24	768.1	30.29	769.4	61	16.1	93	ne.	2	0.9			fg.			0	0	dense fog	
Keokuk, Iowa	29.09	738.9	29.79	756.7	51.5	10.8	90	sw.	4	1.8		0	6 s		sw.	0	0	fair	
Key West, Florida	30.22	767.6	30.25	768.3	72.0	22.2	84	ne.	8	3.6		0	4 s;k		ne.	0	0	fair	
Kittyhawk, North Carolina	30.33	770.4	30.35	770.9	48	8.9	93	sw	9	4.0		hz.	0			0	0	clear	
Knoxville, Tennessee	29.07	738.4	30.15	765.8	52	11.1	96	sw.	3	1.3			10 n			0.02	0.5	light rain	
La Crosse, Wisconsin	28.99	736.3	29.83	757.7	36	2.2	61	sw.	4	1.8		0	0			0	0	clear	
La Mesilla, New Mexico	26.18	665.0	30.19	766.8	39.0	3.9	73	nw.	2	0.9		0	0			0.25	6.3	clear	
Leavenworth, Kansas	28.92	734.6	29.86	758.4	49	9.4	77	calm	0	0			10s;fg			0	0	cloudy	
Lewiston, Idaho	29.00	736.6	29.87	758.7	34.7	1.5	57	w.	1	0.4		0	6 s		w.	0	0	fair	
Little Rock, Arkansas	29.53	750.0	29.86	758.4	66	18.9	93	s.	12	5.4			10 ks		s.	0.10	2.5	cloudy	
Los Angeles, California	29.76	755.9	30.16	766.1	46.2	7.9	83	ne.	13	5.8			10 s		calm	0	0	cloudy	
Louisville, Kentucky	29.36	745.7	29.95	760.7	56.5	13.6	88	se.	14	6.3			10 n		se.	0.52	13.2	heavy rain	
Lynchburg, Virginia	29.52	749.8	30.24	768.1	53.5	11.9	86	s.	4	1.8			10s;fg			0	0	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	28.75	730.2	29.84	757.9	37	2.8	82	s.	5	2.2		4 cs	0	sw.		0	0	fair	
Marquette, Michigan	29.07	738.4	29.85	758.2	34	1.1	79	nw.	12	5.4			10 s		nw.	0	0	cloudy	
Mason, Texas	28.37	720.6	30.10	764.5	56	13.3	64	w.	5	2.2			10 s		w.	0.13	3.3	cloudy	
Memphis, Tennessee	29.60	751.8	29.95	760.7	66	18.9	90	se.	10	4.5			10 s			0.45	11.4	cloudy	
Milwaukee, Wisconsin	29.02	737.1	29.82	757.4	46	7.8	83	sw.	7	3.1			10 s		sw.	0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.21	767.3	30.25	768.3	65	18.3	93	sw.	7	3.1			10s;fg			0	0	cloudy	
Montgomery, Alabama	29.95	760.7	30.19	766.8	61.8	16.6	94	s.	3	1.3			10 s		s.	0.01	0.3	threatening.	
Moorhead, Minnesota	29.21	741.9	30.31	769.9	— 5	—20.6	62	n.	18	8.0		0	0			0	0	clear	
Morgantown, W. Virginia	29.11	739.4	30.18	766.6	39.5	4.2	82	calm	0	0			10 s			0	0	cloudy	
Mt. Washington, N. H.	23.78	604.0	30.40	772.1	19.8	— 6.8	90	nw.	50	22.4		3 cs	1 s;sk	nw.	nw.	0	0	fair	
Nashville, Tennessee	29.42	747.3	29.98	761.5	62.4	16.9	86	s.	16	7.2			10 n		s.	0.44	11.2	light rain	
New Haven, Connecticut	30.16	766.1	30.28	769.1	32.5	0.3	94	calm	0	0		9 c	sk	w.		0	0	cloudy	
New London, Connecticut	30.28	769.1	30.32	770.1	34	1.1	100	calm	0	0			fg			0	0	dense fog	
New Orleans, Louisiana	30.07	763.8	30.13	765.3	69.0	20.6	93	se.	7	3.1		0	4 s		se.	0	0	fair	
Newport, Rhode Island	30.25	768.3	30.30	769.6	38.8	3.8	87	sw.	4	1.8		2 cs	sk	calm		0	0	clear	
New River, N. Carolina					51	10.6	100	calm			0		fg			0.80*	20.3*	dense fog	
New Shoreham, Rhode I'd.	30.27	768.8	30.30	769.6	40.0	4.4	89	sw.	8	3.6		0	0			0	0	clear	
New York, New York	30.11	764.8	30.30	769.6	41	5.0	92	s.	3	1.3		7 cs	2 s	s.		0	0	cloudy	
Norfolk, Virginia	30.26	768.6	30.29	769.4	48	8.9	77	s.	8	3.6		hz	0			0	0	clear	
North Platte, Nebraska	27.03	686.5	30.13	765.3	27.1	— 2.7	78	nw.	28	12.5		0	5 s			0	0	fair	
Olympia, Washington T'y	29.86	758.4	29.90	759.4	32.5	0.3	88	s.	1	0.4		0	9 s		calm	0	0	cloudy	
Omaha, Nebraska	28.64	727.4	29.91	759.7	37.0	2.8	56	nw.	8	3.6		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.84	757.9	29.86	758.4	—15.4	—26.3	81	ssw.	3	1.3		hz	hz			0	0	dense haze	
Oswego, New York	29.75	755.6	30.10	764.5	40.0	4.4	60	s.	8	3.6		hz	4 k		w.	0	0	fair	
Palestine, Texas	29.37	746.0	29.95	760.7	70	21.1	76	s.	28	12.5			10 ks			0	0	cloudy	
Pensacola, Florida	30.15	765.8	30.18	766.6	67.1	19.5	100	s.	8	3.6		2 cs	0	sw.		0	0	clear	
Philadelphia, Pa	30.17	766.3	30.28	769.1	45	7.2	83	sw.	3	1.3			10 s		sw.	0	0	cloudy	
Pike's Peak, Colorado	17.45	443.2	30.17	766.3	3	—16.1	91	sw.	4	1.8		8 cs	0			0	0	cloudy	
Pioche, Nevada	23.86	606.0	30.02	762.5	30	— 1.1	61	s.	6	2.7		10 k	0	calm		0	0	cloudy	
Pittsburg, Pennsylvania	29.28	743.7	30.14	765.5	42.5	5.8	71	ne.	1	0.4			fg.			0	0	dense fog	
Port Eads, Louisiana	30.16	766.1	30.16	766.1	63.0	17.2	100	s.	8	3.6			fg			0.02	0.5	dense fog	
Port Huron, Michigan	29.23	742.4	29.96	761.0	41.0	5.0	87	s.	9	4.0		10 cs	0	calm		0	0	cloudy	
Portland, Maine	30.15	765.8	30.20	767.1	41	5.0	65	sw.	5	2.2		0	3 s		calm	0	0	clear	
Portland, Oregon	29.77	756.1	29.84	757.9	36.0	2.2	89	n.	4	1.8			10 s		n.	0.13*	3.3	cloudy	
Portsmouth, N. Carolina					49	9.4	63	n.	1	0.4		0	hz		calm	0	0	clear	
Prescott, Arizona	24.74	628.4	30.10	764.5	36	2.2	66	se.	6	2.7		0	8 s		s.	0	0	cloudy	
Provincetown, Mass	30.25	768.3	30.28	769.1	37	2.8	89	sw.	6	2.7		0	0			0	0	clear	
Punta Rassa, Florida	30.26	768.6	30.26	768.6	64	17.8	92	e.	6	2.7		0	0			0	0	clear	
Red Bluff, California	29.48	748.8	29.86	758.4	46.5	8.1	98	se.	4	1.8			10 s			0.08	2.0	cloudy	
Rio Grande City, Texas	29.71	754.6	29.96	761.0	67	19.4	90	s.	4	1.8		0	0			0	0	clear	
Rochester, New York	29.39	746.5	30.10	764.5	42	5.6	58	sw.	8	3.6		4 cs	0			0	0	fair	
Roseburg, Oregon	29.35	745.5	29.91	759.7	35	1.7	89	nw.	1	0.4			10 n		nw.	0.07	1.8	light snow	
Sacramento, California	29.88	758.9	29.96	761.0	46.4	8.0	93	s.	18	8.0			10 s			inap.	inap.	cloudy	
St. Louis, Missouri	29.26	743.2	29.90	759.4	53.0	11.7	100	s.	8	3.6			10 s			0.11	2.8	threatening.	
St. Paul, Minnesota	29.00	736.6	29.94	760.5	35.0	1.7	79	nw.	8	3.6			10 ks		nw.	0	0	cloudy	
St. Vincent, Minnesota	29.51	749.5	30.48	774.2	—16	—26.7	100	n.	30	13.4		0	0			0.15	3.8	clear	
Salt Lake City, Utah	25.41	645.4	29.97	761.2	30	— 1.1	52	calm	0	0			10 s			0	0	cloudy	
San Antonio, Texas	29.28	743.7	30.00	762.0	65.5	18.6	84	nw.	4	1.8			10 ks			inap.	inap.	cloudy	
San Diego, California	30.09	764.3	30.16	766.1	53.2	11.8	72	sw.	8	3.6		1 k	9 s			0	0	cloudy	
Sandusky, Ohio	29.27	743.4	29.99	761.7	49	9.4	77	s.	15	6.7			10 s			0	0	cloudy	
Sandy Hook, New Jersey	30.26	768.6	30.30	769.6	42.0	5.6	83	sw.	4	1.8		5 k	0	sw.		0	0	fair	
San Francisco, California	29.96	761.0	30.03	762.7	47	8.3	93	sw.	10	4.5			10 s		sw.	inap.	inap.	cloudy	
Santa Fé, New Mexico	23.17	588.5	30.21	767.3	18.8	— 7.3	87	n.	1	0.4		0	0			0	0	clear	
Savannah, Georgia	30.21	767.3	30.30	769.6	57.5	14.2	85	se.	4	1.8			10 ks			0.13	3.3	cloudy	
Shreveport, Louisiana	29.68	753.9	29.93	760.2	67	19.4	90	s.	9	4.0		0	8 k		s.	0.01	0.3	cloudy	
Silver City, New Mexico	24.30	617.2	30.15	765.8	34	1.1	81	nw.	2	0.9		0	8 ks		calm	0.50	12.7	cloudy	
Sitka, Alaska	30.70	779.8	30.77	781.5	11.5	—11.4	68	ne.	11	4.9		0	0			0	0	clear	
Smithville, North Carolina	30.28	769.1	30.32	770.1	51	10.6	100	se.	4	1.8		4 c	1 s			0.27	6.9	fair	
Spokane Falls, Wash. Ter.	27.77	705.3	29.90	759.4	29	— 1.7	88	nw.	1	0.4			10 s			0	0	cloudy	
Springfield, Illinois	29.11	739.4	29.84	757.9	54	12.2	92	s.	9	4.0			10 s		sw.	0.30	7.6	cloudy	
Springfield, Massachusetts	30.13	765.3	30.27	768.8	32.8	0.4	68	calm	0	0		2 cs	fg			0	0	clear	
Springfield, Mo	28.39	721.1	29.96	761.0	55.5	13.1	86	s.	8	3.6			10 n			0.22	5.6	light rain	
Stockton, Texas	27.01	686.0	30.14	765.5	43.8	6.6	86	sw.	8	3.6		0	0			0	0	clear	
Thatcher's Island, Mass	30.22	767.6	30.28	769.1	37.0	2.8	89	sw.	14	6.3		0	0			0	0	clear	
Toledo, Ohio	29.24	742.7	29.98	761.5	49	9.4	77	s.	7	3.1			10 s		sw.	0	0	threatening.	
Tucson, Arizona	27.68	703.1	30.16	766.1	41	5.0	92	se.	5	2.2		0	0			0.78	19.8	clear	
Umatilla, Oregon	29.52	749.8	29.90	759.4	37.0	2.8	66	w.	3	1.3			10 s			0	0	cloudy	
Uvalde, Texas	29.04	737.6	30.04	763.0	60	15.6	75	n.	4	1.8		0	0			0.13	3.3	clear	
Vicksburg, Mississippi	29.80	756.9	30.07	763.8	67	19.4	84	s.	3	1.3		0	9 s		s.	0	0	cloudy	
Visalia, California	29.64	752.8	30.02	762.5	46.5	8.1	80	nw.	6	2.7			10 s			0	0	cloudy	
Washington, D. C.	30.14	765.5	30.26	768.6	48	8.9	100	calm	0	0			10s;fg		s.	0	0	cloudy	
West Los Animas, Colorado	25.95	659.1	30.08	764.0	22	— 5.6	61	nw.	5	2.2		0	0			c	0	clear	
Wickenburg, Arizona					37	2.8	88	calm			0	0	3 ks			0	0	clear	
Williamsport, Pa	29.58	751.3	30.21	767.3	31	— 0.6	88	calm	0	0		5 c	5 ks			0	0	cloudy	
Wilmington, N. Carolina	30.26	768.6	30.32	770.1	51	10.6	86	calm	0	0			fg		calm	0.10	2.5	dense fog	
Winnemucca, Nevada	25.32	643.1	29.84	757.9	33	0.6	92	sw.	8	3.6			10 n		calm	0.09	2.3	light snow	
Wood's Holl, Mass																			
Yankton, Dakota	28.72	729.5	30.14	765.5	23	— 5.0	73	n.	23	10.3		0	0			0	0	clear	
Yuma, Arizona	29.90	759.4	30.06	763.3	52.4	11.3	65	ne.	4	1.8		0	1 s		ne.	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.04	559.8			51.5	10.8	82	se.	1	0.4		2 k	1 s	nw.	se.	0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.08	764.0	30.09	764.3	77	25.0	86	e.				2 ck	2 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	30.00	762.0	30.02	762.5	77	25.0	86	calm	0	0		0	7 ks		calm	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.05	763.3	30.07	763.8	72	22.2	100	e.					hz			0.630	16.0	rainy	B. Bigar.
Havana, Cuba, W. I.	30.23	767.8	30.28	769.1	72	22.2	76	se.	1.2	0.5		0	0			0	0	clear	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.13	765.3	30.14	765.5	67.7	19.8	93	calm	0	0			9 s		e.	0	0	cloudy	Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	77	25.0	96	e.			2	0	4 k		e.	0.620	15.7		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.53	750.0	29.99	761.7	81	27.2	85	calm			0	5 ck	3 ks	se.	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua							98	ne.			3	1 ck	3 ks	se.	ne.	0	0	fair	Earl Flint.
Santiago de Cuba, W. I.	30.14	765.5	30.17	766.3	73	22.8	67	n.	2.4	1.1		2 c	0			0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.49	774.4	30.55	776.0	—42.0	—41.1		n.	16	7.2		0	0			0.03	0.8	clear	J. Fortescue & W. Wood.

* Total rainfall for 5 days.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, N. 39° 50′, W. 9° 56′	30.59	777.0	57	13.9	81	nne.			4		0					2	w.	blue sky	Capt. E. H. Murray.
H. M. S. Albatross, N. 22° 10′, E. 114° 08′	29.83	757.7	69	20.6		calm			0		10							misty	Capt. A. J. Errington.
H. M. S. Alert, Colombo, Ceylon, India	29.83	757.7	85.8	29.9	73	w.			1		7							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.37	771.4	57	13.9	73	nne.			1		8							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 12° 49′, E. 35° 00′	29.95	760.7	72	22.2	71	nne.			5–6		3	nne.				4	nne.	misty	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.03	762.7	70	21.1	79	sw.			2–4		5	w.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S. 39° 48′, E. 26° 01′	29.66	753.4	66	18.9	90	sse.			5		9					4	nne.	d clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 11° 30′, W. 61° 50′	30.07	763.8	76	24.4		ene.			2–4		8	ene.				4	ne.	showery	Capt. C. Domville.
H. M. Dock Yard, Bermuda, W. I.	30.27	768.8	62	16.7	77	nne.			2–3		4	nne.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 37° 44′, W. 57° 02′	30.03	762.7	69	20.6	84	s.			1		9					1	s.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 10° 40′, E. 42° 09′	29.82	757.4	83	28.3		nw.			1–2		5	nnw.				1	wsw.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt. C. A. G. Bridge.
H. M. S. Fawn, Aden, Arabia	29.96	761.0	78	25.6	68	e.			3		1	e.						blue sky	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	29.65	753.1	53	11.7	93	calm			0		10					2	s.	misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 14° 14′, W. 80° 00′	29.99	761.7	75	23.9	83	ese.			3		8					2 3	e. se; ssw.	showery	Comm. E. G. Bourke.
H. M. S. Garnet, S. 31° 41′, W. 57° 51′	29.86	758.4	52	11.1	79	sw.			5		5							squally	Capt. L. F. Jones.
H. M. S. Inconstant, N. 12° 15′, E. 110° 00′	29.84	757.9	79	26.1	86	s.			1		2	s.				2	s.	d. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′ E. 113° 24′	29.79	756.7	60	15.6	88	ne.			1–2		10	ne.						drizzling	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	30.12	765.0	63	17.2		n.			2		6								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.59	751.6	65	18.3	78	nw.			1–2		1	w.						blue sky	Capt. J. E. Erskine.
H. M. S. Northampton, N. 11° 57′, W. 76° 20′	29.89	759.2	78	25.6	86	ne.			6		2	ne.				4	ne.	d. clouds	Capt. E. Drummond
H. M. S. Orontes, S. 15° 25′, E. 43° 24′	29.79	756.7	82.5	28.1	92	wnw.			1		6	wsw.				2	wsw.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 39° 29′, W. 29° 17′	30.39	771.9	62	16.7	100	ese.			3		4					3	ese.	misty	Capt. F. R. Dicken.
H. M. S. Phœnix, N. 13° 36′, W. 80° 36′	30.05	763.3	80	26.7	82	ne.			6		3	ne.				5	ne.	d. clouds	Capt. H. H. Grenfell.
H. M. S. Rambler, N. 5° 05′, W. 1° 00′	29.89	759.2	80	26.7	95	ssw.			1		7	ssw.						hazy	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.09	764.3	61	16.1		s.			1		7							d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	29.90	759.4	30	— 1.1	89	nne.			1		6							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Sea Gull																			Capt. E. T. Church.
H. M. S. Thalia, N. 42° 50′, W. 12° 00′	30.68	779.3	53	11.7		ne.			4		7					4	wsw.	d. clouds	
H. M. S. Triumph, S. 14° 09′, W. 79° 54′	30.00	762.0	75	23.9	81	ese.			3		3	se.				3	se.	showery	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.09	764.3	79	26.1		ne.					3							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Muscat, Arabia	30.05	763.3	65.5	18.6	54	n.			2		2	nw.				3	nw.	d. clouds	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd. Ids	30.03	762.7	74.8	23.8	69	ne			3		0					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 9° 22′, W. 79° 54′	29.94	760.4	75.2	24.0	91	ne.			1		1							d. clouds	Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.16	766.1	67	19.4	89	sse.	5	2.2			2			0	0			misty	
N. Yard, Portsmouth, N. H.	30.25	768.3	29	—1.7		calm	0	0			0			0	0			clear	
Naval Hospital, Yokohama, Japan	29.58	751.3	40	4.4	95	n.			2		10		n.	0.42	10.7			light rain	
Adams, Callao, Peru	29.72	754.9	67	19.4	100	sse.			2		10			0	0	gr'd		cloudy	
Alaska, Valparaiso, Chili	29.91	759.7	62	16.7	77	calm			0		0			0	0	sm'h		clear	
Alert, S. 3° 10′, E. 106° 08′*	29.73	755.1	83	28.3	83	w.			1		5		calm	0	0	sm'h		fair	
Alliance, Norfolk, Va.	30.23	767.8	52	11.1	79	s.			1		2			0	0			fair	
Ashuelot, Tientsin, China	29.87	758.7	38	3.3	72	calm			0		0							clear	
Brooklyn, S. 52° 48′, W. 70° 34′	29.93	760.2	51	10.6	93	w.	17	7.6			8		w.	0	0	sm'h		fair	
Colorado, New York, N. Y.			41	5.0	91	se.	4	1.8			10		se.	0	0			hazy	
Enterprise, Norfolk, Va*	30.28	769.1	51	10.6	86	s.			1		10?							cloudy?	
Essex, Teneriffe, Canary Id	30.35	770.9	65	18.3	58	e.			2		2		e.			sm'h	se.	fair	
Franklin, Norfolk, Va.	30.32	770.1	56	13.3	61	s.	10.8	4.8			0			0	0			clear	
Galena, Villafranca, France	30.16	766.1	59	15.0	70	ssw.			1		0					sm'h		clear	
Independence, N. Yard, Mare I'd, Cal	29.94	760.5	48	8.9	85	sw.	10.8	4.8			8		sw.	0	0			cloudy	
Kearsarge, New Orleans, La	30.10	764.5	67	19.4	95	sse.			2		10		n.					cloudy	
Lackawanna, Valparaiso, Chili*	29.93	760.2	63	17.2	78	ene.			1		10							foggy	
Lancaster, Alexandria, Egypt	30.26	768.6	60	15.6	71	nnw.			2		8		nw.					fair	
Marion, S. 33° 29,′ E. 27° 51′	29.66	753.4	69	20.6	100	sw.			4		5					sm'h		fair	
Michigan, Erie, Pa	30.03	762.7	45	7.2	76	sw.			3		8		n.					cloudy	
Minnesota, Newport, R. I.	30.30	769.6	38	3.3	100	ssw.	2	0.9			0							clear	
Monocacy, Yokohama, Japan	29.75	755.6	40	4.4	100	wnw.			2		10		nw.					rainy	
Nipsic, Tangier, Morocco, Africa	30.40	772.1	61	16.1	82	ne.			4		2					sm'h		clear	
Onward, Callao, Peru†	30.07	763.8	66	18.9	?	sse.			3		10		n.			long	w.	foggy	
Palos, Hong Kong, China	29.78	756.4	69	20.6	100	ene.			1		10		wnw.					overcast	
Passaic, Washington, D. C.	30.26	768.6	48	8.9	85	s.			2		10							foggy	
Pensacola, Talcahuana, Chili	30.00	762.0	61	16.1	71	sw.	9	4.0			0			0	0	sm'h		clear	
Powhatan, San Juan, Porto Rico, W. I	30.17	766.3	76	24.4	82	ene.			3		5		ene.					fair	
Quinnebaug, N. 32° 54′, E. 27° 55′	30.33	770.4	58	14.4	70	n.			3		8					sm'h		cloudy	
Ranger, N. 19° 34′, W. 105° 07′*	29.93	760.2	66	18.9	79	se.			1		0			0	0	sm'h		clear	
Richmond, N. 22° 24′, E. 154° 40′*	30.06	763.5	71	21.7	66	ne.			4		8			0	0	mod.	n.	cloudy	
Shenandoah, S. 25° 33′, W. 34° 06′*	30.11	764.8	78	25.6	73	e.			3		2		e.			mod.	ene.	fair	
St. Louis, League Island, Pa	30.53	775.4	38	3.3	100	calm	0	0			10			0	0			cloudy	
Swatara, Yokohama, Japan*	29.56	750.8	43	6.1	83	nnw.			3		10		n.			sm'h		rainy	
Tennessee, Fort Monroe, Va	30.27	768.8	49	9.4	100	se.	10	4.5			2			0	0	sm'h		fair	
Vandalia, Aspinwall, Panama*†	30.07	763.8	78	25.6	86	se.			1		2		ene.			long	nne.	fair	
Wabash, Boston, Mass.	30.26	768.6	37	2.8	81	sw.	8	3.6			0			0	0			hazy	
Wachusetts, Esquimalt, B. C.	29.84	757.9	35	1.7	70	nw.			1		5							fair	
Wyoming, Port Royal, S. C.	30.28	769.1	61	16.1	82	e.	2	0.9			8		w.	0.09	2.3			cloudy	
Yantic, N. 11° 05′, W. 79° 59′*	29.96	761.0	79	26.1	78	ne.			4		5		ne.			mod.	ne.	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, Boston, Mass*	29.94	760.5	36	2.2		s.	3		1		ssw.	0	0			clear	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, Moville, Ireland*	29.95	760.7	50	10.0		wnw.	7		8		w.					light rain	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 49° 30′, W. 34° 47′*	30.32	770.1	48	8.9		ssw.	4		8		sw.	0	0	mod.	sw.	cloudy	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, Off Hook Head, Ireland*†	30.28	769.1	50	10.0		wsw.	5		7		w.	1 h'r	1 h'r	sm'h		cloudy	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 48° 49′, W. 32° 13′	30.32	770.1	51	10.6	93	s.	6		10?		sw.			mod.	sw.	fair?	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, Engt	30.14	765.5	45	7.2	100	s.	3		2?		ssw.	light	light			overcast?	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, N. 44° 30′ W. 41° 37′*†	30.09	764.3	47	8.3	92	nne.	5		6?		n.			mod.	s.	overcast?	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,																	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 41° 32′, W. 64° 30′*†	30.54	775.7	43	6.1		ssw	1		0					very light	sw.	very fine	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 24° 10′, W. 73° 55′*	30.29	769.4	74	23.3		ne.	3		5		ne.	0	0	mod.	ene.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Cartagena, U. S. C.*†	29.82	757.4	75	23.9													W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Maracaibo, Venezula, S. A						ne.	2									fine	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 18° —′, W. 77° —	29.68	753.9				e.	4		0			0	0	sm'h		clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,																	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 49° 21′, W. 42° 36′	29.95	760.7	53	11.7		calm	0		9							overcast	
Baroda, Capt. C. J. Russell, S. 11° 09′, W. 31° 17′	30.01	762.2	81.5	27.5	74	e.	4		3							d. clouds	
Caldew, Capt. W. Peterson, S. 44° 59′, W. 39° 24′	29.85	758.2	58.2	14.6		wsw.	2		5							d. clouds	
S. S. Cipero, Capt. W. N. Lailey, N. 8° 47′ W. 57° 12′	30.05	763.3	77.1	25.1	82	ne.	4		8						ne.	showery	
S. City of Agra, Capt. Thos. Young,																	
Coppename. Capt. James Buchan																	
Bk. Glaramara, Capt. R. Morton,																	
Glencairn, Capt. R. S. Tannock, S. 1° 30′, E. 90° 10′	29.86	758.4	83	28.3	97	wnw.	6		7							d. clouds	
S. S. Gordon Castle, Capt. W. Waring, N. 38° 55′, W. 9° 03′	30.49	774.4	57	13.9	75	n.	3-4		1							blue sky	
Bg. Hermine, Capt. S. G. Jones, S. 46° 09′, W. 43° 52′	29.99	761.7	54.4	12.4	93	ene.	2		10							misty	
Hope, Capt. James Campbell, N. 28° 44′, W. 21° 55′	30.31	769.9	66.3	19.1	78	e.	4-5		5							d. clouds	
S. S. Humboldt, Capt. A. W. Jeffery, N. 6° 34′, W. 47° 20′	30.03	762.7	79.2	26.2	86	n.	5		9							misty	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 21° 28′, W. 0° 30′	30.11	764.8	75	23.9	85	ese.	4		8							showery	
May Hulse, Capt. H. Youlden, S. 56° 25′. W. 76° 53′	29.51	749.5	47.2	8.4	92	nnw.	6		10							drizzling	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, Buenos Ayres. Argentine Rep.	30.05	763.3	72	22.2	90	e.	5		5							misty	
Naiad, Capt. John Smith, N. 32° 44′. W. 41° 29′	30.09	764.3	61.5	16.4	98	ne.	5		4							showery	
Pole Star, Capt. F. Norman																	
Queen of Cambria, Capt. M. Parry, S. 10° 35′, E. 79° 05′	29.77	756.1	84	28.9	75	calm	0		8							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson,																	
S. Superb, Capt. Berridge																	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 41° 58′, W. 62° 30′*†	30.35	770.9				wsw.	4		2		w.	0	0	sm'h		clear	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman,																	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 24° 29′, W. 81° 25′*†	30.30	769.6	73	22.8		e.			2		e.			mod.	e.	clear	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,																	E. F. Stembridge, 3d offi
S. S. Gallia, Capt. W. H. P. Hains																	J. H. Mills, 3d officer.

MERCHANT-MARINE SERIES.—Continued.

Vessels and Masters.	Barometer reduced to sea-level. Inch.	Barometer reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Sea Swell. Character.	Sea Swell. Direction.	Weather.	Observers.
GENERAL TRANS-ATLANTIC CO. *Louis de Behian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt. Périer d'Hauterive, N. 40° 38′, W. 71° 54′*†	30.47	774.0	48.2	9.0		s.	3	calm	0	s.		0	0	sm'h	s.	clear	
S. S. St. Laurent, Capt. A. Sérvan, N. 49° —′, W. 18° —′*†	30.63	778.0	59.0	15.0		sw.	5					hail	hail		sw.		A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein,																	
S. S. Silesia, Capt. A. Albers, N. 52° 26′, E. 3° 20′*†	30.27	768.8	43.2	6.2		sw.	7		5		sw.	0	0	6	sw.	fair	
S. S. Wieland, Capt. C. Hebich, N. 50° 44′, W. 29° 30′*	30.21	767.3	53.5	11.9		ssw.	5		10		ssw.	0	0	3	sw.	hazy	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch																	John Inch.
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 26° —′, W. 45° —′*†	30.16	766.1	80	26.7		ene.	3		5?		ene.	1 h'r	1 h'r	long	ese.	clear?	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, Nem York.*																	
S. S. Colorado, Capt. M. B. Crowell, New York, N. Y*†	30.40	772.1	43	6.1		sw.	2		10			0	0			overcast	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann,																	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,																	F. C. Miller, 2d offi.
S. S. Santiago, Capt. S. F. Phillips, N. 20° 32′, W. 74° 04′†	30.22	767.6	76	24.4		ene.	3		3		ene.	1 h'r	sh'rs	mod.	e.	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom N. 22° 07′, W. 74° 22′† [man	30.25	768.3	76	24.4		e.	3								n.	showery	
S. S. City of Alexandria, Capt. L. F. Timmer-																	
S. S. City of Washington, Capt. J. W. Rey- N. 21° 20′, W. 89° 38′*† [nolds	30.25	768.3	81	27.2		e.	3							sm'h		clear	
S. S. Elbe, Capt. W. Willigerod N. 42° 02′, W. 59° 59′*	30.32	770.1	42.8	6.0		w.	4							sm'h		clear	
S. S. Lessing, Capt. B. Voss, N. 40° 36′ W. 72° 35′*†	30.12	765.0	46	7.8		ssw.	2							2	wsw.	clear	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke, N. 51° 23′, W. 10° 00′*†.	30.55	776.0	51.5	10.8		wnw.	6								nnw.	rainy	
S. S. P. Caland, Capt. E Deddes, N. 45° 54′, W. 51° 53′	30.19	766.8	28.4	—2.0		wnw.	4								w.	fine	
S. S. Schiedam, Capt. E. M. Chevalier, N. 40° 35′, W. 72′ 30′	30.25	768.3	43	6.1		ssw.	2							sm'h		clear	
S. S. Scythia, Capt. M Murphy																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur																	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 48° 30′, W. 5° 28′*	30.60	777.2	56.8	13.8		sw.	4		5?		nw.	0	0	r'gh	sw.	clear?	G. H. Lose, 3d offi.
S. S. Leipzig, Capt. F. Pfeiffer, N. 37° 06′ W. 75° 34′	30.32	770.1	47	8.3	92	sse	2		2			0	0	sm'h	ese.	clear	Sander & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	30.21	767.3	33.8	1.0		wsw.	5		4		wsw.	0	0				
S. S. Mosel, Capt. F. Hesse,																	J. Hesse.
S. S. Neckar, Capt. R. Bussius. N. 49° 47′, W. 12° 13′	30.65	778.5	50.0	10.0		w.	5		9		w.	1½ hr	1½ hr	r'gh	wnw.	squally	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	
S. S. Oder, Capt. Undeutsch, Norderney Id, Germany*	30.14	765.5	43.2	6.2		wsw.	4		4		wsw.	0	0	mod.	w.	fair	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, N. 32° 01′, W. 59° 35′	30.30	769.6				ne.	5		8		nne.	8 h'r	light	long	ne.	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Helmbruch N. 52° 10′, E. 3° 02′*	30.29	769.4	48.0	8.9	92	wnw.	6		4?		wnw.	2 h'r	2 h'r	r'gh	w.	cloudy?	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 33° 55′, E. 144° 07′†	29.85	758.2	64	17.8	83	s.	6		10		sw.	rain	rain	high	ssw.	raining	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, San Francisco, Cal			45	7.2	92												
S. S. Oceanic, Capt. J. Metcalfe, N. 38° 04′, E. 153° 39′..*	30.08	764.0	44	6.7	60	nw.	4		9		nw.			5	nne.	overcast	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	30.00	762.0				calm	0		10?							clear?	K. S. Nickerson.
S. Seminole, Capt. H. K. Hallett, Savannah, Ga.†	30.22	767.6	66	18.9	78	se.	1		fg.			6 h'r	6 h'r			foggy	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes,																	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer, N. 43° 12′, W. 124° 40′*†.	29.93	760.2	38	3.3	90	n.	6		8		nw.	½ h'r	½ h'r	mod.	nw.	rain & snow	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otorendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann																	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,																	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†.	29.97	761.2	46	7.8	92	nw.	1		2		nw.					hazy	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 35 21′, W. 121° 02′†	30.07	763.8	51	10.6	93	sw.	3		8		sw.			mod.	wnw.	fair	
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†	30.01	762.2	38	3.3		nnw.	5		4		n.	0	0	sm'h		clear	
S. S. Idaho, Capt. H. M. Hayward, San Francisco, Cal†	29.77	756.1	48	8.9	85	w.	3		10							overcast	
S. S. Orizaba, Capt. Chas. B. Johnson, N. 37° 06′, W. 122° 19′†	30.02	762.5	52	11.1	40	nw.	5		1		nw.			r'gh	nw.	raining	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, San Simon Bay, Cal†	30.14	765.5	51	10.6	93	se.	1		10							drizzling	
S. S. State of California, Capt. G. Debney, Astoria, Oregon†	29.89	759.2	35	1.7	90	nw.	4		10		nnw.	4 h'r	snow			snowing	
S. S. Victoria, Capt. W. E. Plummer, San Francisco, Cal†	30.02	762.5	47	8.3	92	nw.	3		8							misty	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh																	
S. S. City of New York, Capt. W. B. Cobb, N. 20° 59′, W. 158° 00′†	30.21	767.3	71	21.7	85	ene.	5		8		ne.	sq'lls	sq'lls	h'vy	ne.	raining	W. H. Hawes, 2d off. J. M. Dow, 3d officer.
S. S. City of Rio de Janeiro, Capt. Cavarly,																	
S. S. City of Sidney, Capt. H. C. Dearborn, Sydney, N. S. W†	29.91	759.7	89	31.7	69	w.	4		2		w.	0	0	sm'h		misty	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, Hong Kong, China†	29.84	757.9	61	16.1	82	calm	0		8			0	0			cloudy	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 21° 05′, W. 106° 06′†.	30.03	762.7	69	20.6	84	nw.	3		3		wnw.	0	0	sm'h	n.	clear	
S. S. Granada, Capt. M. Connolley, N. 8° 02′, W. 83° 14′†	29.93	760.2	81	27.2	95	nw.	1		5?		n.	0	0	small	nw.	clear?	
S. S. South Carolina, Capt. W. J. Russell, Panama, Panama†	30.03	762.7	78	25.6	82	nw.	1		2		nw.	0	0	sm'h		fair	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	29.87	758.7	75	23.9	81	ne.	1		0							fine	
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth																	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 24° 34′, W. 65° 16′						se.	2		0			0	0	long	e.		G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes Antwerp, Belgium*†	30.48	774.2	43	6.1		w.	6		5		w.	2 h'r	2 h'r	sm'h		fair	
S. S. Nederland, Capt J. Ueberweg, Antwerp, Belgium			46	7.8		sw.	5		8		sw.	driz.	driz.			misty	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, N. 46° 46′ W. 42° 46′*	30.00	762.0	46	7.8	85	s.	4		10		s.	0.3	8.	mod.	s.	cloudy	O. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,																	Egmond & Ludder.
S. S. Vaderland, Capt. W. A Beynon,																	
S. S. Waesland, Capt. H. Nickels. N. 49° 12′, W. 24° 13′*	30.39	771.9	54	12.2		wsw.	4		5?		w.	2 h'r	hail	mod.	w.	cloudy?	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W A. Scholten, Capt. G. I. Vis. N. 40° 28′, W. 74° 00′*	30.04	763.0	54.5	12.5	86	sw.	2		6		nnw.	0	0	sm'h	nw.		
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 46° 47′, W. 48° 15′†	30.15	765.8	31.1	—0.5		n.	2		6?		nnw.	5 h'r	snow	sm'h	nnw.	covered?	J. T. E berling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters.																	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York*																	
S. S. Adriatic, Capt. J. W. Jennings,																	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 44° 54′, W. 46° 54′*†	29.75	755 6	41	5.0		n.	5					5 h'r	5 h'r	mod.	n.	raining	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell New York, N. Y.*†	30.05	703.3	41	5.0	73	sw.	2		2		nw.	0	0			fair	B. Gleadell H. Day, 4th officer.
S. S. Germanic, Capt. C. W. Kennedy																	
S. S. Republic, Capt. P. J. Irving, N. 49° 53′, W. 24° 50′†	30.64	778.2	50	13.3	87	sw.	4		2		sw.	0	0	mod.	sw.	clear	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 46° 16′, W. 32° 59′*	30.25	768.3	59	15.0		sw.	4		8		w.	0	0	mod.	ssw.	hazy	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. Pensacola, Florida †	30.27	766.8	67	19.4	94	sse.	3	0	0			0.05	1.3			clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 33° 31′, W. 58° 36′*†	30.41	772.4	58	14.4		ne.	4		8		ne.	4 h'r	4 h'r	r'gh	nne.	fair	C. Bailey.
Bk. Alpha, Capt. O. Grönn N. 19° 32′, W. 39° 40′*†	30.12	765.0	76	24.4		ne.	5		3		ne.	0	0	long	nw.	fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby, N. 48° 49′ W. 9° 03′*†	30.70	779.8	54	12.2	79	wsw.	4		6		wnw.	1 h'r	light	high cross	wnw.	squally	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, Ponce, Porto Rico, W. I.*†	30.16	766.1	78	25.6		ne.	1		2		ene.	1 h'r	1 h'r			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 2° 26′, W. 25° 07′*†	29.93	760.2	88	31.1		n.	2		4		se.	1 h'r	light	sm'h	nnw.	fair	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia,																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 43° 19′, W. 39° 16′*†	30.07	76[illegible].8				wsw.	3				wsw.	sh'rs	sh'rs	sm'h		cloudy	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill, S. 50° 41′ W. 62° 40′†	30.00	762.0				sw.	2		0			0	0	sm'h	n.	clear	A. J. Pettengill.
S. Enoch Train, Capt. H. D. Chapman, Bremerhaven, Germany*	30.14	765.5				w.	5		0			sh'rs	sh'rs			very fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.																	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C†	30.35	770.9	54	12.2	86	s.	2		10		calm	0	0			cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 22° 15′, W. 36° 14′			72	22.2		n.	1		5		nne.	3 h'r	light	sm'h		fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 21° 48′, W. 64° 10′*†	30.01	762.2				ene.	7		0			0	0	r'gh	ene.	clear	
Bk. Geo. Booth, Capt. D. Williams, N. 6° 37′, W. 30° 49′*†	29.80	756.9	84	28.9		ene.	2					0	0			hazy	D. Williams.
Bk. Granville, Capt. R. Bonney N. 35° 19′, W. 54° 45′*†	30.25	768.3	68	20.0		s.	4					light	rain	rg'h	ssw.	overcast	
Schr. Henry Denison, Capt. Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 39° 50′. E. 49° 35′*	30.18	766.6				ne.	4		2		nne.	0	0	mod.	e.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,																	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte																	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen, Off Cape St. Martin, Spain*†	30.56	776.2				var.	1				e.	0	0	long	e.	fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 28° 19′, W. 23° 54′*†	30.50	774.7	66	18.9	90	sse	6		2		sse.			mod.	se.		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.12	765.0	60	15.6	44	s.	4		8		se.					cloudy	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 24° 05′, W. 28° 58′*†	30.00	762.0				calm	0		10			0	0			overcast	J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	30.31	769.9	70	21.1		calm	0		0			0	0			fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 20° 43′, W. 36° 05′*	29.82	757.4	77.0	25.0	96	n.	5		7		n.				se.		H. N. T. Sumner.
Bk. Sunbeam, Capt. Joseph Hand, N. 25° 30′, W. 31° 18′*†	30.06	763.5	69	20.6	95	sse.	6		10		sw.	1 h'r	light	mod.	s.	cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert,																	
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 47° 26′, W. 19° 15′*†	30.50	774.7	47	8.3	?	wsw.	2				w.			mod.	w.	covered	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, S. 8° 10′, W. 31° 18′*†	30.00	762.0				se.					se.			light	se.		N. P. Dutton.

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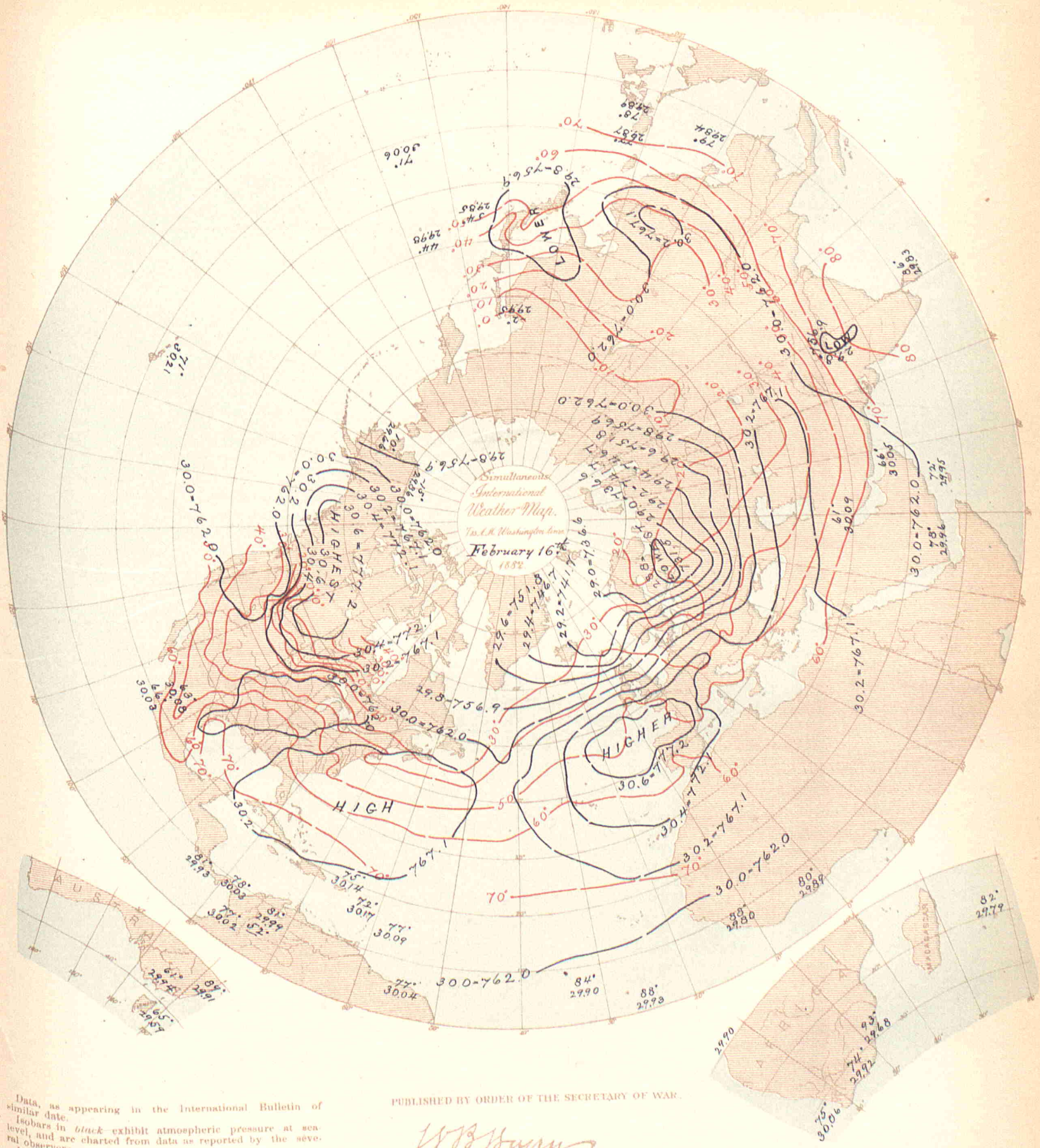
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 17, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.35	770.9	60.8	16.0	79	w.			1		2			0.020	0.5	fair	Moiroud.
Algiers			30.35	770.8	54.3	12.4	93	n.			2		10			inap.	inap.	covered	Nicolas.
La Calle			30.23	767.9	54.7	12.6	82	nnw.			2		6			0.236	6.0	cloudy	Fonfrède.
Tunis			30.17	766.2															Jacques.
Sfax																			Gau.
Saida			30.31	769.8	48.9	9.4	71	n.			1		3			0	0	pretty fair	Dumas.
Tebessa			30.23	767.8	39.6	4.2	87	n.			4		10			inap.	inap.	covered	Derché.
Geriville					38.5	3.6	70	ne.			5		8			0.248	6.3	very cloudy	Louchamp.
Laghouat			30.31	769 9	50.0	10.0	50	n.			2		2			0.236	6.0	fair	Herbin.
Biskra			30.28	769.2	57.2	14.0	41	n.			3		10			0.079	2.0	covered	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.82	757.4	29.91	759.7	62.9	17.2	75	ssw.	17	7.6			10			0	0	dull	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.61	752.0	30.17	766.3	46.8	8.2	68	sw.			3		10			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.05	737.8	29.84	758.0	33.8	1.0	85	wsw.	23.7	10 6			10			0.075	1.9		Dr. Wierzbiski.
Eperies	28.97	735 9	29.87	758.8	38.5	3.6	51	s.			5		10 ks			0	0		Julius Mikolik.
Gratz	28.85	732.7	30.14	765.6	40.5	4.7	42	n.			2		9			0	0		Andreas Rospini.
Hermannstadt	28.64	727.4	30.11	764.8	40.3	4.6	68	wnw.			3		6			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.75	730.3	30.14	765.6	38.5	3.6	87	wsw.			3		10			0.059	1.5	rainy	The Staff.
Lemberg	28.76	730.6	29.78	756.4	36.0	2.2	48	sw.			5		10			0.232	5.9		Dr. T. Stanecki.
Pola	30.21	767.2	30.32	770.2	45.7	7.6	85	wnw.			2		0			0.764	19.4		I. R. Hydrographic Office.
Szathmar	29.59	751.5	30.06	763.4	39.9	4.4	35	s.			3		10			0.106	2.7		Joseph Midlinszky, S. J.
Szegedin	29.78	756.4	30.07	763.7	44.1	6.7	61	se.			3		4			0.110	2.8		Karl Stancel.
Trieste	30.24	768.0	30.34	770.6	46.8	8.2	62	calm			0		10			0	0		Rieder.
Vienna	29.29	743.9	30.02	762.6	41.4	5.2	66	w.			8		10			0	0		I. R. Central Met. Obs'y
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.81	757.2	29.91	759.7	45.4	7.4	57	w.	23	10.3			3			0.010	0.3	squally	W. Boswell.
Armagh, Observatory	29.93	760.2	30.18	766.6	50.0	10.0	93	w.	13	5.8			10					raining	S. Gall.
Bidston, Liverpool Obs'y			30.18	766.6	48.8	9.3	85	wsw.	40	17.9			9					overcast	John Hartnup.
Bolton, Sharples	29.63	752.6	30.18	766.6	46.6	8.1	88	wsw.	30	13.4			10					overcast	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.73	755.1	30.12	765.0	48.1	8.9	91	w.			1		10			0.01	0.3	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	78.0	25.6	69	ne.			3		6					gloomy	Corpl. J. Surgenor, A. H. C.
Cardington			30.22	767.6	50.0	10.0	78	w.			2.0		10					overcast	John McLaren.
Chatham, School M. E.	30.15	765.8	30.28	769.1	48.7	9.3	76	sw.			1		9					d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.23	767.8	30.46	773.7	49.5	9.7	77	w.			4		8					overcast	The Staff.
Fort Napier, Natal	27.70	703.6	29.91	759.7	69.3	20.7	75	ne.			2		7						Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	87.0	30.6	72	nw.			1		5					d. clouds	Sergt. John Robinson.
Galway, Queen's College			30.24	768.1	50	10.0	93	wsw.			2		10			0.06	1.5	misty	J. O'Donaghue.
Gibraltar, Mediterranean	30.38	771.9	30.43	772.9	61.5	16.4	82	ne.			3		6					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	29.81	757.2	30.02	762.5	47.6	8.7	77	w.			3		8 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.10	764.5	30.28	769.1	49.1	9.5	71	wsw.			4		10					overcast	The Staff.
Guernsey	30.16	766.1	30.46	773.7	51.0	10.6	78	nnw.			2		5					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.25	768.3	30.29	769.4	49.5	9.7	63	w.	19	8.5			9					threatening	The Staff.
Leicester, Museum	29.95	760.7	30.21	767.3	51.4	10.8	65	nw.			4		6					d. clouds	J. C. Smith.
Malta, Mediterranean	30.14	765.5	30.21	767.3	56.8	13.8	77	se.			2		9					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.26	768.6	30.30	769.6	72.5	22.5	83	ne.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	30.05	763.3	30.28	769.1	48.5	9.2	70	wsw.			4		10					squally	The Staff.
Plymouth	30.35	770.9	30.42	772.7	51.1	10.6	83	nw.			2		4					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.80	756.9	43.4	6.3	79	w.	35	15.6			5					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.20	767.1	30.27	768.8	47.6	8.7	74	sw.			1		1					blue sky	W. H. Lyne.
Sheffield	29.88	758.9	30.16	766.1	48.9	9.4	85	wsw.			2		10			0.01	0.3	overcast	W. F. Cooper.
Silloth Rectory	30.05	763.3	30.08	764.0	47.1	8.4	92	w.			3		10			0.015	0.4	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.16	766.1	46.7	8.2	88	w.	17	7.6			10					squally	I. New.
Stratfield Turgiss	30.09	764.3	30.31	769.9	50.0	10.0	71	w.			2		8					d. clouds	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.39	771.9	30.44	773.2	54	12.2	73	nw.			6		5					d. clouds	W. Newcombe.
Valencia, Observatory	30.38	771.6	30.40	772.1	51.4	10.8	86	wsw.	28	12.5			10					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.13	765.3	30.16	766.1	71.0	21.7	69	e.	13.6	6.1		0	8 s			0.160	4.1	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	30.02	762.5	30.06	763 5	78.5	25.8	50	s.	32	14.3		0	0			0	0		The Staff, for D. Gill.
Worcester†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.					20.6	— 6.3		calm	0	0			10 n		s.	inap.	inap.	snowing	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.80	756.9	29.84	757.9	34	1.1	92	s.	12	5.4			10 n			inap.	inap.	light rain	H. J. Cundall, C. E.
Chatham, N. B.*	29.65	753.1	29.72	754.9	32	0.0	88	calm	0	0			10 n		calm	0.08	2.0	light rain	G. A. Blair.
Cornwall, Ontario	29.90	759.4	30.10	764.5	27.4	— 5.3	83	nw.			3		10 s			0.195	5.0	cloudy	James Smith, M. A.
Dalhousie, N. B.	29.46	748.3	29.64	752.8	24.0	— 4.4		calm			0		10 n			inap.	inap.	snowing	H. A. Johnson.
Father Point, Quebec*	29.70	754.4	29.72	754.9	26	— 3.3	96	w.	12	5.4			10 n			0.05	1.3	light snow	J. McWilliams.
Fort Garry, Manitoba*	30.07	763.8	31.09	789.7	—29	—33.9	100	n.	3	1.3		0	fg			0	0	hazy	James Stewart.
Fredericton, N. B.	29.58	751.3	29.64	752.8	36.5	2.5	95	se.	12	5.4			10 n			0.270	6.9	raining	Prof. Harrison.
Granton, Ontario	29.19	741.4	30.37	771.4	23.3	— 4.8	96	n.	9	4.0			10 n			0	0	cloudy	James Grant.
Halifax, N. S.*	29.81	757.2	29.94	760.5	39	3.9	96	sw.	16	7.2			10 n		sw.	0.081	2.0	light rain	A. Allison.
Hamilton, Ontario	29.90	759.4	30.32	770.1	25.7	— 3.5	74	w.			2	4 c	0		ne.	0.04	1.0	fair	Geo. Dickson, B. A.
Kingston, Ontario*	29.87	758.7	30.23	767.8	21	— 6.1	80	n.	11	4.9		2 k	2 s		n.	0.18	4.6	fair	A. P. Knight, M. A.
Little Glace Bay, N. S.	29.88	758.9	29.92	760.0	33.0	0.6	80	s.			4		10 n			0	0	cloudy	C. H. Rigby.
Montreal, Quebec*	29.80	756.9	30.02	762.5	28	— 2.2	77	n.	20	8.9			10 s		n.	0.18	4.6	light rain	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.70	754.4	30.48	774.2	3	—16.1	72	n.	19	8.5		0	0			0.32	8.1	clear	Rev. R. Mosley.
Peterboro, Ontario	29.53	750.0	30.34	770.6	18.6	— 7.4	84	nw.			3	0	0			0.35	8.9	clear	J. Dixon, B. A.
Port Dover, Ontario	29.59	751.6	30.32	770.1	30	— 1.1	100	nw.	10	4.5		10 k	0	w.		0.20	5.1	cloudy	H. Morgan.
Port Stanley, Ontario	29.63	752.6	30.32	770.1	26	— 3.3	88	w.	24	10.7			1c n		nw.	0.09	2.3	cloudy	M. Payne.
Quebec, Quebec*	29.41	747.0	29.74	755.4	33	0.6	92	n.			6		10 n			0.15	3.8	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.93	760.2	30.45	773.4	1	—17.2	72	nw.	12	5.4		0	0			0.37	9.4	clear	W. H. McIntyre.
Saugeen, Ontario*	29.70	754.4	30.48	774.2	13	—10.6	83	ne.	18	8.0			10 ks			0.15	3.8	cloudy	
St. Andrews, N. B.	29.64	752.8	29.69	754.1	39	3.9	97	sw.	15	6.7			10 n			0.25	6.3	light rain	
St. John, N. B.	29.53	750.0	29.70	754.4	38.0	3.3	100	sw.	18	8.0			10 n			0.130	3.3	raining	G. Murdock, C. E.
St. Pierre, N. F.																			N. F. Land, Com't.
Stratford, Ontario	28.99	736.3	30.37	771.4	19.4	— 7.0	92	nw.	18	8.0			10 s			0.191	4.9	cloudy	C. I. Macgregor, M. A.
Sydney, C. B*	29.96	761.0	30.03	762.7	31	— 0.6	96	sw.	10	4.5			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.94	760.5	30.35	770.9	20	— 6.7	73	n.	28	12.5		2 k	5 ks	n.	n.	0.17	4.3	fair	Magnetic Observatory.
Windsor, N. S.	29.74	755.4	29.83	757.7	39.5	4.2	86	s.	22	9.8			10 n			0.09	2.3	raining	Prof. W. R. Butler.
Woodstock, Ontario	29.19	741.4	30.32	770.1	26.3	— 3.2	69	w.	21	9.4			10 ks			0.42	10.7	cloudy	Prof. Wolverton
Yarmouth, N. S*	29.74	755.4	29.81	757.2	39	3.9	100	s.	16	7.2		fg	fg			0.45	11.4	heavy rain	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.08	764.0	30.35	770.9	25	— 3.9		s.	1	0.4		0	0			0	0	fair	John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	29.96	761.0	30.25	768.3	43.4	6.3	86	nw.			1		10			0	0		N. Titoushkin.
Sung-shu-chwang†	24.70	627.4			21.7	—5.7		calm			0					0.08	2.		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	30.02	762.6	30.05	763.3	40.3	4.6	91	ese.	2.5	1.1			10			0	0	covered	M. Marc Dechevrens, S. J.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.29	744.0	29.34	745.2	41.2	5.1	83	wnw.	34	15			10						Oversergent Fischer.
Fanöe	29.68	753.8	29.70	754.3	42.3	5.7	77	wnw.			7		1						Overloerer Lauridsen.
Godthaab, Greenland	29.36	745.8	29.41	746.9	19.4	— 7.0	78	e.			3		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.48	748.9	29.53	750.0	29.1	— 1.6		s.			6		5						A. O. Thorlacius.
Thorshavn	29.56	750.8	29.60	751.7	39.0	3.9	73	w.	22	10			3						Overloerer Bergh.
Vestervig	29.50	749.3	29.59	751.6	41.5	5.3	74	nw.			7		1						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.95	760.8	30.62	777.8	51.1	10.6	56	nnw.			1	c; ck	0			0	0		M. Labroue, Director.
Alençon, Normal School	29.95	760.6	30.50	774.6	47.1	8.4	94	w.			4		10 n		e.	0.031	0.8	raining	M. Nicot, Director.
Arras, Engineer School	30.08	763.9	30.34	770.5	45.7	7.6	97				3		1c n			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.33	770.3	30.41	772.3	53.6	12	46	n.			6		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.89	759.1	30.47	773.8	45.0	7.2	94	sw.			2		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.13	765.2	30.40	772.1	48.6	9.2	76	wnw.			3		10		wnw.	0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.43	772.9	39.2	4	97	s.			1		10		sw.	0.098	2.5	raining	M. Gobin, Director.
Bordeaux, Observatory	30.34	770.7	30.61	777.6	50.4	10.2	62	wsw.			1		10		nw.	0.008	0.2	covered	M. Rayet, Director.
Bourges, Normal School	29.97	761.3	30.55	775.9	46.4	8	86	w.			1		kn		w.	0.091	2.3		M. Postel, Director.
Brest, Naval Observatory	30.30	769.6	30.54	775.8	53.2	11.8	80	w.			2		6		w.	0.039	1.0		M. de Kennaree, Dir.
Caen, Normal School	30.36	771.2	30.44	773.1	51.1	10.6	76	w.			1		5			0	0	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.04	763.0	30.37	771.4	46.9	8.3	83	s.			2		10			0.016	0.4	covered	M. Jadot, Director.
Charleville, Normal School.	29.78	756.5	30.31	769.8	46.4	8.0	80	nw.			1		10			0.55	14.	raining	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.15	740.3	30.55	775.9	45.9	7.7	72	wnw.			1		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.69	754.1	30.57	776.4	43.5	6.4	77	se.			2		fg		n.	0.020	0.5	foggy	M. de Villemontée, Dir.
Commercy, Normal School.	29.50	749.2	30.39	772.0	41.2	5.1	90	w.			4		10 n		w.	0.028	0.7	covered	Dr. Coulet, Director.
Gap, Normal School	27.81	706.4	30.43	772.9	43.9	6.6	37	w.			1	c	0			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.23	742.5	30.38	771.6	53.4	11.9	33	nw.			2		2		nw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.72	754.9	30.52	775.3	41.2	5.1	68	wnw.			2		ksn		e.	0	0		M. Ablard, Director.
Guéret, Normal School	28.92	734.5	30.57	776.5	42.4	5.8	67	sw.			1		n		sw.	0	0		M. Rivoire, Director.
Lamballe, Normal School	30.25	768.3	30.53	775.4	50.4	10.2	84	w.			2		5		w.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	30.05	763.2	30.63	778.0	50.4	10.2	58	e.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.48	774.1	30.58	776.7	53.6	12.0	87	sw.			3		8		w.	0	0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.40	746.7	30.59	776.9	39.9	4.4	74	ese.			1		10			0	0	misty	M. André, Director.
Mans, Normal School	30.21	767.3	30.53	775.4	45.7	7.6	89	nw.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.10	764.6	30.37	771.5	54.5	12.5	27	nw.			1		1		nne.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.10	637.5	29.94	760.5	33.8	1.0	58	nw.	15.0	6.7			6		sw.	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.30	769.6	30.43	773.0	55.4	13	41	w.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.56	750.9	30.37	771.4	42.8	6	88	ssw.			1		1c kn			0.008	0.2	covered	M. Hasse, Director
Nantes, Observatory	30.42	772.6	30.58	776.7	52.5	11.4	72	wnw.			1-2		8k; kn	wnw.	wnw.	0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.38	771.6	30.49	774.5	52.3	11.3	37	n.	28.0	12.5			1	ne.		0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.42	544.1			21.2	— 6.0		ne.			2		1		ne.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.38	746.2	30.48	774.3	43.2	6.2	79	n.			4		10 k		n.	0	0	covered	M. Taillen.
Puy de Dôme Obs'y, Summit	25.45	646.3			27.7	—2.4	100	w.			4		1c			0.035	0.9	foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.55	775.9	30.58	776.7	49.6	9.8	92	w.			1		10					raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.28	769.0	30.50	774.6	50.0	10	86	nw.			1		5		nw.	0.028	0.7	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.33	719.5	30.56	776.3	41.0	5	29	nw.			4		1		sw.	0	0	clear	M. Serger, Director.
Rouen, Normal School	30.37	771.4	30.42	772.6	48.2	9	78	w.			2		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.30	769.5	30.45	773.5	49.8	9.8	76	nw.			3		5		nw.	0.051	1.3	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.26	768.6	30.43	772.8	47.8	8.8	77	w.			2		10		w.	0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.90	759.5	30.64	778.2	48.7	9.3	69	nw.			1		2		nw.	0	0	slightly cl'dy	M. Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.93	760.1	30.42	772.6	46.8	8.2	75	nw.			3					0.004	0.1		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.14	765.5	30.43	772.9	48.0	8.9	76	w.			1		10		w.	inap.	inap.	sprinkling	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.21	742.0	30.07	763.7	39.4	4.1	80	sw.			5		10 n		wsw.	0.157	4.0	raining	Prof. Dr. Hoh.
Berlin	29.54	750.3	29.72	754.9	42.8	6.0	70	w.			6		5			0.094	2.4	raining	Prof. Dr. Arndt.
Breslau	29.23	742.5	29.76	755.8	42.4	5.8	67	w.			7		10			0.063	1.6	sprinkling	Royal University Obs'y.
Carlsruhe	29.83	757.7	30.29	769.3	41.4	5.2	81	sw.			5		10		sw.	0.012	0.3		Albert Senz.
Cassel	29.27	743.4	29.98	761.5	42.4	5.8	90	s.			8		10 n		s.	0.650	16.5		Dr. H. Möhl.
Frankfort on the Main	29.77	756.1	30.14	765.6	46.0	7.8	86	sw.			2		10			0.213	5.4		Physical Society.
Friedrichshafen	28.93	734.8	30.43	772.9	38.8	3.8	83	sw.			6		10	sw.		0	0		Wilhelm, Chief Tel.
Hamburg	29.70	754.3	29.79	756.7	43.3	6.3	75	wnw.			7		9			0.130	3.3		E. Preller.
Kiel	29.67	753.5	29.68	753.9	43.3	6.3	67	w.			9		5			0.248	6.3		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.47	748.6	29.90	759.5	44.6	7.0	69	sw.			5		8	w.		0.016	0.4		H. Leppig, Asst.
Magdeburg	29.65	753.0	29.84	757.8	45.9	7.7	65	wnw.			7	c	8 ks;k		w.	0.008	0.2		Dr. Assmann.
Memel	29.19	741.3	29.23	742.4	38.5	3.6	87	wsw.			6		10 s						Issermann.
Munich	28.39	721.0	30.26	768.7	39.0	3.9	74	wsw.			6		10	wsw.		0.016	0.4		Central Station.
Neufahrwasser	29.32	744.6	29.33	745.0	41.0	5.0	78	w.			6		7	w.		0.169	4.3		A. Lothes.
Neustadt, Palatinate	29.67	753.6	30.20	767.1	43.9	6.6	91	wsw.			5		10			0.055	1.4		Dicknether.
Stuttgart	29.28	743.7	30.20	767.1	44.1	6.7	76	w.			5		10			0.126	3.2		Prof. Dr. Schoder.
Wustrow	29.53	750.0	29.56	750.7	41.0	5.0	100	wsw.			9	0	8 s			0.047	1.2		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.90	759.4	30.29	769.4	57.6	14.2		s.			1.0		8			0	0	misty	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurnachee	30.00	762.0	30.05	763.3	69.2	20.7	56	w.	18	8.0			0			0	0	blue sky	
Deesa	29.48	748.7	29.96	761.1	71.1	21.7	32	nnw.	10.3	4.6			0			0	0	blue sky	
Bombay	29.87	758.7	29.91	759.7	74.8	23.8	56	nnw.	32	14.3			0			0	0	blue sky	
Poona, Yarrowda.	27.99	710.8	29.81	757.2	84.9	29.4	20	wnw.	20	8.9			0			0	0	blue sky	
Belgaum	27.29	693.2	29.78	756.5	84.7	29.3	34	s.	9	4.0			0			0	0	blue sky	
Lahore	29.24	742.7	30.02	762.5	58.6	14.8	38	nw.	2.4	1.1			0			0	0	blue sky	
Roorkee	29.06	738.2	30.00	762.0	61.8	16.6	59	w.	2.4	1.1			3			0.30	7.9		
Agra	29.44	747.7	30.02	762.6	67.3	19.6	24	w.	6.5	2.9						0	0		
Nagpur	28.84	732.5	29.88	758.9	82.5	28.1	27	nw.	5.4	2.4			0			0	0	blue sky	
Jubbulpore	28.55	725.1	29.90	759.6	80.0	26.7	26	calm	2.1	0.9			0			0	0	blue sky	
Lucknow	29.55	750.5	29.93	760.3	72.7	22.6	28	w.	4.6	2.1			0			0	0	blue sky	
Allahabad	29.60	751.9	29.92	760.0	70.8	21.6	37	w.	4.8	2.2			0			0	0	blue sky	
Patna	29.65	753.0	29.84	757.8	75.1	23.9	36	w.	3.9	1.7			0			0	0	blue sky	
Hazaribagh	27.82	706.7	29.84	758.0	76.3	24.6	8	nw.	7.9	3.5			0			0	0	blue sky	
Cuttack	29.75	755.6	29.83	757.7	86.1	30.1	57	sw.	1.8	0.8			3			0	0	d. clouds	
Calcutta, Alipore	29.76	755.9	29.78	756.5	81.8	27.7	52	nnw.	7.0	3.1			0			0	0	blue sky	
Dhubri	29.64	752.8	29.76	755.9	72.7	22.6	60	calm	1.7	0.8			0			0	0	blue sky	
Chittagong	29.73	755.2	29.82	757.5	75.6	24.2	89	sw.	3.9	1.7			8			0	0	d. clouds	
Sibsagar	29.50	749.2	29.85	758.1	63.2	17.3	80	ne.	4.5	2.0			8	w.	w.	0	0	d. clouds	
Jeypore	28.54	724.9	30.03	762.8	64.9	18.3	29	nw.	5.2	2.3			0			0	0	blue sky	
Zanzibar, Africa	29.76	755.9			87.1	30.6	60	ne.	9.7	4.3		c;cs	4 fk		nne.	0	0	d. clouds	
Trichinopoly	29.64	752.8			84.9	29.4	37	ese.	2	0.9			10			0	0	overcast	
Bellary	28.36	720.3			92.0	33.3	16	nw.	4.8	2.1			4			0	0	d. clouds	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.89	759.2	30.32	770.0	45.1	7.3	45	sw.	0.7	0.3			5			0	0		Prof. Giovanni Clodig
Milan	29.80	757.0	30.34	770.7	44.6	7.0	77	wsw.	6.9	3.1			4	wsw.		0	0		Prof. Schiaparelli.
Padua	30.17	766.4	30.29	769.3	48.2	9.0	58	wsw.	19.2	8.6			6			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.41	746.9	30.35	770.8	46.4	8.0	58	sse.	2.5	1.1			5	w.		0	0		Prof. P. F. Denza.
Genoa	30.13	765.3	30.33	770.3	56.3	13.5	41	n.	1.8	0.8			2			0	0		Prof. G. M. Garibaldi.
Mondovi	28.37	720.5	30.35	771.0	43.5	6.4	54	ne.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.28	769.0	30.33	770.3	43.2	6.2	82	n.	8.7	3.9			10			0.205	5.2		Prof. Luigi Guidi.
Florence	30.06	763.5	30.32	770.2	51.4	10.8	58	nw.			2					0.315	8.0		Prof. Costantino Pitter.
Leghorn	30.19	766.9	30.28	769.1	53.8	12.1	68	nne.	9.8	4.4			1			0	0		Prof. P. Monte.
Rome	30.13	765.3	30.31	769.9	54.3	12.4	54	nw.	0	0			4			0.031	0.8		Prof. P. S. Ferrari.
Lecce	30.02	762.6	30.28	769.2	55.0	12.8	60	ne.	7.4	3.3			7	ne.		0	0		Prof. C. de Giorgi.
Cosenza	29.38	746.3	30.30	769.6	51.1	10.6	72	ese.	3.1	1.4			9	se.		0	0		Prof. D. Conti.
Cagliari	29.99	761.7	30.19	766.7	54.3	12.4	50	sse.			4		4			0	0		Prof. A. Pacinotti.
Palermo	30.01	762.2	30.26	768.7	55.2	12.9	56	ne.	1.3	0.6			10			0	0		Prof. G. Ciacciatore.
Syracuse	30.21	767.2	30.25	768.4	55.0	12.8	61	w.	5.6	2.5			10	sw.		0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.73	755.2	30.27	768.8	55.0	12.8	57	e.	0	0			8	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.24	564.9			27.7	— 2.4	65	e.			1		10			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.26	565.6			26.2	— 3.2	70	n.			2		4			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.75	755.6	29.79	756.6	37.1	2.8	82	e.	4.6	2.1			10 s			0.030	0.8	overcast	
Hakodate	29.81	757.2	29.82	757.4	35.0	1.7	90	ese.	27.0	12.1			10			0.098	2.5	overcast	
Hiroshima, I. M. Obs'y.....†	29.79	756.6	29.80	756.9	48.0	8.9	95	wsw.	1.0	0.4		0	0			inap.	inap.	clear	K. Sasaki.
Kanazawa	30.16	766.0	30.26	768.6	45.2	7.3	98	se.	1.6	0.7		ck	10 ks			0.175	4.4	overcast	S. Endo.
Kioto	29.63	752.6	29.81	757.2	46.1	7.8	86	nw.	2.8	1.3		ck	3 s			0.008	0.2	fair	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.70	754.4	29.91	759.7	48.5	9.2	76	nw.	3.3	1.5			10 s			0	0	overcast	S. Takehayashi.
Niigata	29.75	755.6	29.79	756.6	44.6	7.0	92	ene.	1.0	0.4			10 n			0.095	2.4	light rain	
Nobiru	29.73	755.1	29.75	755.6	41.6	5.3	92	nnw.	5.4	2.4			9 s			0.140	3.6	cloudy	H. Midzushina.
Supporo					30.8	— 0.7	92	calm	0	0			10			0.080	2.0	covered	
Tokei Obs'y, Yeddo	29.66	753.3	29.73	755.1	51.1	10.6	92	calm	0	0			10 n			0.018	0.5	light rain	The Staff.
Wakayama	29.74	755.4	29.79	756.6	50.3	10.2	84	calm	0	0		4 ck	6 ck			0	0	cloudy	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon											1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	24.45	621.1	30.24	768.0	52.2	11.2	76	nne.				9 cs	0	sw.		0	0	very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	29.76	756.0	30.03	762.7	61.8	16.6	83	e.	1.6	0.8		0	0			0	0	very fine	The Staff.
Morelia	23.16	588.2	30.32	770.2	47.5	8.6	57	calm	0	0		1 c	0	s.		0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.29	617.0	30.49	774.6	54.0	12.2	71	sw.			4					0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	24.02	610.1	30.13	765.4	45.1	7.3	52					0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	23.44	595.3	30.38	771.5	41.0	5.0	80	calm	0	0		3	4	w.	e.	0	0	cloudy	G. Barroeta, M. D.
Tlacotalpam	24.22	615.0	30.35	771.0	53.5	11.9	72	se.			1								Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.62	574.7	30.35	771.0	49.6	9.8	49	nnw.	6.0	2.6		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.58	751.3	29.77	756.1	81.7	27.6	64	se.	22.5	10.1	.....	0	2 k	.....	se.	0.06	1.5	fair	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.21	767.3	30.21	767.3	45.3	7.4	.....	wsw.	.....	.....	5	.....	.....	.....	.....	0.098	2.5	.....	
Groningen	29.92	760.0	29.98	761.4	45.1	7.3	.....	nw.	.....	.....	6	.....	.....	.....	.....	0.114	2.9	.....	
Helder	30.03	762.8	30.03	762.8	43.9	6.6	.....	s.	.....	.....	4	.....	.....	.....	.....	0.024	0.6	.....	
Hellevoetsluis	30.14	765.5	30.14	765.5	44.8	7.1	88	wsw.	.....	.....	5	.....	.....	.....	.....	0.110	2.8	.....	
Utrecht	30.06	763.5	30.11	764.7	46.9	8.3	83	wsw.	.....	.....	5	.....	8	.....	.....	0.114	2.9	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.51	749.5	29.57	751.1	35.6	2.0	64	nnw.	27	12	.....	.....	7	.....	.....	0.039	1.0	.....	
Brono	29.31	744.5	29.35	745.5	29.8	— 1.2	63	sw.	9	4	.....	.....	8	.....	.....	0.016	0.4	.....	
Christiania	29.26	743.3	29.41	747.1	34.2	1.2	57	nnw.	7	3	.....	.....	8	.....	.....	0.134	3.4	.....	
Gjæsvær	29.15	740.5	29.18	741.1	25.3	— 3.7	.....	n.	.....	.....	4	.....	0	.....	.....	.....	.....	.....	
Lodingen	29.22	742.1	29.26	743.3	28.9	— 1.7	92	calm	.....	.....	0	.....	10	.....	.....	0.020	0.5	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	61.2	16.2	77	se.	16.8	7.5	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.43	747.6	30.46	773.7	53.6	12.0	40	ene.	4.9	2.2	.....	.....	1	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.27	768.8	30.36	771.1	64.8	18.2	44	ese.	5.6	2.5	.....	.....	5	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	30.11	764.8	30.48	774.3	52.9	11.6	52	ne.	20.6	9.2	.....	.....	0	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.31	769.9	30.38	771.7	61.2	16.2	79	ese.	14.3	6.4	.....	.....	3	.....	.....	0	0	.....	
Saint Paul de Loando	29.66	753.3	29.85	758.3	86.0	30.0	67	w.	0.7	0.3	.....	.....	1	sse.	.....	0	0	.....	
Serra da Estrella	25.59	649.9	30.48	774.3	38.5	3.6	58	sse.	18.1	8.1	.....	.....	0	.....	.....	0	0	.....	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.01	736.9	30.17	766.4	15.8	— 9.0	.....	sw.	31	14	.....	0	5 k	.....	.....	0.028	0.7	.....	Major K. Lasarew.
Archangel	28.68	728.5	28.70	729.0	18.7	— 7.4	92	nnw.	4	2	.....	.....	10	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	30.21	767.4	30.13	765.3	36.7	2.6	79	wsw.	7	3	.....	.....	10 s	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	29.66	753.3	30.20	767.0	14.7	— 9.6	91	sw.	22	10	.....	.....	10	.....	.....	0.043	1.1	.....	Meteorological Obs'y.
Dorpat	28.93	734.8	29.18	741.1	27.7	— 2.4	61	ene.	4	2	.....	6 ck	0	.....	.....	0	0	.....	Observatory.
Ekaterinburg	28.35	720.1	29.33	745.0	30.0	— 1.1	74	ssw.	27	12	.....	.....	10	.....	.....	0	0	snow drift	Meteorological Obs'y.
Kasan	29.07	738.4	29.35	745.5	24.6	— 4.1	66	wsw.	13	6	.....	.....	5	.....	.....	0.004	0.1	.....	Observatory.
Kertch	30.22	767.5	30.24	768.0	38.5	3.6	69	sse.	4	2	.....	0	0	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	29.09	738.8	29.74	755.4	36.0	2.2	41	sw.	20	9	.....	c;ck	6 ks	.....	.....	0.031	0.8	.....	Observatory.
Lugan	29.83	757.7	30.04	763.0	36.7	2.6	55	sw.	34	15	.....	.....	4	.....	.....	0	0	.....	Meteorological Obs'y.
Moscow	28.82	732.0	29.31	744.5	28.0	— 2.2	51	ssw.	13	6	.....	0	6 ks	.....	.....	0.087	2.2	.....	Meteorological Obs'y.
Nikolaiev	30.12	765.1	30.19	766.9	41.9	5.5	55	sw.	45	20	.....	0	0	.....	.....	0	0	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	29.91	759.7	30.05	763.3	31.3	— 0.4	36	n.	4	2	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.11	739.4	29.13	739.8	24.4	— 4.2	73	wnw.	9	4	.....	0	1 ks	.....	.....	0	0	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.84	732.5	30.54	775.8	23.7	— 4.6	90	calm	0	0	.....	.....	2	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.77	730.7	30.23	767.8	43.3	6.3	29	nw.	45	20	.....	8 cs	0	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	29.81	757.2	29.88	758.9	31.5	— 0.3	100	calm	0	0	.....	.....	10 k	.....	.....	0.130	3.3	.....	
Warsaw	29.14	740.1	29.57	751.1	28.2	— 2.1	93	ssw.	25	11	.....	.....	10 ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	28.87	733.2	29.29	744.0	34.5	1.4	91	sw.	4	2	.....	.....	10	.....	.....	0.016	0.4	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.81	757.1	30.11	764.9	18.5	— 7.5	80	sw.	9	4	.....	.....	10	.....	.....	0.008	0.2	snowing	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.90	759.4	48	8.9	100	sw.	.....	.....	4	.....	10	.....	.....	0.2	5.	drizzling	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.27	768.8	30.38	771.6	55.8	13.2	48	sw.	0.9	0.4	.....	.....	0	.....	.....	0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.56	776.1	30.61	777.6	53.8	12.1	65	se.	1.8	0.8	.....	2	3	ne.	.....	0.020	0.5	cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.49	698.3	30.58	776.7	42.4	5.8	58	ne.	11.0	4.9	.....	0	0	.....	.....	0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.19	715.9	30.48	774.3	50.0	10.0	44	ne.	8.7	3.9	.....	0	0	.....	.....	0	0	clear	The Staff.
Murcia, Met. Obs'y	30.31	769.9	30.44	773.2	55.8	13.2	73	sw.	2.5	1.1	.....	0	3	.....	.....	0.012	0.3	misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.57	751.1	30.49	774.5	52.5	11.4	56	ne.	7.4	3.3	.....	0	0	.....	.....	0	0	clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.14	765.6	30.21	767.2	67.3	19.6	90	e.	0.9	0.4	.....	0	0	.....	.....	0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.81	757.2	29.87	758.7	77.3	25.2	75	se.	9.5	4.2	.....	0	k	.....	.....	0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.33	770.3	30.43	772.8	61.5	16.4	52	e.	2.6	1.2	.....	0	5	.....	e.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.02	762.5	30.11	764.8	74.5	23.6	82	e.	9.2	4.1	.....	2 c	4 kn	e.	e.	0	0	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.73	755.1	29.86	758.4	78.5	25.8	66	s.	1.6	0.7	.....	0	0	.....	.....	0	0	clear	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.24	742.8	29.28	743.8	18.0	— 7.8	89	n.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	29.22	742.2	29.27	743.5	26.6	— 3.0	70	nnw.	.....	.....	2	.....	1	.....	.....	0	0	.....	
Hernosand	29.23	742.4	29.28	743.7	26.4	— 3.1	68	n.	.....	.....	2	.....	3	.....	.....	0.008	0.2	.....	
Stockholm	29.10	739.1	29.28	743.6	26.2	— 3.2	70	nne.	.....	.....	2	.....	2	.....	.....	0	0	.....	
Wisby	29.10	739.1	29.16	740.6	33.8	1.0	89	nne.	.....	.....	4	.....	10	.....	.....	0.307	7.8	.....	
Sub-Series.																			
Upsala	29.19	741.4	29.28	743.6	27.1	— 2.7	61	n.	10.3	4.6	.....	.....	8	.....	.....	0	0	.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.06	738.0	30.52	775.2	40.3	4.6	62	sw.	.....	.....	1	.....	.....	.....	.....	0	0	covered	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Counbary, Efendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.31	769.8	50.2	10.1	69	nw.	4	2.0	.....	.....	4	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.31	769.9	55.8	13.2	.....	nw.	.....	.....	1	.....	10	.....	.....	0	0	covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.34	770.7	64.2	17.9	58	wsw.	.....	.....	1	0	2 k	.....	sw.	0	0	.....	Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	29.81	757.2	29.90	759.4	48	8.9	77	s.	8	3.6		0	4 ks		w.	0.44	11.2	fair	
Alpena, Michigan	29.93	760.2	30.64	778.2	8	—13.3	78	n.	16	7.2			10 n			0.39	9.9	light snow	
Atlanta, Georgia	29.01	736.8	30.24	768.1	58.0	14.4	93	nw.	6	2.7		6 c	0	calm		0.10	2.5	fair	
Atlantic City, New Jersey	29.90	759.4	29.90	759.4	49.7	9.8	94	nw.	14	6.3		0	0			0.77	19.6	clear	
Augusta, Georgia	30.00	762.0	30.20	767.1	64.4	18.0	84	w.	3	1.3		2 c	0			inap.	inap.	clear	
Baltimore, Maryland	29.98	761.5	30.03	762.7	55	12.8	74	n.	10	4.5		6 k	0	nw.		0.67	17.0	fair	
Barnegat, New Jersey	29.88	758.9	29.90	759.4	48.0	8.9	86	nw.	17	7.6		0	2 s			0.88	22.4	clear	
Bismarck, Dakota	28.83	732.3	30.81	782.6	—14	—25.6	100	ne.	12	5.4			10 n		calm	0.10	2.5	light snow	
Block Island, Rhode Island																			
Boise City, Idaho	26.89	683.0	29.85	758.2	18	— 7.8	96	w.	2	0.9			10 s		calm	0.25	6.3	cloudy	
Boston, Massachusetts	29.53	750.0	29.69	754.1	43.0	6.1	93	w.	9	4.0		10 cs	fg.	w.		0.36	9.1	cloudy	
Brownsville, Texas	30.02	762.5	30.07	763.8	72	22.2	90	se.	4	1.8		0	0			0	0	clear	
Buffalo, New York	29.52	749.8	30.32	770.1	28.3	— 2.1	84	nw.	10	4.5			10 s		nw.	0.40	10.2	cloudy	
Burlington, Vermont	29.63	752.6	29.94	760.5	38.3	3.5	81	nw.	13	5.8			10 s		nw.	0.12	3.0	cloudy	
Cairo, Illinois	29.85	758.2	30.27	768.8	54.5	12.5	95	n.	6	2.7			10 s			1.75	44.4	cloudy	
Campo, California	27.30	693.4	29.94	760.5	39.2	4.0	92	sw.	8	3.6			10 n		sw.	0.57	14.5	heavy rain	
Camp Thomas, Arizona	27.24	691.9	30.07	763.8	35.5	1.9	87	se.			1	0	0			0	0	clear	
Cape Henry, Virginia	30.02	762.5	30.04	763.0	53	11.7	86	w.	14	6.3		0	0			0.15	3.8	clear	
Cape May, New Jersey	29.90	759.4	29.93	760.2	47	8.3	86	nw.	32	14.3		0	0			0.56	14.2	clear	
Castroville, Texas	29.27	743.4	30.11	764.8	50	10.0	77	nw.	5	2.2		0	0			0.06	1.5	clear	
Cedar Keys, Florida	30.23	767.8	30.25	768.3	65	18.3	90	s.	3	1.3			fg.			0	0	dense fog	
Champaign, Illinois	29.49	749.0	30.36	771.1	30.8	— 0.7	78	ne.	11	4.9			10 s		n.	inap.	inap.	cloudy	
Charleston, S. Carolina	30.09	764.3	30.15	765.8	63	17.2	90	calm	0	0		0	0			0	0	clear	
Charlotte, N. Carolina	29.25	742.9	30.14	765.5	56.0	13.3	93	n.	4	1.8		4 ck	fg.			0.30	7.6	fair	
Chattanooga, Tennessee	29.38	746.2	30.24	768.1	57.0	13.9	80	nw.	3	1.3		3 cs	fg.	nw.	calm	0.32	8.1	clear	
Cheyenne, Wyoming	23.95	608.3	30.20	767.1	8.3	—13.2	80	s.	12	5.4			10 s			0	0	cloudy	
Chicago, Illinois	29.70	754.4	30.45	773.4	28.8	— 1.8	85	ne.	17	7.6		10 k	0	ne.		0	0	cloudy	
Chincoteague, Virginia	29.95	760.7	29.97	761.2	53	11.7	86	nw.	17	7.6		0	0			0.54	13.7	clear	
Cincinnati, Ohio	29.60	751.8	30.29	769.4	49	9.4	77	nw.	8	3.6			10 s		n.	0.77	19.6	cloudy	
Cleveland, Ohio	29.61	752.1	30.40	772.1	30.8	— 0.7	93	n.	11	4.9			10 s			0.07	1.8	cloudy	
Coleman City, Texas	28.29	718.6	30.17	766.3	49	9.4	80	s.	4	1.8		6 c	0			0	0	fair	
Columbus, Ohio	29.42	747.3	30.32	770.1	43	6.1	74	n.	9	4.0			10 s		n.	0.91	23.1	cloudy	
Concho, Texas	28.15	715.0	30.17	766.3	47	8.3	93	w.	4	1.8		0	8 s			0	0	cloudy	
Davenport, Iowa	29.75	755.6	30.45	773.4	33	0.6	68	ne.	13	5.8			10 s		calm	0	0	cloudy	
Dayton, Washington T'y	28.40	721.3	30.21	767.3	6	—14.4	60	n.	5	2.2		0	0			0.68	17.3	clear	
Deadwood, Dakota	25.49	647.4	30.41	772.4	—11	—23.9	100	calm	0	0			10 n			0.08	2.0	light snow	
Decatur, Texas					58	14.4	69	s.	3	1.3		0	3 s			0	0	fair	
Delaware Breakwater, Del.	29.92	760.0	29.94	760.5	47	8.3	93	nw.	28	12.5		0	0			0.28	7.1	clear	
Denison, Texas	29.30	744.2	30.14	765.5	53.0	11.7	86	sw.	2	0.9		0	0			0.10	2.5	clear	
Denver, Colorado	24.72	627.9	30.24	768.1	15.0	— 9.4	64	n.	6	2.7			10 s		calm	0	0	cloudy	
Des Moines, Iowa	29.45	748.0	30.42	772.7	31	— 0.6	78	ne.	10	4.5			10 s		ne.	0	0	cloudy	
Detroit, Michigan	29.67	753.6	30.42	772.7	32.1	0.1	100	n.	8	3.6			10 s		n.	0.10	2.5	cloudy	
Dodge City, Kansas	27.60	701.0	30.34	770.6	14.5	— 9.7	94	n.	17	7.6			10 s			0	0	cloudy	
Dubuque, Iowa	29.74	755.4	30.50	774.7	23.2	— 4.9	73	ne.	13	5.8			10 s		ne.	0	0	cloudy	
Duluth, Minnesota	30.01	762.2	30.77	781.5	2	—16.7	72	nw.	12	5.4			10 s		nw.	0	0	cloudy	
Eagle Pass, Texas	29.29	744.0	30.13	765.3	52.0	11.1	80	nw.	1	0.4		0	0			0	0	clear	
Eagle Rock, Idaho	24.90	632.4	29.80	756.9	10	—12.2	83	n.	16	7.2			10 s			0.13	3.3	cloudy	
Eastport, Maine	29.62	752.3	29.69	754.1	41	5.0	92	s.	19	8.5			10 n		sw.	0.43	10.9	light rain	
El Paso, Texas	26.29	667.8	30.17	766.3	39	3.9	92	calm	0	0			10 s		calm	0	0	cloudy	
Erie, Pennsylvania	29.56	750.8	30.33	770.4	34	1.1	88	nw.	11	4.9			10 s			0.07	1.8	cloudy	
Escanaba, Michigan	29.98	761.5	30.70	779.8	10	—12.2	91	n.	24	10.7			10 s		n.	0.02	0.5	cloudy	
Fort Apache, Arizona	25.07	636.8	30.17	766.3	31	— 0.6	65	ne.	2	0.9		0	0			0	0	clear	
Fort Assinnaboine, Montana	27.63	701.8	30.67	779.0	—18	—27.8	40	ne.	9	4.0		0	2 s		ne.	0.05	1.3	clear	
Fort Bennett, Dakota	28.97	735.8	30.70	779.8	— 6	—21.1	100	ne.	9	4.0			10 n			0.42	10.7	light snow	
Fort Benton, Montana	27.64	702.0	30.64	778.2	—18	—27.8	41	calm	0	0			0			0.25	6.3	clear	
Fort Buford, Dakota	28.54	724.9	30.72	780.3	—13	—25.0	100	ne.	9	4.0		0	0			0.04	1.0	clear	
Fort Custer, Montana	27.14	689.3	30.50	774.7	— 6	—21.1	29	n.	6	2.7		0	0			inap.	inap.	clear	
Fort Davis, Texas	25.14	638.5	30.10	764.5	43	6.1	76	s.	2	0.9			10 s		calm	0	0	cloudy	
Fort Elliott, Texas	27.32	693.9	30.22	767.0	24	— 4.4	40	ne.	16	7.2		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.56	750.8	30.16	766.1	48.5	9.2	93	w.	4	1.8			10 s		w.	0.20	5.1	cloudy	
Fort Grant, Arizona	25.20	640.1	30.06	763.5	40	4.4	67	e.	6	2.7		0	0			0	0	clear	
Fort Griffin, Texas	28.79	731.3	30.16	766.1	50	10.0	77	s.	3	1.3		0	0			0	0	clear	
Fort Keogh, Montana	27.95	709.9	30.63	778.0	4	—15.6	68	ne.	12	5.4			10 s		ne.	0.04	1.0	cloudy	
Fort Macon, North Carolina	30.04	763.0	30.04	763.0	57	13.9	100	w.	14	6.3		hz.	sks;fg	calm	w;c	0.12	3.0	fair	
Fort McKavett, Texas	27.87	707.9	30.25	768.3	50.2	10.1	80	sw.	2	0.9		0	0			0	0	clear	
Fort Missoula, Montana	26.80	680.7	30.23	767.8	—12	—24.4	100	ne.	12	5.4		0	0			0.10	2.5	clear	
Fort St. Michaels, Alaska	29.39	746.5	29.43	747.5	31	— 0.6	100	se.	25	11.2			10 n			0.01	0.3	light snow	
Fort Shaw, Montana	26.71	678.4	30.56	776.2	—21	—29.4	100	nw.	6	2.7		0	0			0.11	2.8	clear	
Fort Sill, Indian Territory	28.89	733.8	30.20	767.1	35.2	1.8	74	n.	20	8.9			10 s			0	0	cloudy	
Fort Stevenson, Dakota	28.83	732.3	30.85	783.6	—14	—25.6	50	n.	16	7.2			10 n		calm	0.10	2.5	light snow	
Fort Verde, Arizona					41.2	5.1	59	s.			4	2 k	3 s	w.	s.	0	0	fair	
Fort Washakie, Wyoming	24.37	619.0			— 2.0	—18.9	91	ne.	4	1.8			10 n			0.05	1.3	light snow	
Fredericksburg, Texas	28.34	719.8	30.14	765.5	50	10.0	80	w.	1	0.4		0	0			0	0	clear	
Galveston, Texas	30.08	764.0	30.12	765.0	68	20.0	95	sw.	8	3.6			10 ks		s.	0	0	cloudy	
Grand Haven, Michigan	29.77	756.1	30.48	774.2	23.5	— 4.7	88	n.	12	5.4		0	0			0.08	2.0	clear	
Hatteras, North Carolina	30.00	762.0	30.02	762.5	61	16.1	93	sw.	28	12.5		5 k	fg.	w.		0.30	7.6	fair	
Helena, Montana	25.99	660.1	30.39	771.9	—17	—27.2	46	calm	0	0			10 n		nw.	0.06	1.5	light snow	
Henrietta, Texas	29.03	737.3	30.08	764.0	44	6.7	93	n.	6	2.7		0	3 s			0.01	0.3	fair	
Huron, Dakota	29.17	740.9	30.69	779.5	— 2.3	—19.1	66	n.	10	4.5			10 n			0.05	1.3	light snow	
Indianapolis, Indiana	29.46	748.3	30.31	769.9	42	5.6	83	n.	8	3.6			10 s		n.	0.13	3.3	cloudy	
Indianola, Texas	30.09	764.3	30.12	765.0	69.5	20.8	100	s.	12	5.4		0	4 s		s.	inap.	inap.	fair	
Jacksboro, Texas	28.92	734.6	30.16	766.1	48	8.9	77	sw.	2	0.9		0	0			0.50	12.7	clear	
Jacksonville, Florida	30.19	766.8	30.24	768.1	65	18.3	90	se.	6	2.7		4 cs	fg.	w.		0	0	fair	
Keokuk, Iowa	29.66	753.4	30.36	771.1	32.5	0.3	88	ne.	14	6.3			10 s		ne.	0	0	cloudy	
Key West, Florida	30.20	767.1	30.23	767.8	72.2	22.3	84	e.	6	2.7		0	2 s			0	0	clear	
Kittyhawk, North Carolina	30.00	762.0	30.02	762.5	61	16.1	84	ne.	25	11.2		0	0			0.25	6.3	clear	
Knoxville, Tennessee	29.17	740.9	30.25	768.3	52.4	11.3	91	n.	1	0.4		1 c	fg.			0.29	7.4	clear	
La Crosse, Wisconsin	29.76	755.9	30.60	777.2	15	— 9.4	83	ne.	16	7.2		0	6 s		ne.	0	0	fair	
La Mesilla, New Mexico	26.12	663.4	30.13	765.3	34.0	1.1	88	calm	0	0		0	1 s			0	0	clear	
Leavenworth, Kansas	29.42	747.3	30.37	771.4	29	— 1.7	77	n.	8	3.6			10 s			0	0	cloudy	
Lewiston, Idaho	29.38	746.2	30.25	768.3	13	—10.6	64	calm	0	0		0	0			inap.	inap.	clear	
Little Rock, Arkansas	29.82	757.4	30.15	765.8	55	12.8	100	calm	0	0			fg.			0.55	14.0	dense fog	
Los Angeles, California	29.55	750.6	29.95	760.7	46.2	7.9	83	nw.	3	1.3			10 s		calm	0.46	11.7	cloudy	
Louisville, Kentucky	29.64	752.8	30.23	767.8	48.0	8.9	93	n.	8	3.6		10 cs	0	calm		1.27	32.3	cloudy	
Lynchburg, Virginia	29.37	746.0	30.09	764.3	58.2	14.6	60.0	nw.	2	0.9		0	0			0.35	8.9	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.47	748.5	30.56	776.2	16	— 8.9	67	ne.	18	8.0			10 s		ne.	0	0	cloudy	
Marquette, Michigan	29.98	761.5	30.76	781.3	10	—12.2	80	n.	14	6.3			10 s		nw.	0.03	0.8	cloudy	
Mason, Texas	28.44	722.4	30.17	766.3	49	9.4	80	w.	4	1.8		0	2 s		calm	0	0	clear	
Memphis, Tennessee	29.86	758.4	30.21	767.3	52	11.1	100	se.	1	0.4			fg.			0.40	10.2	dense fog	
Milwaukee, Wisconsin	29.74	755.4	30.54	775.7	22	— 5.6	73	n.	20	8.9			10 s		ne.	inap.	inap.	cloudy	

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.17	766.3	30.21	767.3	67	19.4	93	calm	0	0		3 cs	2 ks	w.	w.	0	0	fair	
Montgomery, Alabama	29.94	760.5	30.18	766.6	67	19.4	91	sw.	5	2.2			10 s		sw.	0	0	cloudy	
Moorhead, Minnesota	29.70	754.4	30.80	782.3	— 8	—22.2	100	ne.	16	7.2			10 s		ne.	0	0	cloudy	
Morgantown, W. Virginia	29.21	741.9	30.28	769.1	45.0	7.2	83	ne.	16	7.2			10 s		ne.	0.81	20.6	cloudy	
Mt. Washington, N. H.	23.37	593.6	29.99	761.7	25.5	— 3.6	100	nw.	67	30.0			10n;fg		nw.	0.30	7.6	heavy snow	
Nashville, Tennessee	29.65	753.1	30.21	767.3	54.6	12.6	92	calm	0	0			fg			0.56	14.2	dense fog	
New Haven, Connecticut	29.67	753.6	29.79	756.7	49	9.4	77	n.	16	7.2		2 c	1 k	nw.	nw.	0.78	19.8	clear	
New London, Connecticut	29.81	757.2	29.86	758.4	50	10.0	77	nw.	14	6.3		4 cs	0	n.		0.70	17.8	fair	
New Orleans, Louisiana	30.13	765.3	30.19	766.8	68.0	20.0	93	sw.	3	1.3		hz.	hz			0	0	dense haze.	
Newport, Rhode Island	29.66	753.4	29.71	754.6	46.3	7.9	95	nw.	12	5.4		3 ck	3 ks	sw.	nw.	0.94	23.9	fair	
New River, N. Carolina																			
New Shoreham, Rhode I'd.	29.71	754.6	29.74	755.4	45.0	7.2	93	nw.	16	7.2		4 ck	fg	nw.		1.62	41.1	fair	
New York, New York	29.70	754.4	29.89	759.2	48	8.9	86	w.	10	4.5		1 k	1 s	w.		0.55	14.0	clear	
Norfolk, Virginia	30.02	762.5	30.05	763.3	56	13.3	80	nw.	11	4.9		0	0			0.21	5.3	clear	
North Platte, Nebraska	17.36	694.9	30.46	773.7	6.6	—14.1	82	n.	12	5.4		0	8 s			inap.	inap.	cloudy	
Olympia, Washington T'y	30.19	766.8	30.23	767.8	25.0	— 3.9	88	ne.	8	3.6		0	2 s		calm	0.26	6.6	clear	
Omaha, Nebraska	29.22	742.2	30.49	774.4	19.0	— 7.2	64	n.	10	4.5			10 s			0	0	cloudy	
Ooglaamie, Pt. Barrow, Alas.	29.51	749.5	29.53	750.0	—18.6	—22.6	84	nne.	22	9.8			10 s			0.01	0.3	cloudy	
Oswego, New York	29.82	757.4	30.17	766.3	33.0	0.6	78	n.	15	6.7			10 s		n.	0.17	4.3	cloudy	
Palestine, Texas	29.61	752.1	30.19	766.8	52	11.1	59	sw.	4	1.8		0	0			0	0	clear	
Pensacola, Florida	30.20	767.1	30.23	767.8	65.1	18.4	100	sw.	3	1.3			fg			0	0	dense fog	
Philadelphia, Pa.	29.85	758.2	29.96	761.0	52	11.1	80	nw.	12	5.4			10 ks		nw.	0.73	18.5	cloudy	
Pike's Peak, Colorado	17.41	442.2	30.13	765.3	1	—17.2	91	sw.	12	5.4			10 s		sw.	0	0	cloudy	
Pioche, Nevada	23.60	599.4	29.76	755.9	29	— 1.7	96	s.	16	7.2			10 n		s.	0.04	1.0	light snow	
Pittsburg, Pennsylvania	29.46	748.3	30.32	770.1	39.8	4.3	82	nw.	10	4.5			10 s			0.28	7.1	cloudy	
Port Eads, Louisiana	30.20	767.1	30.22	767.6	58.0	14.4	100	s.	2	0.9			fg			0.01	0.3	dense fog	
Port Huron, Michigan	29.74	755.4	30.47	773.9	21.5	— 5.8	76	n.	18	8.0			10 n		calm	0.07	1.8	light snow	
Portland, Maine	29.61	752.1	29.66	753.4	43	6.1	93	nw.	5	2.2			10s;fg		calm	0.98	24.9	cloudy	
Portland, Oregon	30.09	764.3	30.16	766.1	24.0	— 4.4	73	e.	16	7.2		0	1 s		n.	0.07	1.8	clear	
Portsmouth, N. Carolina					56	13.3	69	w.	14	6.3		6 k	0	nw.		0.10	2.5	fair	
Prescott, Arizona	24.60	624.8	29.96	761.0	36	2.2	53	se.	24	10.7		0	3 ks		s.	0	0	clear	
Provincetown, Mass	29.63	752.6	29.66	753.4	42	5.6	100	w.	9	4.0			fg		w.	0.81	20.6	dense fog	
Punta Rassa, Florida	30.22	767.6	30.23	767.8	63	17.2	90	e.	6	2.7		1 c	hz	calm		0	0	clear	
Red Bluff, California	29.41	747.0	29.79	756.7	35.5	1.9	84	nw.	6	2.7		0	8 s			0.30	7.6	cloudy	
Rio Grande City, Texas	29.80	756.9	30.04	763.0	71	21.7	84	se.	6	2.7		10 cs	0	calm		0	0	cloudy	
Rochester, New York	29.51	749.5	30.22	767.6	34	1.1	89	nw.	15	6.7			10 ks		nw.	0.18	4.6	cloudy	
Roseburg, Oregon	29.44	747.8	30.01	762.2	31.5	0.3	83	nw.	10	4.5		0	5 s		n.	0.11	2.8	fair	
Sacramento, California	29.72	754.9	29.80	756.9	37.5	3.1	82	sw.	6	2.7			8 s			0.37	9.4	cloudy	
St. Louis, Missouri	29.69	754.1	30.33	770.4	40.0	4.4	89	ne.	14	6.3			10 s			0.21	5.3	cloudy	
St. Paul, Minnesota	29.66	753.4	30.60	777.2	17.5	— 8.1	71	ne.	16	7.2			10 s		ne.	0	0	cloudy	
St. Vincent, Minnesota	30.02	762.5	30.99	787.1	—23	—30.6	100	n.	12	5.4			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.22	640.6	29.78	756.4	33	0.6	62	se.	4	1.8		0	4 s			0.08	2.0	fair	
San Antonio, Texas	29.39	746.5	30.11	764.8	54.6	12.6	69	ne	4	1.8		0	7 k		s.	0.04	1.0	fair	
San Diego, California	29.86	758.4	29.93	760.2	51.1	10.6	90	w.	12	5.4			10 n			0.42	10.7	light rain	
Sandusky, Ohio	29.69	754.1	30.41	772.4	32	0.0	81	n.	19	8.5			10 s			0.25	6.3	cloudy	
Sandy Hook, New Jersey	29.85	758.2	29.89	759.2	47.0	8.3	86	nw.	25	11.2		3 k	0	nw.		0.62	15.7	clear	
San Francisco, California	29.79	756.7	29.86	758.4	40	4.4	57	nw.	12	5.4		0	0			0.41	10.4	clear	
Santa Fé, New Mexico	23.16	588.3	30.20	767.1	29.5	— 1.4	66	se.	5	2.2		0	0			0	0	clear	
Savannah, Georgia	30.11	764.8	30.20	767.1	64.5	18.1	83	w.	10	4.5		2 cs	1 ks	w.	w.	0	0	clear	
Shreveport, Louisiana	29.91	759.7	30.16	766.1	55	12.8	100	calm	0	0			fg			0.15	3.8	dense fog	
Silver City, New Mexico	24.22	615.2	30.07	763.8	29	— 1.7	70	nw.	3	1.3		0	0			0	0	clear	
Sitka, Alaska	30.41	772.4	30.48	774.2	27	— 2.8	82	e.	8	3.6			10 s		calm	0	0	cloudy	
Smithville, North Carolina	30.05	763.3	30.09	764.3	58	14.4	100	w.	9	4.0		1 c	0			0	0	clear	
Spokane Falls, Wash. Ter.	28.17	715.5	30.30	769.6	— 2	—18.9	83	ne.	7	3.1		0	0			0.03	0.8	clear	
Springfield, Illinois	29.67	753.6	30.40	772.1	33	0.6	78	ne.	10	4.5			10 s		n.	0	0	cloudy	
Springfield, Massachusetts	29.65	753.1	29.79	756.7	47.4	8.6	83	n.	4	1.8		1 c	2 ks	sw.	nw.	0.36	9.1	clear	
Springfield, Mo.	28.75	730.2	30.32	770.1	45.5	7.5	83	ne.	5	2.2			10 ks			1.42	36.1	cloudy	
Stockton, Texas	27.00	685.8	30.13	765.3	47.0	8.3	100	calm	0	0		0	7 s		s.	0	0	fair	
Thatcher's Island, Mass.	29.65	753.1	29.71	754.6	41.0	5.0	100	nw.	8	3.6		6 cs	fg	nw.		0.57	14.5	fair	
Toledo, Ohio	29.65	753.1	30.39	771.9	32.9	0.5	88	nw.	10	4.5			10 s		n.	0.43	10.9	cloudy	
Tucson, Arizona	27.53	699.2	30.01	762.2	42	5.6	80	se.	3	1.3		0	0			0	0	clear	
Umatilla, Oregon	30.02	762.5	30.40	772.1	11.7	—11.3	84	e.	10	4.5		0	2 s			0	0	clear	
Uvalde, Texas	29.10	739.1	30.10	764.5	50	10.0	86	calm	0	0		0	0			0	0	clear	
Vicksburg, Mississippi	29.89	759.2	30.16	766.1	65	18.3	90	e.	3	1.3		0	7 ks		se.	0	0	fair	
Visalia, California	29.44	747.8	29.82	757.4	36	2.2	94	w.	2	0.9		0	8 s		w.	0.30	7.6	cloudy	
Washington, D. C.	29.93	760.2	30.05	763.3	54	12.2	61	n.	8	3.6		0	1 s		nw.	0 87	22.1	clear	
West Los Animas, Colorado	26.16	664.5	30.28	769.1	10	—12.2	80	ne.	12	5.4		0	3 s		calm	0	0	clear	
Wickenburg, Arizona					37	2.8	81	w.			1	4 ck	0	w.		0	0	fair	
Williamsport, Pa.	29.50	749.3	30.13	765.3	46	7.8	68	n.	8	3.6			10 ks		n.	0.34	8.6	cloudy	
Wilmington, N. Carolina	30.03	762.7	30.09	764.3	63	17.2	84	w.	4	1.8		hz	0			0	0	clear	
Winnemucca, Nevada	25.18	639.6	29.70	754.4	24	— 4.4	76	sw.	8	3.6			10 s		calm	0.55	14.0	cloudy	
Wood's Holl, Mass.																			
Yankton, Dakota	29.17	740.9	30.59	777.0	8	—13.3	74	n.	8	3.6			10 s			0	0	cloudy	
Yuma, Arizona	29.70	754.4	29.85	758.2	51.4	10.8	79	n.	15	6.7		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.03	559.6			52.5	11.4	79	calm	0	0		2 k	6 s			0.34	8.6	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.05	763.3	30.06	763.5	76	24.4	81	e.				5 k	5 ks	e.	e.	0.50	12.7	fair	J. A. Racker.
Buenaventura, U. S. C.	30.00	762.0	30.02	762.5	77	25.0	95	calm	0	0			10 n		s.	0.20	5.1	raining	J. I. Plume.
Guadeloupe, W. I.	29.99	761.7	30.01	762.2	74	23.3	90	e.				3 k	0			0.039	1.0	clear	B. Bigar.
Havana, Cuba, W. I.	30.21	767.3	30.26	768.6	73	22.8	82	calm	0	0		0	2 ks		calm	0	0	fair	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	65.8	18.8	95	calm	0	0		0	1 s		e.	0	0	fine	Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.03	762.7	30.03	762.7	77	25.0	91	e.			2	5 k	7 ps	e.	e.	0.130	3.3		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.50	749.3	29.96	761.0	82	27.8	80	calm			0	4 ck	1 s	s.	calm	0	0	fair	Miss Flora A. Nichols.
Rivas, Nicaragua							96	ne.			2	1 ck	1 ks	se.	ne.	0.01	0.3	clear	Earl Flint.
Santiago de Cuba, W. I.	30.13	765.3	30.16	766.1	74	23.3	67	n.	6	2.7		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.72	780.3	30.88	781.8	—40.0	—40.0		nw.	13	5.8		0	0			0	0	clear	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, N. 37° 36′, W. 9° 38′	30.43	772.9	56	13.3	80	ne.			2		0					3	wnw.	blue sky	Capt. E. H. Murray.
H. M. S. Albatross, N. 22° 02′, E. 114° 30′	29.83	757.7	64	17.8		nnw.			2		10							raining	Capt. A. J. Errington.
H. M. S. Alert, Colombo, Ceylon, India.	29.86	758.4	82.8	28.2	79	nw.			1-2		7							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.24	768.1	58.5	14.7	73	ese.			2		10	ese.						overcast	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 13° 04′, E. 53° 19′	29.95	760.7	74	23.3	68	ene.			2		1	ne.				2	ene.	misty	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.07	763.8	70	21.1	71	ese.			4-5		0							squally	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S 39° 48′. E. 29° 46′	30.17	766.3	63.5	17.5	61	s.			1-2		3					2	ssw.	d. clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′. W. 61° 31′	30.04	763.0	77	25.0		calm			0		5	ene.						misty	Capt. C Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.21	767.3	61.5	16.4	68	ene.			1-2		4	ene.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 35° 27′, W. 56° 38′	30.03	762.7	72	22.2	83	ne.			1		5					1-2	ne.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 12° 04′, E. 42° 53′	29.86	758.4	83	28.3		wnw.			1-2		6							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt C. A. G. Bridge.
H. M. S. Fawn, Aden, Arabia	30.06	763.5	79.5	26.4	66	e.			1		4							d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	29.78	756.4	52	11.1	93	calm			0		6					1	sw.	misty	Capt. R. F. Roskyn.
H. M. S. Gannet, S. 13° 35′, W. 79° 00′	29.96	761.0	75	23.9	79	se.			4		2	sw.				2 2	ssw. s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.72	754.9	51	10.6	86	n.			4		10							drizzling	Capt. L. F. Jones.
H. M. S. Inconstant, N. 10° 00′, E. 109° 30′	29.80	756.9	79	26.1	82	sw.			2		2	sw.				1	sw.	d. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′, E. 113° 24′	29.90	759.4	55	12.8	100	e.			1		10	e.						drizzling	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.97	761.2	63	17.2		nw.			1		10							overcast	Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.58	751.3	60	15.6	82	w.			2-6		6	e.						squally	Capt. J. E. Erskine.
H. M. S. Northampton, N. 15° 07′, W. 77° 18′	30.01	762.2	78	25.6	86	ne.			6		2	ne.				2	ne.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 18° 40′, E. 39° 40′	29.84	757.9	83.5	28.6	92	se.			3		7					3	ese.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 41° 38′, W. 26° 18′	30.40	772.1	60	15.6	94	ese.			3		5					2	ese.	misty	Capt. F. R. Dicken.
H. M. S. Phœnix, N. 16° 19′, W. 81° 00′	30.08	764.0	79	26.1	82	ne.			3		4	ne.				3	ne.	d. clouds	Capt. H. H. Grenfell.
H. M. S. Rambler, Acera, Lower Guinea	29.89	759.2	81	27.2	95	ssw.			2		5	ssw.						d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.18	766.6	57	13.9		w.			3		1							blue sky	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	30.34	770.6	20	— 6.7	85	ne.			2		4							squally	Lieut. V. B. Orlebar.
H. M. S. Sea Gull																			Capt. E. T. Church.
H. M. S. Thalia, N. 39° 50′, W. 13° 52′	30.51	774.9	57	13.9		ne.			4		2					2	wsw.	d. clouds	
H. M. S. Triumph, S. 13° 47′, W. 79° 19′	30.00	762.0	75	23.9	81	ese.			3		2	se.				2	e.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.06	763.5	79	26.1		nnw.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Muscat, Arabia	30.05	763.3	67.5	19.7	64	se.			2		8	nw.						d. clouds	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Santiago, Cape Verd Ids	30.01	762.2	74.8	23.8	73	ne.			3		0					2	ne.	blue sky	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 9° 22′, W. 79° 54′	29.94	760.5	78.6	25.9	84	nne.			2		5							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.20	767.1	65	18.3	89	ese.	1	0.4			5		sw.	0	0			fair	
N. Yard, Portsmouth, N. H.	29.69	754.1	38	3.3		w.	4	1.8			10		w.	0.05	1.3			foggy	
Naval Hospital, Yokohama, Japan	29.53	750.0	51.5	10.8	90	calm			0		10		w.	0	0			gloomy	
Adams, Callao, Peru	29.75	755.6	67	19.4	100	sse.			0–1		10			0	0	gr'd		foggy	
Alaska, Valparaiso, Chili	29.98	761.5	61	16.1	88	calm			0		0			0	0	sm'h		clear	
Alert, Batavia, Java*	29.71	754.6	79	26.1	86	ssw.			2		10		calm			sm'h		cloudy	
Alliance, Norfolk, Va	29.96	761.0	59	15.0	82	nw.			2		2			light	light			clear	
Ashuelot, Tientsin, China	30.02	762.5	36	2.2	70	nw.			4–5		0							clear	
Brooklyn, Strait of Magellan	29.91	759.7	53	11.7	86	wsw.	4	1.8			5		sw.	0.17	4.3	sm'h		fair	
Colorado, New York, N. Y	29.82	757.4	49	9.4	85	wnw.	3	1.3			8		wnw.	0.50	12.7			clearing	
Enterprise, Norfolk, Va*	30.02	762.5	56	13.3	94	nw.			3		2							clear	
Essex, Teneriffe, Canary Id	30.34	770.6	66	18.9	59	e.			2		2		e.			sm'h	e.	fair	
Franklin, Norfolk, Va	30.07	763.8	59	15.0	88	nw.	20	8.9			8?		calm	0.04	1.0			clear	
Galena, Villafranca, France	30.32	770.1	62	16.7	61	s.			1		0					sm'h		clear	
Independence, N. Yard, Mare I'd, Cal	29.72	754.9	37	2.8	81	nw.	6	2.7			0			0.01	0.3			clear	
Kearsarge, New Orleans, La	30.19	766.8	66	18.9	95	sse.			1		10							foggy	
Lackawanna, Valparaiso, Chili*	29.91	759.7	62	16.7	94	calm			0		10							misty	
Lancaster, Alexandria, Egypt	30.33	770.4	71	21.7	57	w.			0–1		2		nw.			sm'h		fair	
Marion, S. 34° 01,′ E. 26° 30′	29.97	761.2	70	21.1	80	ese.			3		10		calm			sm'h		cloudy	
Michigan, Erie, Pa	30.15	765.8	35	1.7	90	nw.			3		10		nw.					cloudy	
Minnesota, Newport, R. I	29.69	754.1	47	8.3	100	nnw.	3	1.3			8							cloudy	
Monocacy, Yokohama, Japan	29.74	755.4	55	12.8	87	calm			0		10		calm					overcast	
Nipsic, Tangier, Marocco, Africa	30.40	772.1	61	16.1	55	ese.			4		8		ese.			sm'h		squally	
Onward, Callao, Peru†	30.07	763.8	65	18.3	100	sse.			2		10		n.			long	w.	misty	
Palos, Hong Kong, China	29.78	756.4	64	17.8	100	e.			1		10		wnw.					raining	
Passaic, Washington, D. C	30.05	763.3	53	11.7	93	nw.			2		2		nw.					clear	
Pensacola, Talcahuana, Chili	30.02	762.5	60	15.6	71	ssw.			4		0			0	0	sm'h		clear	
Powhatan, San Juan, Porto Rico, W.I	30.14	765.5	75	23.9	72	ne.			3		5		ne.					fair	
Quinnebaug, N. 31° 15′, E. 29° 48′	30.37	771.4	63	17.2	62	calm			0		2			0	0	sm'h		clear	
Ranger, N. 19° 34′, W. 105° 07′*	29.89	759.2	64	17.8	78	e.			1		0			0	0	sm'h		clear	
Richmond, N. 23° 40′, E. 153° 15′*	30.07	763.8	72	22.2	80	ene.			4		0					mod.	n.	clear	
Shenandoah, S. 24° 30′, W. 34° 36′*	29.98	761.5	75	23.9	95	ene.			4		10		ene.			mod.	ene.	cloudy	
St. Louis, League Island, Pa	30.15	765.8	50	10.0	52	nw.	12	5.4			8		nw.	0.35	8.9			cloudy	
Swatara, Yokohama, Japan*	29.55	750.6	55	12.8	80	nw.			1		10					sm'h		hazy	
Tennessee, Fort Monroe, Va	30.03	762.7	58	14.4	88	nnw.	16	7.2			0			0	0	sm'h		fair	
Vandalia, Aspinwall, Panama*†	30.05	763.3	78	25.6	86	nne.			2		2		nne.			long	nne.	fair	
Wabash, Boston, Mass	29.67	753.6	45	7.2	84	nw.	8	3.6			10		nw.	0.30	7.6			cloudy	
Wachusetts, Esquimalt, B. C	30.21	767.3	20	— 6.7		ne.			2		0							clear	
Wyoming, Port Royal, S. C	30.18	766.6	62	16.7	88	sw.	6	2.7			5		calm	0	0			fair	
Yantic, N. 11° 45′, W. 80° 19′*	29.96	761.0	76	24.4	91	ne.			4–5		5		ne.			mod.	ne.	squally	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.				Character.	Direction.		
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 43° 30′, W. 64° 29′*	29.73	755.1	34	1.1		ssw.	5		9		sw.	9 h'r	9 h'r	mod.	s.	hazy	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, N. 55° 20′, W. 7° 50′*	30.13	765.3	50	10.0		w.	4		8		wsw.			h'vy	w.	cloudy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 47° 56′, W. 38° 45′*	30.32	770.1	40	4.4		nnw.	4		8		nw.	o	o	mod.	cross	cloudy	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 50° 57′, W. 12° 44′*†	30.30	769.6	52	11.1		wnw.	6		7		w.	o	o	r'gh	w.	cloudy	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 47° 10′, W. 36° 34′	30.16	766.1	43	6.1	91	n.	5		10?		nne.			mod.	n.	clear.?	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	30.15	765.8	48	8.9	77	w.	5		2?		w.	o	o			overcast?	H. O. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, N. 47° 10′, W. 36° 20′*†	30.18	766.6	46	7.8	92	se.	5		10		ne.			r'gh	ne.	overcast	Worth & Snow. W. H. Townshend.
S. S. Pennsylvania, Capt. G. H. Dodge,																	
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 42° 55′, W. 58° 25′*†	30.33	770.4	47	8.3		s.	1		0							very fine	H. Young. John Daw, 3d officer.
S. S. Galatia, Capt. J. D. Allison																	
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	C. P. Krause.
S. S. Alps, Capt. C. P. Krause,																	
S. S. Alvo, Capt. D. Williams, N. 20° 15′, W. 73° 25′*	30.19	766.8	76	24.4		ene.	6		0			0	0	mod.	ene.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Cartagena, U. S. C*†	29.79	756.7	73	22.8													W. H. Bennett.
S. S. Arden, Capt. P. de Echevarrieta, Maracaibo, Venezula, S. A						ne.	3									fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 18° —′, W. 76° —′	29.78	756.4				ne.	4		2		ne.	o	o	r'gh	ne.	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Boston, Mass†	29.81	757.2				wnw.			0			o	o			clear	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 48° 20′, W. 41° 11′	29.70	754.4	50	10.0		sse.	4		7							blue sky	
Baroda, Capt. C. J. Russell, S. 14° 13′, W. 30° 38′	29.98	761.5	80.3	26.8	70	ene.	4		2							d. clouds	
Bk. Caldew, Capt. W. Peterson																	
S. S. Cipero, Capt. W. N. Lailey N. 11° 20′, W. 55° 54	30.02	762.5	77.5	25.3	69	nne.	4		2						ne.	d. clouds	
S. City of Agra, Capt. Thos. Young																	
Coppename, Capt. James Buchan N. 8° 02′, W. 58° 34′	29.98	761.5	80	26.7	74	ene.	4		4							blue sky	
Bk. Glaramara, Capt. R. Morton,																	
Glencairn, Capt. R. S. Tannock																	
S. S. Gordon Castle, Capt. W. Waring, N. 36° 00′, W. 6° 10′	30.40	772.1	64.8	18.2	63	se.	4-5		1							blue sky	
Hermine, Capt. S. G. Jones, S. 44° 34′, W. 43° 01′	29.85	758.2	54.3	12.4	86	s.	6		3							d clouds	
Hope, Capt. James Campbell																	
S. S. Humboldt, Capt. A. W. Jeffery, N. 9° 15′, W. 49° 15′	30.00	762.0	78	25.6	77	ne.	4		6							d. clouds	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 19° 13′, W. 1° 35′	30.07	763.8	76	24.4	81	ese.	4		7							d. clouds	
May Hulse, Capt. H. Youlden, R. N. R., S. 55° 49′, W. 78° 36′	29.44	747.8	45.7	7.6	69	se.	2		10							overcast	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	30.06	763.5	74	23.3	85	e.	3		5							d. clouds	
Naiad, Capt. J. Smith, N. 33° 19′, W. 41° 24′	30.08	764.0	61.0	16.1	88	nw.	3		3							d. clouds	
Pole Star, Capt. F. Norman,																	
Queen of Cambria, Capt. M. Parry, S. 10° 13′, E. 79° 14′	29.80	756.9	83.6	28.7	75	w.	3		5							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson																	D. W. Barker.
S. Superb, Capt. Berridge																	
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 40° 58′, W. 66° 42′*†	29.90	759.4				s.	6		10		nw.	6 h'r	light	high	s.	foggy	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	H. R. Freeman.
S. S. Hudson, Capt. H. R. Freeman,																	
S. S. New Orleans, Capt. T. P. C. Halsey, N. 25° 40′, W. 84° 40′†*	30.30	769.6	74	23.3		s.			2		s.			sm'h		clear	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	E. F. Stembridge, 3d offi.
S. S. Bothnia, Capt. W. McMickan,																	J. H. Mills, 3d officer.
S. S. Gallia, Capt. W. H. P. Hains,																	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Franceul,																	
S. S. France, Capt. Périer d'Hauterive, N. 41° 40′, W. 65° 30′*†	29.92	760.0	46.4	8.0		sw.	6			n.	sw.	rain	rain	hv'y	se.	covered	
S. S. St. Laurent, Capt. A. Sérvan, N. 49° 30′, W. 10° —′*†	30.55	776.0	51.8	11.0		w.	5					0	0		w.		A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein,																	
S. S. Silesia, Capt. A. Albers. Havre, France†*	30.39	771.9	50.0	10.0		wsw.	5		8		wsw.	0	0			fair	
S. S. Wieland, Capt. C. Hebich, N. 50° 41′, W. 21° 22′*	30.21	767.3	53	11.7		ssw.	5		8		sw.	0	0	4	sw.		Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch																	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt. Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 23° —′, W. 43° —′*†.	30.00	762.0	78	25.6		ene.	2		5?		ne.	1 h'r	1 h'r	sm'h		clear.?	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, New York, N. Y.*†	30.20	767.1	48	8.9		n.	2		0			6 h'r	6 h'r			clear	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 49° 58′, W. 4° 15′*†	30.46	773.6	52	11.1	93	w.	4		5		w.	0	0	sm'h		fine	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,																	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, N. 24° 55′, W. 74° 10′.†	30.26	768.6	73	22.8		n	2		1		n.	0	0	long	e.	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 26° 00′, W. 74° 14′† [man	30.26	768.6	72	22.2		n.	2								n.	fine	
S. S. City of Alexandria, Capt. L. F. Timmer-																	
S. S. City of Washington, Capt. J. W. Rey- N. 19° 55′, W. 91° 44′*† [nolds	30.25	768.3	80	26.7		e.	3								w.	fine	
S. S. Elbe, Capt. W. Willigerod N. 41° 03′, W. 68° 25′*	29.57	751.1	46.4	8.0		sse; sw.	4–6							mod.		rainy	
S. S. Lessing, Capt. B. Voss																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke																	
S. S. P. Caland, Capt. E. Deddes, N. 43° 33′, W. 56° 36′	30.20	767.1	41.0	5.0		s.	4							sm'h		fine	
S. S. Schiedam, Capt. E. M. Chevalier,																	
S. S. Scythia, Capt. M. Murphy																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur																	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 45° 44′, W. 8° 07′*	30.65	778.5	48.9	9.4		wsw.	3		5?		w; ene.	0	0	mod.	ene.	clear?	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer, N. 38° 24′, W. 69° 49′	29.73	755.1	62	16.7	97	ssw.	7		10		ssw.	10 h'r	10 h'r	cross	ssw.	raining	Sander & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	29.75	755.6	41.0	5.0		w.	6		5		wnw.	0	0				
S. S. Mosel, Capt. F. Hesse,																	J. Hesse.
S. S. Neckar, Capt. R. Bussius, N. 49° 38′, W. 19° 39′	30.42	772.7	51.8	11.0		ssw.	6		8		sw.	1 h'r	1 h'r	r'gh	wsw.	squally	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	
S. S. Oder, Capt. C. Undeutsch,																	
S. S. Ohio, Capt. Gustave Meyer, N. 33° 22′, W. 64° 20′	30.29	769.4				sse.	4		7		se; ssw.	0	0	mod.	se.	cloudy	Montz & Kohlenbeck.
S. S. Strassburg, Capt. O. Heimbruch, N. 50° 33′, W. 1° 01′*	30.34	770.6	53.5	11.9	73	wsw.	6		8		wsw.	0	0	mod.	wsw.	fair	Hattensaur & Raetz.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 34° 49′, E. 139° 48′†	29.70	754.4	63	17.2	72	w.	5		5		w.	0	0	mod.	sw.	fair	Schuckmann & von [Goessel.
S. S. Gaelic, Capt. E. O. Hallett, San Francisco, Cal			46	7.8	92												J. Jones, 2d officer.
S. S. Oceanic, Capt. J. Metcalfe, N. 40° 11′, E. 158° 57′*	30.04	763.0	45	7.2	76	ese.	6		9		se.			5	nne.	overcast	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	29.90	759.4				w.	2		1							clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Savannah, Georgia†	30.22	767.6	70	21.1	90	w.	1		1		wsw.					clear	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO.																	
John L. Howard, Agent, San Francisco.																	
S. S. Mississippi, Capt. E. W. Holmes, N. 38° 53′, W. 123° 44′†	29.85	758.2	37	2.8	80	n.	5	.....	5	.....	nnw.	.....	.....	h'vy	nw.	squally	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer N. 46° 34′, W. 124° 24′*†	30.26	768.6	29	—1.7	89	e.	5	.....	4	.....	ene.	0	0	mod.	nw.	d. clouds	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO.																	
K. Van Oterendorp, Agent, San Francisco.																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. Fred. Bolles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†	29.77	756.1	38	3.3	90	nw.	1	.....	0	.....	.....	.....	.....	.....	.....	fine	G. Boese.
PACIFIC COAST S. S. CO.																	
Goodal, Perkins & Co., Agents, San Francisco.																	
S. S. Ancon, Capt. J. N. Ingalls, N. 33° 43′, W. 118° 14′†	29.89	759.2	50	10.0	64	w.	4	.....	8	.....	wsw.	.....	.....	mod.	w.	fair	.....
S. S. Geo. W. Elder, Capt. H. G. Morse, Puget Sound†	30.28	769.1	37	2.8	.....	n.	2	.....	0	.....	.....	0	0	sm'h	.....	clear	.....
S. S. Idaho, Capt. H. M. Hayward, San Francisco, Cal†	29.98	761.5	40	4.4	63	w.	4	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, N. 34° 24′, W. 119° 40′†	29.95	760.7	44	6.7	92	w.	2	.....	8	.....	w.	.....	.....	light	w.	sprinkling	.....
S. S. State of California, Capt. G. Debney, N. 42° 00′, W. 124° 30′†	29.89	759.2	38	3.3	71	nnw.	5	.....	0	.....	.....	0	0	short	nw.	clear	.....
S. S. Victoria, Capt. W. E. Plummer, San Francisco, Cal.†	29.85	758.2	36	2.2	80	nw.	4	.....	0	.....	.....	.....	.....	.....	.....	clear	J. C. Hunter.
PACIFIC MAIL S. S. CO.																	
Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 36° 49′, W. 124° 28′	29.74	755.4	44	6.7	84	nw.	7	.....	8	.....	n.	2 h'r	hail	h'vy	nw.	cloudy	.....
S. S. City of New York, Capt. W. B. Cobb. N. 22° —′, W. 156° 50′†	30.29	769.4	70	21.1	79	ne.	5	.....	8	.....	ne.	0	0	h'vy	ne.	cloudy	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, Sydney, N. S. W.†	29.80	756.9	83	28.3	64	w.	4	.....	2	.....	w.	0	0	sm'h	.....	clear	E. Le Saik.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	29.94	760.5	58	14.4	87	calm	0	.....	8	.....	.....	0	0	.....	.....	fair	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 18° 09′, W. 103° 18′†	29.98	761.5	78	25.6	82	e.	2	.....	2	.....	ese.	0	0	long	nw.	clear	.....
S. S. Grenada, Capt. M. Connolley, N. 9° 50′, W. 85° 41′†	29.92	760.0	77	25.0	100	e.	1	.....	2	.....	e.	0	0	small	e.	clear	.....
S. S. South Carolina, Capt. W J. Russell, Panama, Panama†	30.03	762.7	77	25.0	82	nnw.	1	.....	2	.....	nw.	0	0	sm'h	.....	fair	A. W. Hart, 2d offi.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	29.76	755.9	75	23.9	76	se.	1	.....	0	.....	.....	.....	.....	.....	.....	fine	.....
QUEBEC S. S. CO.																	
E. A. Outerbridge & Co., Agents, New York.																	
S. S. Burmuda, Capt. F. M Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 21° 30′, W. 64° 17′	.....	.....	.....	.....	.....	ene.	2	.....	0	.....	.....	0	0	mod.	e.	.....	G. S. Locke.
RED STAR LINE.																	
Peter Wright & Sons, Agents, New York and Philadelphia.																	
S. S. Belgenland, Capt. J. Stokes, Antwerp, Belgium*†	30.28	769.1	48	8.9	.....	sw.	6	.....	8	.....	sw.	14 h'r	14 h'r	sm'h	.....	cloudy	.....
S. S. Nederland, Capt. J. Uberweg, Antwerp, Belgium	.....	.....	48	8.9	.....	wsw.	4	.....	5	.....	w.	0	0	.....	.....	clearing	Atbrecht & Bull.
S. S. Rhyniand, Capt. W. G. Randle, N. 48° 17′, W. 35° 38′*	30.19	766.8	45	7.2	85	nnw.	6	.....	10	.....	nnw.	0.2	5.	mod.	nnw.	cloudy	C. H. Grant, 2d offi.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Egmond & Ludder.
S. S. Vaderland, Capt. W. A. Beynon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Waesland, Capt. H. Nickels, N. 48° 20′, W. 31° 05′*	29.92	760.0	55	12.8	.....	s.	5	.....	10	.....	sse.	sh'rs	sh'rs	mod	ssw.	cloudy	Olsen & Assfeld.
ROTTERDAM LINE.																	
Fundh, Edye, & Co., Agents, New York.																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 40° 33′, W. 69° 15′*†	29.62	752.3	55.5	13.1	87	w.	3	.....	10	.....	.....	10 h'r	10 h'r	mod	sw.	rain & fog	.....
THINGVALLA LINE.																	
Funch, Edye, & Co., Agents, New York.																	
S. S. Thingvalla, Capt. S. T. Laub, N. 44° 46′, W. 53° 05′†	30.35	770.9	29.5	—1.4	.....	sw.	2	.....	10	.....	.....	0	0	sm'h	wsw.	covered	J. T. Elberling.
WARREN LINE.																	
Warren & Co., Agents, Boston.																	
S. S. Iowa, Capt. S. Walters, Off Cape Clear, Ireland*†	30.51	774.9	53	11.7	.....	wsw.	4	.....	8	.....	wsw.	0	0	light	wsw.	cloudy	S. Walters.
WHITE STAR LINE.																	
R. J. Cortis, Agents, New York.																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 43° 08′, W. 65° 04′*†	30.08	764.0	43	6.1	.....	wnw.	1	.....	8	.....	.....	3 h'r	3 h'r	sm'h	.....	d. clouds	W. Brownless, 4th offi.
S. S. Celtic, Capt. Benjamin Gleadell, N. 40° 41′, W. 69° 46′*†	29.57	751.1	47	8.3	92	sw.	4	.....	10	.....	w.	8 h'r	rain hail	mod.	sw.	foggy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving. N. 51° 09′, W. 15° 20′†	30.55	776.0	56	13.3	87	sw.	5	.....	5?	.....	sw.	0	0	mod.	sw.	cloudy?	H. Goulden, 4th officer
WILSON LINE.																	
Sanderson & Sons, Agents, New York.																	
S. S. Romano, Capt. Joseph Mitchell, N. 45° 20′, W. 38° 22′*	30.13	765.3	50	10.0	.....	nne.	3	.....	10	.....	nnw. nne.	3 h'r	3 h'r	r'gh cross	nw;e.	overcast	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—7	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, Pensacola, Florida†	30.31	769.9	66	18.9	94	nnw.	2		10 s		nw.	0	0			overcast	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 31° 49′, W. 56° 35′*†	30.31	769.9	59	15.0		ne.	3		10		ene.	0	0	r'gh	ne.	cloudy	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 19° 18′, W. 42° 25′*†	30.12	765.0	74	23.3		nne.	4		3		ne.	0	0	long	ne.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 47° 09′ W. 10° 06′*†	30.60	777.2	53	11.7	79	w.	2		9		w.	0	0	long	wnw.	overcast	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewi Ponce, Porto Rico, W. 1*†	30.11	764.8	78	25.6		ne.	1		2		ene.	0	0			clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 2° 24′, W. 25° 25′*†	29.95	760.7	85	29.4		e.	2		9		nw.	3 h'r	light	sm'h	n.	drizzling	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 43° 02′, W. 43° 25′*†	30.05	763.3				ene.	4				ne.	4 h'r	light	mod.	nw.	cloudy	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 51° 50′, W. 63° 48′†	29.50	749.3				n.	1		8		wsw.	mist	mist	sm'h	nne.	cloudy	A. J. Pettingill.
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	29.76	755.9				nw.	8		1		nw.	sh's	sh's			clear	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr																	J. C. Andreson, Jr.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.17	766.3	56	13.3	80	nnw.	2		1		calm	0.68	17.3			clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison.																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 21° 30′, W. 37° 48′			74	23.3		calm	0		0			0	0	sm'h		fine	
Bk. Gamaliel, Capt. D. J. Anthony, N. 23° 39′, W. 66° 25′*†	30.01	762.2				ne.	6		0			0	0	long	se.	clear	
Bk. Geo. Booth, Capt. D. Williams N. 4° 24′, W. 29° 15′*†	29.75	755.6	87	30.6		nne.	3					0	0			overcast	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 34° 02′, W. 51° 17′*†	30.30	769.6	65	18.3		nne.	4				nne.	rain	rain	mod.	ne.	squally	
Schr. Henry Denison, Capt. Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 40° 00′, E. 54° 06′*†	30.14	765.5				n.	6		7		nnw.	0	0	cross	nne.	cloudy	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith																	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte,																	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen. Off Cape San Antonia Spain*†	30.52	775.2				var.	1				e.	12 h'r	12 h'r	long	e.	fair	Sorensen & Arvesen
Bk. Pawashick, Capt. Edwin Fry, N. 26° 48′, W. 26° 30′*†	30.42	772.7	68	20.0	90	s.	5		2		s.			mod.	s.		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.10	764.5	61	16.1	77	se.	4		10		s.					raining	G. S. d'Ancona.
Bk Pilgrim, Capt. J. Connolly S. 26° 10′, W. 28° 43′*†	30.00	762.0				e.			2		e.	0	0				J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	30.19	766.8	70	21.1		sw.	1		0			½ h'r	½ h'r			fine	H. Mehaffey, 2d mate.
Bk. Stella, Capt. H. N. T. Sommer, S. 23° 00′, W. 37° 38′*	29.64	752.8	74.8	23.8	96	ne.	7		10		ne.						H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 25° 32′, W. 32° 46′*†	30.06	763.5	70	21.1	90	nnw.	1		2		nw.	4 h'r	mod	long	nw.	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert,																	
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 48° 16′, W. 16° 16′*†	30.37	771.4	56	13.3	80	wsw.	4				w.				w.	covered	H. T. Schmidt.
Bk. Winifried, Capt. N. P. Dutton. S. 10° 36′, W. 31° 45′*†	29.95	760.7				se.					se.			light	se.		N. P. Dutton.

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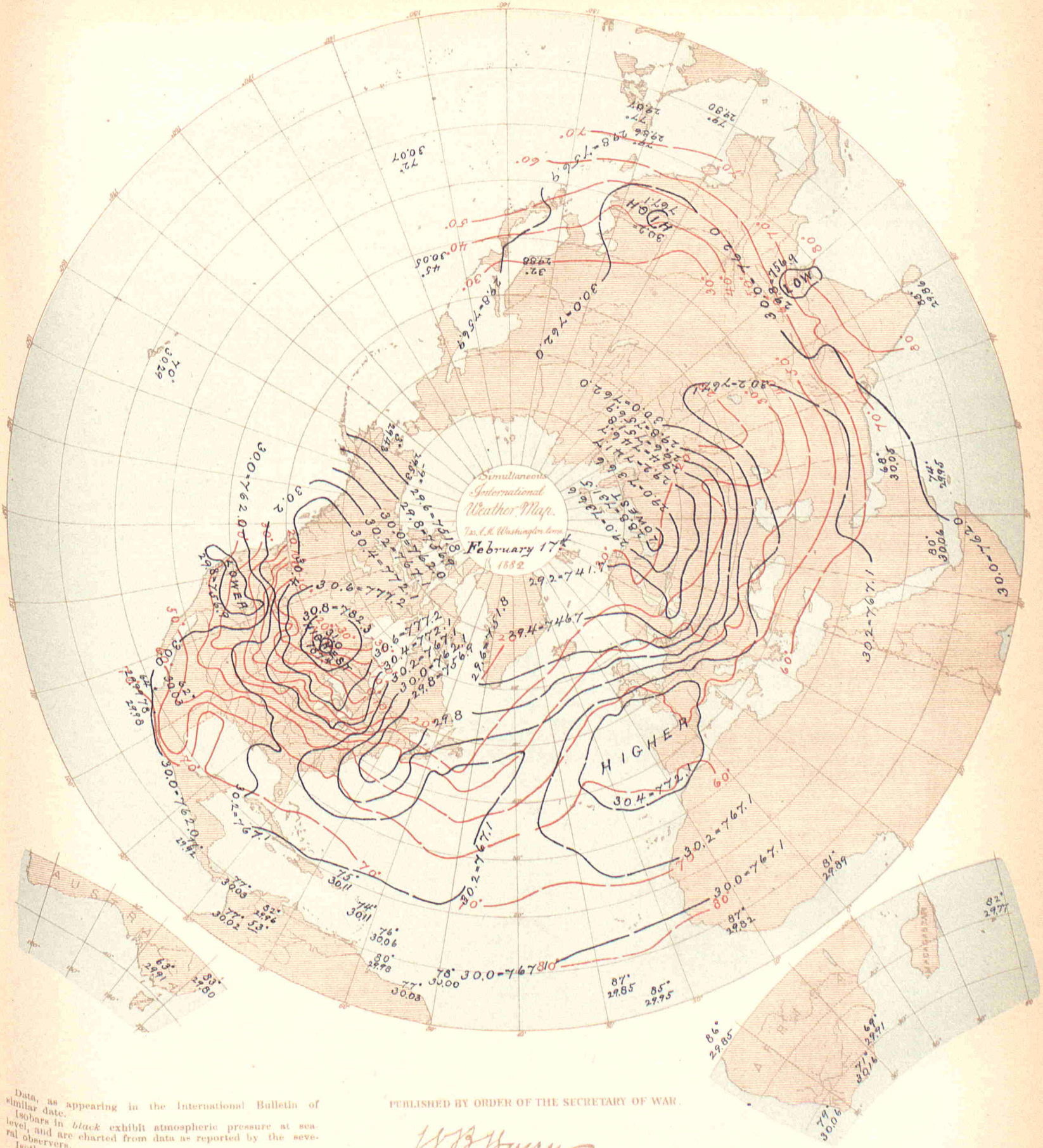
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Chief Signal Officer, U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 18, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.36	771.1	60.8	16.0	81	sw.			4		3			0	0	pretty fair	Moiroud.
Algiers			30.31	769.9	55.0	12.8	93	n.			1		10			0.472	12.0	covered	Nicolas.
La Calle			30.25	768.4	57.2	14.0	78	nw.			2		7			0.366	9.3	very cloudy	Fonfréde.
Tunis			30.20	767.1															Jacques.
Sfax																			Gau.
Saida			30.31	769.9	40.6	4.8	100	nne.			2		2			0.110	2.8	fair	Dumas.
Tebessa			30.22	767.7	43.9	6.6	83	n.			2		10			0	0	covered	Derché.
Geriville					39.9	4.4	80	nne.			2		8			0.012	0.3	very cloudy	Louchamp.
Laghouat			30.31	769.8	48.2	9.0	73	n.			2		2			0.157	4.0	fair	Herbin.
Biskra			30.25	768.3	63.7	17.6	82	n.			1		8			0	0	very cloudy	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	59.6	15.3	63	s.	9	4.0			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.70	754.4	30.26	768.7	47.8	8.8	65	se.			3		2			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.30	744.3	30.10	764.5	37.4	3.0	62	nnw.	10.5	4.7			10			0.012	0.3		Dr. Wierzbiski.
Eperies	29.14	740.2	30.06	763.4	35.6	2.0	84	n.			3	cs	8 s			0	0		Julius Mikolik.
Gratz	28.96	735.6	30.25	768.3	42.4	5.8	69	w.			1		6			0	0		Andreas Rospini.
Hermannstadt	28.56	725.5	30.03	762.7	41.5	5.3	51	nw.			6		6			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.91	734.4	30.31	769.8	39.4	4.1	88	wsw.			2		10			0.382	9.7	rainy	The Staff.
Lemberg	28.92	734.5	29.94	760.5	35.2	1.8	80	nw.			2		10			0.071	1.8		Dr. T. Stanecki.
Pola	30.17	766.4	30.29	769.3	51.8	11.0	89	wsw.			1		0			0	0		I. R. Hydrographic Office.
Szathmar	29.58	751.2	30.04	763.0	38.7	3.7	72	nw.			3		3			0	0		Joseph Midlinszky, S. J.
Szegedin	29.80	757.0	30.09	764.3	46.0	7.8	61	w.			3		7			0.012	0.3		Karl Stancel.
Trieste	30.21	767.2	30.31	769.8	44.6	7.0	66	calm			0		3			0	0		Rieder.
Vienna	29.50	749.3	30.24	768.2	41.0	5.0	87	nw.			2		10			0.484	12.3		I. R. Central Met. Obs'y
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.19	741.4	29.29	744.0	48.9	9.4	39	wsw.	53	23.7			2			0.120	3.0	squally	W. Boswell.
Armagh, Observatory	29.81	757.2	30.06	763.5	46.2	7.9	72	wnw.	23	10.3			7					squally	S. Call.
Bidston, Liverpool Obs'y			30.02	762.5	43.2	6.2	97	w.	36	16.1			10					raining	John Hartnup.
Bolton, Sharples	29.45	748.0	29.99	761.7	47.8	8.8	88	wsw.	30	13.4			10					raining	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.53	750.0	29.93	760.2	50.5	10.3	78	sw.			5		8			0.02	0.5	raining	J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	79.0	26.1	69	ne.			3		3					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			30.13	765.3	50.0	10.0	82	w.			2.0		8					overcast	John McLaren.
Chatham, School M. E.	30.10	764.5	30.23	767.8	49.5	9.7	75	w.			2		8					d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.14	765.5	30.38	771.6	50.3	10.2	80	w.			4		7						The Staff.
Fort Napier, Natal	27.64	702.0	29.86	758.4	77.2	25.1	57	calm			0		5					overcast	Pvt. E. K. Annis, A. H. C.
Free Town, Sierra Leone	29.57	751.1	29.80	756.9	89.0	31.7	66	w.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.18	766.6				n.			2		10			0	0	overcast	J. O'Donnghue.
Gibraltar, Mediterranean	30.36	771.1	30.41	772.4	61.4	16.3	81	ne.			2		3					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	29.53	750.0	29.73	755.1	47.3	8.5	53	w.			9		5					squally	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.04	763.0	30.22	767.6	50.3	10.2	74	sw.			4		8					d. clouds	The Staff.
Guernsey	30.10	764.5	30.41	772.4	49.0	9.4	92	nw.			2		9					showery	A. Collenette, F. M. S.
Kew, Observatory	30.20	767.1	30.24	768.1	50.5	10.3	67	sw.	26	11.6			9					d. clouds	The Staff.
Leicester, Museum	29.82	757.4	30.08	764.0	52.0	11.1	94	sw.			4		10					overcast	J. C. Smith.
Malta, Mediterranean	30.05	763.3	30.13	765.3	58.0	14.4	76	ne.			4		8					overcast	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.23	767.8	30.28	769.1	73.5	23.1	74	ne.			3		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	29.97	761.2	30.20	767.1	48.9	9.4	81	sw.			6		10					squally	The Staff.
Plymouth	30.27	768.8	30.35	770.9	50.2	10.1	86	wnw.			2		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			29.02	737.1	45	7.2	83	w.	64	28.6			7					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.00	762.0	30.06	763.5	48.2	9.0	76	ssw.			1		8					d. clouds	W. H. Lyne.
Sheffield	29.76	755.9	30.04	763.0	49.0	9.4	79	w.			3		10			0.01	0.3	overcast	W. F. Cooper.
Silloth Rectory	29.85	758.2	29.88	758.9	45.0	7.2	77	w.			6		10			0.115	2.9	squally	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.00	762.0	45.0	7.2	92	wsw.	38	17.0			10					raining	I. New.
Stratfield Turgiss	30.03	762.7	30.25	768.3	51.9	11.1	75	w.			3–4		6					squally	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.28	769.1	30.33	770.4	53	11.7	79	w.			6		6					d. clouds	W. Newcombe.
Valencia, Observatory	30.31	769.9	30.33	770.4	45.6	7.6	82	wnw.	21	9.4			10					raining	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.07	763.8	30.10	764.5	72.0	22.2	74	e.	13.6	6.1		0	6 s			0	0		John Duthie.
Cape Town, C. G. H. Obs'y	29.98	761.5	30.02	762.5	80.0	26.7	56	s.	35	15.6		0	1			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.					−8.5	−22.5		nw.	10	4.5		2 cs	0			0	0	clear	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.20	767.1	30.25	768.3	−2	−18.9	100	nw.	15	6.7			10 n			0.985	25.0	light snow	H. J. Cundall, C. E.
Chatham, N. B.*	30.43	772.9	30.50	774.7	−10	−23.3	100	nw.	18	8.0		0	0			0.47	11.9	clear	G. A. Blair.
Cornwall, Ontario	30.68	779.3	30.91	785.1	−4.6	−20.3	100	n.			3	0	0			0	0	clear	James Smith, M. A.
Dalhousie, N. B.	30.36	771.1	30.56	776.2	−14.0	−25.6		w.			4	0	0			0.10	2.5	clear	H. A. Johnson.
Father Point, Quebec*	30.76	781.3	30.78	781.8	−13	−25.0	78	n.	15	6.7		0	5 s?		ne.	0	0	clear?	J. McWilliams.
Fort Garry, Manitoba*	29.63	752.6	30.58	776.7	−8	−22.2	100	ne.	2	0.9		0	0			0.052	1.4	clear	James Stewart.
Fredericton, N. B.	30.53	775.4	30.61	777.5	−5.4	−20.8	77	nw.	14	6.3		0	0			0.240	6.1	clear	Prof. Harrison.
Granton, Ontario	29.51	749.5	30.72	780.3	15.5	−9.2	91	se.	5	2.2		4 cs	0			0	0	fair	James Grant.
Halifax, N. S*	30.16	766.1	30.31	769.9	0	−17.8	100	w.	20	8.9		0	0			0.938	23.8	clear	A. Allison.
Hamilton, Ontario	30.32	770.1	30.75	781.0	17.9	−7.8	68	ne.			3	10 ks	0			inap.	inap.	light snow	Geo. Dickson, B. A.
Kingston, Ontario*	30.52	775.2	30.90	784.8	0	−17.8	65	ne.	12	5.4		0	0			0	0	clear	A. P. Knight, M. A.
Little Glace Bay, N. S.	29.92	760.0	29.96	761.0	−1.5	−18.6	100	n.			8		10 n			0.67	17.0	cloudy	C. H. Rigby.
Montreal, Quebec*	30.71	780.0	30.96	786.4	−8	−22.2	71	n.	12	5.4		0	0			0	0	clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	30.09	764.3	30.90	784.8	−3	−19.4	68	e.	8	3.6		0	0			0	0	clear	Rev. R. Mosley.
Peterboro, Ontario	30.08	764.0	30.93	785.6	2.4	−16.4	100	nw.			3	0	0			0	0	clear	J. Dixon, B. A.
Port Dover, Ontario	29.97	761.2	30.74	780.8	15	−9.4	100	ne.	8	3.6		8 ck	0	sw.		0	0	fair	H. Morgan.
Port Stanley, Ontario	29.96	761.0	30.67	779.0	18	−7.8	87	e.	12	5.4		5 ck	0	nw.		0	0	fair	M. Payne.
Quebec, Quebec*	30.46	773.7	30.84	783.3	−14	−25.6	47	n.			5	0	0			0	0	clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.44	773.2	30.98	786.9	−11	−23.9	78	se.	5	2.2		0	0			0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.96	761.0	30.77	781.5	9	−12.8	83	e.	22	9.8		0	0			0	0	clear	
St. Andrews, N. B.	30.48	774.2	30.54	775.7	−3	−19.4	69	n.	16	7.2		0	0			0.30	7.6	clear	
St. John, N. B.	30.28	769.1	30.46	773.7	−2.0	−18.9	100	n.	30	13.4		0	0			1.730	43.9	clear	G. Murdock, C. E.
St. Pierre, N. F.																			N. F. Land, Com't.
Stratford, Ontario	29.27	743.4	30.69	779.5	13.0	−10.6	91	se.	17	7.6			10 s			0	0	cloudy	C. I. Macgregor, M. A.
Sydney, C. B*	29.94	760.5	30.01	762.2	−2	−18.9	79	nw.	30	13.4		0	2 ks			0.82	20.8	clear	T. C. Hill, C. E.
Toronto, Ontario*	30.41	772.4	30.84	783.3	10	−12.2	80	ne.	14	6.3			10 ks		e.	0	0	cloudy	Magnetic Observatory.
Windsor, N. S.	30.22	767.6	30.33	770.4	0.5	−17.5	85					0	1 k			1.03	26.2	raining	Prof. W. R. Butler.
Woodstock, Ontario	29.58	751.3	30.76	781.3	15.6	−9.1	76	ne.	20	8.9			10 ks			0.05	1.3	cloudy	Prof. Wolverton
Yarmouth, N. S*	30.38	771.6	30.45	773.4	7	−13.9	87	n.	23	10.3			8 k		n.	0.73	18.5	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.70	754.4	29.96	761.0	34	1.1	100	se.	4	1.8			10 n			0.20	5.1	raining	John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.12	765.0	30.40	772.1	44.1	6.7	61	nnw.			2		10			0	0		N. Titoushkin.
Sung-shu-chwang†	24.71	627.5			17.6	−8.0		calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.08	764.0	30.11	764.7	42.8	6.0	93	ene.	3.1	1.4			10			0	0	covered	M. Marc Dechevrens, S. J.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.77	756.2	29.82	757.4	37.0	2.8	96	sw.	20	9			10					rain and fog.	Oversergent Fischer.
Fanöe	29.72	755.0	29.74	755.5	42.3	5.7	95	wsw.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.76	755.9	29.80	757.0	1.8	−16.8	100	nw.			3		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.84	758.0	29.89	759.1	22.3	−5.4		w.			6		5						A. O. Thorlacius.
Thorshavn	29.39	746.4	29.42	747.3	34.5	1.4	80	n.	31	14			7					snowing	Overloerer Bergh.
Vestervig	29.48	748.8	29.57	751.1	42.6	5.9	96	sw.			6		10					raining	Loerer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.90	759.4	30.57	776.4	46.4	8	83	calm			0	0	8 kn		w.	0	0	very cloudy	M. Labroue, Director.
Alençon, Normal School	29.94	760.5	30.49	774.5	47.1	8.4	94	w.			3		10 k		e.	0.008	0.2	raining	M. Nicot, Director.
Arras, Engineer School	30.07	763.7	30.33	770.3	47.1	8.4	94	?			3		10 k			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.25	768.4	30.33	770.4	55.3	13	45	n.			4		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.87	758.8	30.45	773.4	46.9	8.3	71	sw.			1		10			0.004	0.1	covered	M. Saillard, Director.
Beauvais, Normal School	30.16	766.1	30.43	773.0	49.6	9.8	79	w.			2		10		wnw.	0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.41	772.5	46.4	8.	97	s.			1		10 n		sw.	0.008	0.2	covered	M. Gobin, Director.
Bordeaux, Observatory	30.24	768.1	30.51	775.0	50.0	10.0	55	nnw.			1		10			0.012	0.3	covered	M. Rayet, Director.
Bourges, Normal School	29.89	759.2	30.46	773.6	49.1	9.5	50	sw.			1		kn		sw.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.23	767.9	30.48	774.1	54.3	12.4	83	w.			2		8		w.	0.020	0.5		M. de Kennaree, Dir.
Caen, Normal School	30.36	771.2	30.44	773.1	51.1	10.6	68	sw.			2		10			0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.02	762.6	30.35	771.0	52.7	11.5	86	sw.			1		5		w.	0.031	0.8	cloudy	M. Jadot, Director.
Charleville, Normal School	29.83	757.6	30.35	770.9	47.5	8.6	81	wnw.			1		2			0.04	1.	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.08	738.7	30.48	774.3	46.0	7.8	56	nw.			1		10			0	0	covered	M. Allnard, Director.
Cluny, Normal School	29.63	752.6	30.50	774.8	47.1	8.4	68	e.			1		fg		e.	0	0	foggy	M. de Villemontée, Dir.
Commercy, Normal School.	29.55	750.5	30.45	773.3	44.8	7.1	85	w.			1		10	w.	w.	0.031	0.8	covered	Dr. Coulet, Director.
Gap, Normal School	27.78	705.5	30.37	771.5	45.7	7.6	51	n.			2					0	0		M. Jeanglrard, Director.
Gréasque, du. Rhone	29.15	740.5	30.29	769.3	57.7	14.3	34	sw.			1		2		sw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.66	753.3	30.45	773.5	45.5	7.5	65	se.			1		kn		ne.	0	0		M. Ablard, Director.
Guéret, Normal School	28.85	732.9	30.51	774.9	42.8	6	37	w.			1		n		sw.	0	0		M. Rivoire, Director.
Lamballe, Normal School	30.19	766.7	30.44	773.2	50.0	10	74	wsw.			2		8		wsw.	0	0	very cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.93	760.2	30.51	774.9	52.2	11.2	61	ene.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.40	772.2	30.50	774.8	52.7	11.5	83	sw.			3		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.39	746.5	30.48	774.3	46.0	7.8	64	n.			1		10 kn		n.	0.039	1.0	covered	M. André, Director.
Mans, Normal School	30.22	767.5	30.54	775.7	47.8	8.8	78	nw.			1		8		nw.	0.008	0.2	very cloudy	M. Piboen, Director.
Marseille, Observatory	30.03	762.8	30.30	769.7	58.1	14.5	36	wnw.			1		1			0	0	hazy	M. Stephan, Director.
Montlouis l'Instituteur	25.06	636.4	29.90	759.4	36.7	2.6	53	ne.	20.6	9.2			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.22	767.6	30.35	771.0	55.4	13	45	w.			1		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.67	753.6	30.47	774.0	47.1	8.4	72	w.					10			0.008	0.2	covered	M. Hasse, Director
Nantes, Observatory	30.36	771.2	30.52	775.3	51.3	10.7	63	wnw.			0–1		10n; kn			0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.26	768.7	30.37	771.5	55.4	13.0	41	ne.	18.6	8.3			1			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.42	544.1			30.9	−0.6		ne.			1		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.46	748.2	30.56	776.3	50.0	10	50	n.			4		0			0	0	clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.43	645.8			26.8	−2.9	100	nnw.			2		10			0.118	3.0	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	30.50	774.8	30.54	775.6	51.3	10.7	79	calm			0		10		w.	0.024	0.6	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.22	767.7	30.44	773.2	50.7	10.4	68	nw.			1		5		w.	0	0	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.31	719.0	30.54	775.6	43.2	6.2	58	nw.			2		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.36	771.2	30.41	772.4	50.0	10	84	ssw.			2		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.29	769.4	30.45	773.4	47.8	8.8	77	w.			2		8		nw.	0	0	very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.26	768.5	30.42	772.7	49.5	9.7	75	wnw.			1		10		w.	0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.80	757.0	30.54	775.6	49.3	9.6	69	nw.			2		8		nw.	0.020	0.5	very cloudy	M. Baillard, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.91	759.7	30.40	772.2	48.6	9.2	71	w.			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.15	765.7	30.44	773.1	51.4	10.8	70	w.			2		10		wsw.	0.004	0.1	covered	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.37	746.1	30.23	767.9	46.8	8.2	73	wsw.			4	0	6 ks		w.	0.181	4.6		Prof. Dr. Hoh.
Berlin	29.84	757.9	30.02	762.5	40.6	4.8	96	se			4		10			0.154	3.9		Prof. Dr. Arndt.
Breslau	29.58	751.4	30.11	764.9	39.0	3.9	82	wnw.			3		10			0.016	0.4	raining	Royal University Obs'y.
Carlsruhe	29.93	760.3	30.39	771.9	47.5	8.6	71	s.			2		10		w.	0.197	5.0	raining	Albert Senz.
Cassel	29.40	746.7	30.11	764.8	48.2	9.0	88	sw.			4	0	8 n		sw.	0.157	4.0		Dr. H. Möhl.
Frankfort on the Main	29.90	759.4	30.27	768.9	49.1	9.5	74	sw.			2		9			0.130	3.3		Physical Society.
Friedrichshafen	28.92	734.6	30.40	772.2	44.6	7.0	78	s.			2		2	w.		0.067	1.7		Wilhelm, Chief Tel.
Hamburg	29.91	759.7	30.00	762.1	45.3	7.4	93	wsw.			4		10			0.083	2.1	raining	E. Preller.
Kiel	29.87	758.7	29.89	759.1	43.5	6.4	90	wsw.			4		10			0.228	5.8		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.69	754.0	30.12	765.0	45.3	7.4	93	sw.			3		10	wsw.				light rain	H. Leppig, Asst.
Magdeburg	29.86	758.5	30.06	763.5	45.5	7.5	94	w.			4		10 ks		w.	0.169	4.3		Dr. Assmann.
Memel	29.85	758.2	29.90	759.4	33.1	0.6	82	nnw.			2	0	8 ks						Issermann.
Munich	28.49	723.7	30.38	771.6	44.1	6.7	64	nw.			1		5	sw.		0.004	0.1		Central Station.
Neufahrwasser	29.99	761.7	30.00	762.1	34.7	1.5	66	n.			1		0			0.031	0.8		A. Lothes.
Neustadt, Palatinate	29.80	757.0	30.34	770.6	47.3	8.5	76	wsw.			3		10			0	0		Dicknether.
Stuttgart	29.37	745.9	30.28	769.1	48.2	9.0	61	nw.			1		7	n.		0.031	0.8		Prof. Dr. Schoder.
Wustrow	29.87	758.8	29.90	759.5	38.8	3.8	100	sse.			3		10			0.059	1.5		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.77	756.2	30.17	766.2	58.6	14.8		s.			1.0	5 c	0			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	30.02	762.4	30.07	763.8	71.1	21.7	62	wsw.	14	6.3			4	w.		0	0	d. clouds	
Deesa	29.46	748.3	29.94	760.5	77.0	25.0	9	nw.	9.4	4.2			0			0	0	blue sky	
Bombay	29.88	758.9	29.92	759.9	77.1	25.0	52	nw.	18	8.0			6	wnw.		0	0	d. clouds	
Poona, Yarrowda.	28.02	711.6	29.84	758.0	86.4	30.2	18	wsw.	15	6.7			2	w.		0	0	d. clouds	
Belgaum	27.36	695.0	29.88	759.0	80.1	26.7	41	w.	9	4.0			6	nw.		0	0	d. clouds	
Lahore	29.28	743.8	30.07	763.7	58.6	14.8	33	nw.	1.7	0.8			0			0	0	blue sky	
Roorkee	29.02	737.0	29.96	760.9	60.0	15.6	57	nw.	6.0	2.7			0			0	0		
Agra	29.40	746.8	29.99	761.6	67.3	19.6	27	nw.	8.4	3.8					n.	0	0		
Nagpur	28.83	732.4	29.87	758.6	85.9	29.9	22	calm	3.3	1.5			0			0	0	blue sky	
Jubbulpore	28.56	725.4	29.93	760.2	76.8	24.9	27	ne.	2.2	1.0			0			0	0	blue sky	
Lucknow	29.54	750.4	29.93	760.2	70.7	21.5	26	wsw.	9.0	4.0			0			0	0	blue sky	
Allahabad	29.62	752.2	29.94	760.4	69.5	20.8	25	w.	6.7	3.0			0			0	0	blue sky	
Patna	29.68	753.9	29.87	758.8	69.9	21.1	28	w.	10.4	4.6			0			0	0	blue sky	
Hazaribagh	27.85	707.4	29.90	759.5	69.8	21.0	23	nw.	15.1	6.7			0			0	0	squally	
Cuttack	29.78	756.4	29.86	758.5	82.0	27.8	50	wnw.	1.1	0.5			3			0	0	d. clouds	
Calcutta, Alipore	29.85	758.2	29.87	758.7	70.7	21.5	56	wnw.	2.0	0.9			5			0	0	d. clouds	
Dhubri	29.71	754.6	29.83	757.7	68.5	20.3	58	calm	1.3	0.6			3		w.	0	0	d. clouds	
Chittagong	29.79	756.6	29.88	758.9	71.4	21.9	55	wnw.	3.6	1.6			0			0	0	blue sky	
Sibsagar	29.50	749.3	29.85	758.1	63.9	17.7	79	ne.	5.1	2.3			6	w.	w.	0.12	3.0	d. clouds	
Jeypore	28.52	724.5	30.01	762.3	67.0	19.4	23	n.	4.5	2.0			2		n.	0	0	d. clouds	
Zanzibar, Africa	29.78	756.4			85.7	29.8	66	ne.	11.3	5.1		c;cs	6 fk		nne.	0	0	d. clouds	
Trichinopoly	29.64	752.8			90.6	32.6	31	s.	2	0.9			6			0	0	d. clouds	
Bellary	28.38	720.8			93.0	33.9	21	nw.	2.3	1.0		5 c	2	wnw.		0	0	d. clouds	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.89	759.2	30.32	770.0	50.2	10.1	51	calm	0	0			1			0	0		Prof. Giovanni Clodig'
Milan	29.78	756.5	30.32	770.2	45.0	7.2	83	se.	1.8	0.8			2			0	0		Prof. Schiaparelli.
Padua	30.19	766.9	30.31	769.8	48.4	9.1	67	nne.	2.5	1.1			7	sw.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.35	745.5	30.29	769.4	51.6	10.9	59	e.	3.1	1.4			0			0	0		Prof. P. F. Denza.
Genoa	30.10	764.5	30.30	769.5	55.4	13.0	62	sw.	1.8	0.8			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.33	719.5	30.32	770.0	54.7	12.6	28	ne.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.23	767.9	30.28	769.2	44.2	6.8	81	n.	6.9	3.1			4			0	0		Prof. Luigi Guidi.
Florence	30.04	763.1	30.31	769.8	50.0	10.0	71	n.			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.16	766.1	30.25	768.3	53.6	12.0	74	wsw.	0	0			3			0	0		Prof. P. Monte.
Rome	30.08	764.0	30.26	768.6	56.8	13.8	49	w.	1.8	0.8			0			0	0		Prof. P. S. Ferrari.
Lecce	30.00	761.9	30.26	768.5	55.4	13.0	51	nne.	9.4	4.2			1			0	0		Prof. C. de Giorgi.
Cosenza	29.35	745.4	30.26	768.7	52.5	11.4	73	ese.	2.5	1.1			4	e.		0	0		Prof. D. Conti.
Cagliari	30.04	763.0	30.24	768.0	58.1	14.5	54	ssw.			2		5	nne.		0	0		Prof. A. Pacinotti.
Palermo	29.98	761.4	30.23	767.9	57.6	14.2	59	ene.	4.9	2.2			9			0.067	1.7		Prof. G. Cincciatore.
Syracuse	30.13	765.4	30.18	766.6	56.5	13.6	65	ne.	9.8	4.4			9	ne.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.71	754.5	30.23	767.9	57.2	14.0	47	ne.	0.7	0.3			1	ne.		0	0		Prof. T. Brioschi.
Stelvio	22.29	566.1			25.2	— 3.8	64	e.			1		1			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.34	567.5			30.4	— 0.9	60	n.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.86	758.4	29.90	759.4	34.4	1.3	93	s.	4.5	2.0			10 n			0.040	1.0	light rain	
Hakodate	29.86	758.4	29.87	758.7	33.3	0.7	97	calm	0	0			4			0.045	1.1		
Hiroshima, I. M. Obs'y †	29.96	761.0	29.98	761.5	42.7	5.9	79	ne.	3.3	1.5		0	0			0.027	0.7	clear	K. Sasaki.
Kanazawa	30.16	766.0	30.27	768.8	42.9	6.1	89	ese.	4.7	2.1		ck	8 ks		nw.	0	0	cloudy	S. Endo.
Kioto	29.78	756.4	29.96	761.0	42.1	5.6	92	nw.	0.6	0.3		0	5 s			0.020	0.5	fair	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.81	757.2	30.02	762.5	42.6	5.9	84	ne.	1.2	0.5		0	0			0	0	clear	S. Takehayashi.
Niigata	29.92	759.9	29.95	760.7	44.1	6.7	76	ene.	5.0	2.2			10 n			0.215	5.5	light rain	
Nobiru	29.87	758.7	29.89	759.2	42.5	5.8	75	nw.	17.7	7.9			10 s			0	0	overcast	H. Midzushina.
Supporo	29.77	756.1	29.84	757.9	33.0	0.6	99	w.	5.4	2.4			10			0.095	2.4	covered	
Tokei Obs'y, Yeddo	29.80	756.9	29.87	758.7	47.1	8.4	87	ne.	4.4	2.0			10 s			0.024	0.6	covered	The Staff.
Wakayama	29.90	759.4	29.95	760.7	47.9	8.8	76	nne.	3.8	1.7		4 cs	0			inap.	inap.	fair	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.41	619.9	30.20	767.0	50.7	10.4	81	nnw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.69	754.2	29.96	760.9	62.0	16.7	88	ene.	1.6	0.8		5 cs	0	sw.		0	0	very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.8	30.26	768.6	46.8	8.2	66	calm	0	0		0	0			0	0		The Staff.
Morelia	24.28	616.8	30.46	774.3	54.5	12.5	65	se.			6	1	0	sw.		0	0		M. Tena, M. D.
Pabellon, Aguascalientes	24.02	610.1	30.14	765.5	45.1	7.3	54						0			0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.45	595.5	30.44	773.0	39.6	4.2	73	ne.	0.2	0.1		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.23	615.7	30.24	768.2	55.4	13.0	83	e.			1		10		e.	0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.55	572.8	30.24	768.1	50.7	10.5	47	nnw.	4.5	2.0		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.56	750.8	29.75	755.6	83.0	28.3	69	wsw.	17.5	7.8	.....	0	4 ks;k	.....	sw.	0.02	0.5	fair	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.22	767.5	30.22	767.5	46.6	8.1	.....	wsw.	.....	.....	5	.....	.....	.....	.....	0.031	0.8	.....	
Groningen	29.94	760.4	29.99	761.8	47.1	8.4	.....	sw.	.....	.....	6	.....	.....	.....	.....	0.059	1.5	.....	
Helder	30.04	763.0	30.04	763.0	45.3	7.4	.....	sw.	.....	.....	4	.....	.....	.....	.....	0.059	1.5	.....	
Hellevoetsluis	30.16	766.0	30.16	766.0	46.8	8.2	86	wsw.	.....	.....	5	.....	.....	.....	.....	0	0	.....	
Utrecht	30.14	765.5	30.19	766.7	48.7	9.3	81	wsw.	.....	.....	5	.....	5	.....	.....	0.008	0.2	cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.08	738.7	29.15	740.3	41.0	5.0	94	s.	27	12	.....	.....	10	.....	.....	1.043	26.5	raining	
Brono	29.35	745.6	29.39	746.6	28.0	— 2.2	75	ne.	4	2	.....	.....	5	.....	.....	0.004	0.1	.....	
Christiania	29.37	745.9	29.52	749.8	27.0	— 2.8	96	ne.	0	0	.....	.....	10	.....	.....	.....	.....	snow & fog	
Gjæsvær	29.39	746.5	29.41	747.1	21.9	— 5.6	.....	w.	.....	.....	4	.....	5	.....	.....	.....	.....	.....	
Lodingen	29.45	748.0	29.50	749.2	24.4	— 4.2	81	ssw.	.....	.....	1	.....	3	.....	.....	0	0	.....	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	60.4	15.8	85	se.	16.1	7.2	.....	.....	6	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.42	747.2	30.42	772.7	63.5	17.5	32	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.27	768.8	30.36	771.1	64.4	18.0	58	ese.	1.8	0.8	.....	.....	4	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	30.13	765.2	30.49	774.5	53.6	12.0	52	ne.	9.8	4.4	.....	.....	1	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.30	769.7	30.37	771.5	62.2	16.8	73	ese.	16.8	7.5	.....	.....	3	.....	.....	0	0	.....	
Saint Paul de Loando	29.67	753.7	29.87	758.7	84.9	29.4	77	w.	1.3	0.6	.....	.....	3	e.	.....	0	0	.....	
Serra da Estrella	25.60	650.2	30.40	772.2	46.9	8.3	43	se.	8.1	3.6	.....	.....	0	.....	.....	0	0	.....	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.10	739.2	30.26	768.7	18.1	— 7.7	.....	sw.	31	14	.....	0	5 k	.....	.....	0.024	0.6	.....	Major K. Lasarew.
Archangel	29.40	746.7	29.42	747.2	14.7	— 9.6	91	wnw.	4	2	.....	.....	10	.....	.....	.....	.....	light snow	Capt. Sselliwerstow.
Astrakhan	30.13	765.4	30.05	763.3	35.6	2.0	57	s.	18	8	.....	0	0	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	29.89	759.1	30.43	773.0	15.1	— 9.4	81	sw.	9	4	.....	.....	7	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	29.54	750.3	29.80	756.8	24.8	— 4.0	64	wnw.	9	4	.....	.....	10 ks	.....	.....	0	0	.....	Observatory.
Ekaterinburg	28.74	729.9	29.74	755.5	22.3	— 5.4	68	s.	9	4	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Kasan	29.14	740.2	29.42	747.2	29.3	— 1.5	82	ssw.	22	10	.....	.....	10	.....	.....	0.024	0.6	light snow	Observatory.
Kertch	29.72	755.0	29.74	755.5	45.0	7.2	70	w.	4	2	.....	0	6 ks	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	28.95	735.2	29.60	751.8	32.7	0.4	62	nw.	16	7	.....	c;cs	10 ks	.....	.....	0	0	.....	Observatory.
Lugan	29.40	746.8	29.61	752.1	36.7	2.6	82	ssw.	18	8	.....	.....	10	.....	.....	0.035	0.9	.....	Meteorological Obs'y.
Moscow	28.83	732.2	29.33	744.9	21.6	— 5.8	72	n.	7.8	3.5	.....	0	3 ks	.....	.....	0.024	0.6	.....	Meteorological Obs'y.
Nikolaiev	29.69	754.0	29.76	755.8	44.4	6.9	52	w.	31	14	.....	0	5 kn	.....	.....	0	0	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.95	760.7	30.04	762.9	1.4	—17.0	88	calm	0	0	.....	.....	5	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	29.95	760.8	30.10	764.4	34.3	1.3	39	nw.	9	4	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.65	753.2	29.67	763.6	20.8	— 6.2	79	wnw.	11	5	.....	0	8 k;ks	.....	.....	0	0	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.84	732.5	30.54	775.6	25.7	— 3.5	93	calm	0	0	.....	.....	0	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.69	728.6	30.13	765.3	48.9	9.4	44	s.	2	1	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	29.87	758.6	29.93	760.3	29.7	— 1.3	100	calm	0	0	.....	.....	10 k	.....	.....	0.130	3.3	.....	
Warsaw	29.55	750.6	29.99	761.8	34.5	1.4	62	nw.	16	7	.....	.....	10 ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.39	746.6	29.83	757.7	30.2	— 1.0	64	nnw.	9	4	.....	.....	9	.....	.....	0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.99	761.8	30.30	769.6	21.7	— 5.7	81	s.	11	5	.....	.....	10	.....	.....	0.020	0.5	snowing	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.63	752.6	47	8.3	85	nw.	.....	.....	10	5	5	nw.	.....	0.3	8.	rainy	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.23	767.8	30.34	770.5	54.9	12.7	61	s.	2.5	1.1	.....	.....	0	.....	.....	0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.47	773.8	30.52	775.3	56.7	13.7	61	se.	2.5	1.1	.....	2	3	nw.	.....	0	0	cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.43	696.7	30.50	774.8	45.1	7.3	63	ne.	7.4	3.3	.....	0	0	.....	.....	0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.15	715.0	30.44	773.1	51.6	10.9	48	sw.	2.9	1.3	.....	0	0	.....	.....	0	0	clear	The Staff.
Murcia, Met. Obs'y	30.28	769.1	30.43	773.0	59.4	15.2	54	w.	5.4	2.4	.....	0	1	.....	.....	0.008	0.2	misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.50	749.4	30.41	772.5	57.4	14.1	63	calm	0	0	.....	0	0	.....	.....	0	0	clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.13	765.2	30.19	766.9	67.4	19.7	87	calm	0	0	.....	0	1 k	.....	e.	0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.83	757.7	29.89	759.2	80.9	27.2	76	ese.	3.3	1.5	.....	0	k	.....	.....	c	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.34	770.7	30.44	773.2	61.5	16.4	48	ese.	8.5	3.8	.....	0	2	.....	e.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.01	762.3	30.10	764.6	67.3	19.6	95	calm	0	0	.....	3 c	2 kn	e.	e.	0	0	.....	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.78	756.4	29.92	760.0	76.9	24.9	76	nnw.	6.0	2.7	.....	0	0	.....	.....	0	0	clear	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.51	749.6	29.55	750.6	16.9	— 8.4	82	sw.	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	29.54	750.3	29.59	751.6	21.2	— 6.0	85	nw.	.....	.....	2	.....	4	.....	.....	0.110	2.8	.....	
Hernosand	29.56	750.9	29.61	752.2	26.1	— 3.3	72	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	
Stockholm	29.58	751.4	29.76	755.9	29.5	— 1.4	57	sw.	.....	.....	2	.....	2	.....	.....	0	0	.....	
Wisby	29.72	754.9	29.78	756.4	32.4	0.2	85	w.	.....	.....	4	.....	3	.....	.....	0.012	0.3	.....	
Sub-Series.																			
Upsala	29.63	752.6	29.72	754.8	27.3	— 2.6	65	ssw.	11.9	5.3	.....	.....	3	.....	.....	0.276	7.0	.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.98	736.1	30.44	773.2	43.2	6.2	68	n.	.....	.....	1	.....	.....	.....	.....	0	0	covered	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.13	765.2	52.7	11.5	63	wnw.	10	4.5	.....	.....	9	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	30.24	768.2	55.8	13.2	.....	nw.	.....	.....	1	.....	5	.....	.....	0	0	cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.24	768.0	64.0	17.8	59	sw.	.....	.....	1	10 cs	0	sw.	.....	0	0	.....	Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.74	780.8	30.83	783.1	12.3	—10.9	61	ne.	12	5.4		0	0			0	0	clear	
Alpena, Michigan	30.00	762.0	30.71	780.0	17	— 8.3	83	e.	20	8.9			10 s			0.04	1.0	cloudy	
Atlanta, Georgia	29.12	739.6	30.34	770.6	54.0	12.2	80	e.	13	5.8		8 k	0	nw.		0	0	cloudy	
Atlantic City, New Jersey	30.66	778.7	30.67	779.0	24.4	— 4.2	55	n.	19	8.5		0	0			0	0	clear	
Augusta, Georgia	30.17	766.3	30.37	771.4	62.3	16.8	84	e.	5	2.2			10s ; fg			0	0	cloudy	
Baltimore, Maryland	30.66	778.7	30.71	780.0	28	— 2.2	54	ne.	8	3.6		2 c	0	nw.		0	0	clear	
Barnegat, New Jersey	30.65	778.5	30.67	779.0	24.5	— 4.2	60	n.	30	13.4		0	2 k		ne.	0	0	clear	
Bismarck, Dakota	28.33	719.6	30.31	769.9	— 5	—20.6	65	e.	12	5.4			10 s		calm	0.13	3.3	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.22	691.4	30.18	766.6	2	—16.7	79	w.	4	1.8		0	4 s		calm	0.11	2.8	fair	
Boston, Massachusetts	30.52	775.2	30.68	779.3	10.0	—12.2	58	nw.	17	7.6		0	0			0	0	clear	
Brownsville, Texas	29.94	760.5	29.99	761.7	72	22.2	90	se.	10	4 5		0	0			0	0	clear	
Buffalo, New York	29.97	761.2	30.77	781.5	14.4	— 9.8	88	ne.	13	5.8		0	6 n		ne.	0.01	0.3	light snow	
Burlington, Vermont	30.57	776.5	30.88	784.3	— 3.0	—19.4	65	n.	15	6.7		0	0			0	0	clear	
Cairo, Illinois	29.85	758.2	30.27	768.8	50.5	10.3	95	ne.	6	2.7			10 s		ne.	inap.	inap.	cloudy	
Campo, California	27.39	695.7	30.03	762.7	28	— 2.2	88	sw.	3	1.3			10 s			0.81	20.6	cloudy	
Camp Thomas, Arizona	27.18	690.4	30.02	762.5	38	3.3	82	nw.			2		9 ks		w.	0	0	cloudy	
Cape Henry, Virginia	30.59	777.0	30.61	777.5	39	3.9	73	ne.	24	10.7			10 s		n.	inap.	inap.	cloudy	
Cape May, New Jersey	30.65	778.5	30.68	779.3	25	— 3.9	64	n.	21	9.4		0	0			0	0	clear	
Castroville, Texas	29.19	741.4	30.03	762.7	67	19.4	93	se.	8	3.6			10 s			0	0	cloudy	
Cedar Keys, Florida	30.24	768.1	30.26	768.6	64	17.8	93	n.	7	3.1			10 s			0	0	cloudy	
Champaign, Illinois	29.46	748.3	30.33	770.4	33.8	1.0	88	se.	10	4.5			10 s		se.	0	0	cloudy	
Charleston, S. Carolina	30.29	769.4	30.35	770.9	58	14.4	80	ne.	16	7.2		3 ck	6 s	nw.	nw.	0	0	cloudy	
Charlotte, N. Carolina	29.56	750.8	30.44	773.2	51.0	10.6	66	e.	13	5.8			10 s		e.	0	0	cloudy	
Chattanooga, Tennessee	29 46	748.3	30.32	770.1	53.0	11.7	86	ne.	2	0.9		7 ck	fg.	w.	calm	0	0	fair	
Cheyenne, Wyoming	23.61	599.7	29.86	758.4	11.5	—11.4	72	sw.	1	0.4			10 s			0	0	cloudy	
Chicago, Illinois	29.66	753.4	30.41	772.4	31.8	— 0.1	97	se.	12	5.4			10 k			0	0	cloudy	
Chincoteague, Virginia	30.60	777.2	30.62	777.7	32.5	0.3	84	n.	27	12.1		0	3 k		n.	0	0	clear	
Cincinnati, Ohio	29.77	756.1	30.46	773.7	38	3.3	82	ne.	6	2.7			10 s		e.	0	0	cloudy	
Cleveland, Ohio	29.82	757.4	30.61	777.5	22	— 5.6	87	e.	8	3.6		5 k	0			0	0	fair	
Coleman City, Texas	28.14	714.7	30.02	762.5	63	17.2	90	se.	12	5.4			10 ks		se.	0	0	cloudy	
Columbus, Ohio	29.61	752.1	30.51	774.9	30	— 1.1	77	e.	9	4.0			10 s		e.	0	0	cloudy	
Concho, Texas	27.97	710.4	29.99	761.7	65	18.3	93	sw.	30	13.4			10 s		se.	0	0	cloudy	
Davenport, Iowa	29.57	751.1	30.27	768.8	42	5.6	83	e.	14	6.3			10 n		calm	0.02	0.5	light rain	
Dayton, Washington T'y	28.52	724.4	30.33	770.4	— 1.5	—18.6	50	se.	3	1.3		0	0			0	0	clear	
Deadwood, Dakota	25.15	638.8	30.07	763.8	—10	—23.3	100	ne.	6	2.7			10 s			0.01	0.3	cloudy	
Decatur, Texas					62	16.7	87	s.	13	5.8			10 s			0	0	cloudy	
Delaware Breakwater, Del.	30.63	778.0	30.65	778.5	29	— 1.7	77	ne.	31	13.9		4 cs	0	w.		0	0	fair	
Denison, Texas	29.20	741.7	30.04	763.0	63.0	17.2	90	s.	16	7.2			10 s			0	0	cloudy	
Denver, Colorado	24.40	619.7	29.92	760.0	12.0	—11.1	50	n.	6	2.7		0	0			inap.	inap.	clear	
Des Moines, Iowa	29.18	741.2	30.15	765.8	36	2.2	79	se.	6	2.7			10 n		se.	0.04	1.0	light rain	
Detroit, Michigan	29.86	758.4	30.61	777.5	29.5	— 1.4	88	e.	15	6.7			10 s		e.	0	0	cloudy	
Dodge City, Kansas	27.24	691.9	29.98	761.5	26.5	— 3.1	86	se.	12	5.4			10 s			inap.	inap.	cloudy	
Dubuque, Iowa	29.50	749.3	30.26	768.6	31.2	— 0.4	74	e.	11	4.9			10 s		calm	0.02	0.5	cloudy	
Duluth, Minnesota	29.66	753.4	30.42	772.7	18	— 7.8	100	ne.	24	10.7			10 s		ne.	0.60	15.2	cloudy	
Eagle Pass, Texas	29.16	740.7	30.00	762 0	67.3	19.6	93	se.	6	2.7			10 s			0	0	cloudy	
Eagle Rock, Idaho	25.01	635.2	29.91	759.7	4	—15.6	79	sw.	20	8.9			10 s			0.91	23.1	cloudy	
Eastport, Maine	30.50	774.7	30.57	776.5	— 2	—18.9	78	nw.	23	10.3		0	0			0.96	24.4	clear	
El Paso, Texas	26.14	663.9	30.02	762.5	42	5.6	67	w.	4	1.8		0	0			0	0	clear	
Erie, Pennsylvania	29.89	759.2	30.66	778.7	22	— 5.6	88	ne.	4	1.8		2 c	0			0	0	clear	
Escanaba, Michigan	29.85	758.2	30.57	776.5	19	— 7.2	84	e.	13	5.8			10 s		se.	inap.	inap.	cloudy	
Fort Apache, Arizona	24.96	634.0	30.06	763.5	34	1.1	75	w.	5	2.2			10 s		calm	0.02	0.5	cloudy	
Fort Assinnaboine, Montana	27.39	695.7	30.43	772.9	—16	—26.7	44	nw.	2	0.9		0	9 s			0.01	0.3	cloudy	
Fort Bennett, Dakota	28.50	723.9	30.23	767.8	3	—16.1	100	n.	3	1.3			10 n			0.15	3.8	light snow	
Fort Benton, Montana	27.45	697.2	30.45	773.4	—15	—26.1	46	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	28.25	717.5	30.43	772.9	— 7	—21.7	100	ne.	11	4.9			10 n		calm	0.13	3.3	light snow	
Fort Custer, Montana	26.89	683.0	30.25	768.3	— 7	—21.7	61	nw.	9	4.0			10 n		calm	0.02	0.5	heavy snow	
Fort Davis, Texas	25.07	636.8	30.03	762.7	49	9.4	80	s.	4	1.8		0	5 ks		calm	0	0	fair	
Fort Elliott, Texas	27.13	689.1	30.03	762.7	33	0.6	62	se.	12	5.4			10 s		se.	0	0	cloudy	
Fort Gibson, Indian T'y	29.42	747.3	30.02	762.5	57.8	14.3	86	se.	6	2.7			10 s		sw.	0	0	cloudy	
Fort Grant, Arizona	25.22	640.6	30.08	764.0	38	3.3	92	sw.	6	2.7		3 cs	0			0	0	clear	
Fort Griffin, Texas	28.64	727.4	30.01	762.2	48	8.9	77	ne.	4	1.8			10 s		w.	0	0	cloudy	
Fort Keogh, Montana	27.61	701 3	30.29	769.4	— 5	—20.6	65	n.	8	3.6			10 s		n.	0.02	0.5	cloudy	
Fort Macon, North Carolina	30.46	773.7	30.47	773.0	46	7.8	83	n.	18	8.0			10 ks		ne.	0	0	cloudy	
Fort McKavett, Texas	27.69	703.3	30.07	763.8	63.6	17.6	90	se.	12	5.4			10 s			0	0	cloudy	
Fort Missoula, Montana	26.75	679.4	30.18	766.6	—13	—25.0	100	nw.	3	1.3		0	0			0	0	clear	
Fort St. Michaels, Alaska	28.89	733.8	28.92	734.6	21	— 6.1	86	sw.	14	6.3			10 s			0.09	2.3	cloudy	
Fort Shaw, Montana	26.50	673.1	30.35	770.9	—22	—30.0	100	w.	2	0.9		0	0			inap.	inap.	clear	
Fort Sill, Indian Territory	28.71	729.2	30.02	762.5	42.5	5.8	75	n.	8	3.6			10 s			0	0	cloudy	
Fort Stevenson, Dakota	28.35	720.1	30.37	771.4	— 8	—22.2	100	ne.	12	5.4			10 n		calm	0.18	4.6	light snow	
Fort Verde, Arizona					32	0.0	81	s.			1	0	6 s		s.	0.35	8.9	fair	
Fort Washakie, Wyoming	24.10	612.1			— 2.0	—18.9	87	se.	1	0.4			9 s			0.07	1.8	cloudy	
Fredericksburg, Texas	28.23	717.0	30.03	762.7	64	17.8	90	sw.	14	6.3			10 ks		sw.	0	0	cloudy	
Galveston, Texas	30.05	763.3	30.09	764.3	68	20.0	100	s.	16	7.2		0	7 ks		s.	0	0	fair	
Grand Haven, Michigan	29.77	756.1	30.48	774.2	21.5	— 5.8	86	e.	20	8.9			10 s		w.	0	0	cloudy	
Hatteras, North Carolina	30.46	773.7	30.48	774.2	47	8.3	77	ne.	28	12.5		6 k	hz.	ne.		0	0	fair	
Helena, Montana	25.77	654.5	30.17	766.3	—12	—24.4	54	ne.	7	3.1			10 n		ne.	0.09	2.3	light snow	
Henrietta, Texas	28.97	735.8	30.02	762.5	47	8.3	93	calm	0	0			10 s			0	0	cloudy	
Huron, Dakota	28.65	727.7	30.17	766.3	17	— 8.3	67	ne.	6	2.7			10 n			0.07	1.8	light snow	
Indianapolis, Indiana	29.55	750.6	30.40	772.1	33	0.6	85	se.	9	4.0			10 s		se.	0	0	cloudy	
Indianola, Texas	30.00	762.0	30.03	762.7	70.4	21.3	94	s.	19	8.5			10 s		s.	0	0	cloudy	
Jacksboro, Texas	28.78	731.0	30.02	762.5	61	16.1	93	se.	10	4.5			10 s			0	0	cloudy	
Jacksonville, Florida	30.23	767.8	30.28	769.1	62	16.7	93	w.	1	0.4			fg.			0	0	dense fog	
Keokuk, Iowa	29.51	749.5	30.21	767.3	40.5	4.7	100	e.	12	5.4			fg.			0.04	1.0	dense fog	
Key West, Florida	30.20	767.1	30.23	767.8	72.5	22.5	73	ne.	9	4.0		0	2 k		ne.	0	0	clear	
Kittyhawk, North Carolina	30.53	775.4	30.55	776.0	43	6.1	80	ne.	31	13.9		0	9 ks		e.	0	0	cloudy	
Knoxville, Tennessee	29.25	742.9	30.33	770.4	49.3	9.6	85	ne.	3	1.3		0	8 k		sw.	0	0	cloudy	
La Crosse, Wisconsin	29.44	747.8	30.28	769.1	31	— 0.6	85	se.	8	3.6			10 n			inap.	inap.	light snow	
La Mesilla, New Mexico	25.97	659.6	29.98	761.5	39.5	4.2	55	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.10	739.1	30.05	763.3	44	6.7	93	calm	0	0			fg.			0.16	4.1	dense fog	
Lewiston, Idaho	29.51	749.5	30.38	771.6	7.8	—13.4	63	sw.	5	2.2		0	0			0	0	clear	
Little Rock, Arkansas	29.80	756.9	30.13	765.3	56	13.3	100	se.	3	1.3			10 n			0.02	0.5	light rain	
Los Angeles, California	29.75	755.6	30.15	765.8	32.1	0.1	78	nw.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	29.76	755.9	30.35	770.9	41.0	5.0	82	e.	12	5.4			10 s		calm	0	0	cloudy	
Lynchburg, Virginia	29.89	759.2	30.61	777.5	37.0	2.8	61	ne.	7	3.1			10 s		ne.	0	0	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	29.27	743.4	30.36	771.1	29	— 1.7	88	e.	16	7.2			10 s		e.	0.01	0.3	cloudy	
Marquette, Michigan	29.80	756.9	30.58	776.7	12	—11.1	80	se.	16	7.2			10 s		se.	0.22	5.6	threatening	
Mason, Texas	28.31	719.1	30.04	763.0	65.2	18.4	84	s.	10	4.5			10 s		s.	0	0	cloudy	
Memphis, Tennessee	29.83	757.7	30.18	766.6	55	12.8	93	e.	1	0.4			10 ks		se.	0	0	threatening	
Milwaukee, Wisconsin	29.63	752.6	30.43	772.9	30	— 1.1	88	se.	24	10.7			10 n		se.	0.02	0.5	light sleet	

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.20	767.1	30.24	768.1	61	16.1	93	calm	0	0			fg			0	0	dense fog	
Montgomery, Alabama	29.99	761.7	30.23	767.8	64.4	18.0	92	se.	3	1.3		3 k	fg	sw.		0	0	clear	
Moorhead, Minnesota	29.21	741.9	30.31	769.9	8	—13.3	76	ne	5	2.2			10 s			0.19	4.8	cloudy	
Morgantown, W. Virginia	29.50	749.3	30.57	776.5	32.5	0.3	87	ne.	3	1.3		6 cs	0			0	0	fair	
Mt. Washington, N. H	23.68	601.5	30.30	769.6	—17.5	—27.5	55	nw.	63	28.2		0	0			0.15	3.8	clear	
Nashville, Tennessee	29.70	754.4	30.26	768.6	51.8	11.0	83	ne.	3	1.3		3 ck	5 ks	nw.	w.	0	0	fair	
New Haven, Connecticut	30.60	777.2	30.72	780.3	14	—10.0	72	n.	16	7.2		0	0			0	0	clear	
New London, Connecticut	30.68	779.3	30.74	780.8	17	— 8.3	67	n.	13	5.8		0	0			0	0	clear	
New Orleans, Louisiana	30.13	765.3	30.19	766.8	66.0	18.9	97	se.	4	1.8			fg			0	0	dense fog.	
Newport, Rhode Island	30.63	778.0	30.68	779.3	15.0	— 9.4	56	n.	18	8.0		0	0			0	0	clear	
New River, N. Carolina					45	7.2	68	ne.			4	4 k	5 s	e.		0	0	cloudy	
New Shoreham, Rhode I'd	30.63	778.0	30.66	778.7	17.2	— 8.2	67	n.	30	13.4		0	0			0	0	clear	
New York, New York	30.53	775.4	30.72	780.3	20	— 6.7	84	n.	15	6.7		0	0			0	0	clear	
Norfolk, Virginia	30.57	776.5	30.60	777.2	36	2.2	69	ne.	14	6.3			10 ks		ne.	0	0	cloudy	
North Platte, Nebraska	26.93	684.0	30.03	762.7	10.6	—11.9	82	calm	0	0			10 n			0.02	0.5	light snow	
Olympia, Washington T'y	30.29	769.4	30.33	770.4	16.5	— 8.6	74	s.	2	0.9		0	0			0	0	clear	
Omaha, Nebraska	28.82	732.0	30.09	764.3	35.4	1.9	90	se.	8	3.6			10n;fg			0.03	0.8	sleeting	
Ooglaamie, Pt. Barrow, Alas.	29.30	744.2	29.32	744.7	—15.4	—26.3	82	ne.	18	8.0			10 s			0	0	cloudy	
Oswego, New York	30.48	774.2	30.83	783.1	8.1	—13.3	66	e.	10	4.5		2 k	0	ne.		0	0	clear	
Palestine, Texas	29.54	750.3	30.12	765.0	65	18.3	84	s.	12	5.4		0	6 ks			0	0	fair	
Pensacola, Florida	30.22	767.6	30.25	768.3	64.0	17.8	100	s.	4	1.8			fg			0	0	dense fog	
Philadelphia, Pa	30.61	777.5	30.72	780.3	29	— 1.7	45	n.	9	4.0		0	0			0	0	clear	
Pike's Peak, Colorado	17.11	434.6	29.83	757.7	2.5	—16.4	74	sw.	24	10.7			10 n		sw.	0.03	0.8	light snow	
Pioche, Nevada	23.80	604.5	29.96	761.0	9	—12.8	63	sw.	5	2.2		0	0			0.10	2.5	clear	
Pittsburg, Pennsylvania	29.74	755.4	30.60	777.2	27.7	— 2.4	77	ne.	8	3.6		2 c	0	nw.		0	0	clear	
Port Eads, Louisiana	30.21	767.3	30.22	767.6	63.0	17.2	97	se.	6	2.7		0	hz			0.01	0.3	clear	
Port Huron, Michigan	29.91	759.7	30.64	778.2	19.0	— 7.2	82	e.	10	4.5			10 s		calm	0.03	0.8	cloudy	
Portland, Maine	30.65	778.5	30.70	779.8	8.0	—13.3	34	n.	13	5.8		0	0			0	0	clear	
Portland, Oregon	30.24	768.1	30.31	769.9	21.0	— 6.1	70	calm	0	0		0	0			0	0	clear	
Portsmouth, N. Carolina					44	6.7	68	ne.	30	13.4		4 k	6 ks	n.	ne.	0	0	cloudy	
Prescott, Arizona	24.57	624.1	29.93	760.2	7	—13.9	62	se.	6	2.7			10 s		se.	0.43	10.9	cloudy	
Provincetown, Mass	30.60	777.2	30.63	778.0	18	— 7.8	84	n.	20	8.9		2 k	0	n.		0	0	clear	
Punta Rassa, Florida	30.21	767.3	30.22	767.6	64	17.8	92	ne.	4	1.8		0	hz			0	0	clear	
Red Bluff, California	29.70	754.4	30.08	764.0	31.0	— 0.6	84	n.	6	2.7		0	1 s			0	0	clear	
Rio Grande City, Texas	29.72	754.9	29.97	761.2	70	21.1	84	se.	12	5.4		0	0			0	0	clear	
Rochester, New York	30.10	764.5	30.81	782.6	12	—11.1	80	e.	9	4.0		0	8 ks		e.	0	0	cloudy	
Roseburg, Oregon	29.66	753.1	30.23	767.6	23	— 5.0	73	ne.	1	0.4		0	0			0	0	clear	
Sacramento, California	29.98	761.5	30.06	763.5	36.3	2.4	89	se.	6	2.7		0	5 s			inap.	inap.	fair	
St. Louis, Missouri	29.63	752.6	30.27	768.8	46.0	7.8	93	e.	8	3.6			10 s			0.01	0.3	cloudy	
St. Paul, Minnesota	29.34	745.2	30.28	769.1	20.3	— 6.5	79	se.	11	4.9			10 n		se.	0.34	8.6	light snow	
St. Vincent, Minnesota	29.50	749.3	30.47	773.9	—4	—20.0	100	ne.	6	2.7			10 s		calm	0.10	2.5	cloudy	
Salt Lake City, Utah	25.37	644.4	29.93	760.2	22	— 5.6	61	calm	0	0			10 s			0.07	1.8	threatening.	
San Antonio, Texas	29.29	744.0	30.01	762.2	66.5	19.2	100	se.	4	1.8		0	9 k		s.	0	0	cloudy	
San Diego, California	30.01	762.2	30.08	764.0	41.2	5.1	82	ne.	6	2.7		0	4 s			0.22	5.6	fair	
Sandusky, Ohio	29.85	758.2	30.57	776.5	27	— 2.8	77	ne.	20	8.9			10 s		w.	0	0	cloudy	
Sandy Hook, New Jersey	30.68	779.3	30.72	780.3	21.0	— 6.1	70	n.	28	12.5		0	0			0	0	clear	
San Francisco, California	29.97	761.2	30.04	763.0	46	4.4	65	w.	8	3.6		0	0			0	0	clear	
Santa Fé, New Mexico	23.00	584.2	30.04	763.0	28	— 2.2	51	s.	8	3.6		0	0			0	0	clear	
Savannah, Georgia	30.22	767.6	30.31	769.9	61	16.1	81	e.	12	5.4		8 ck	0	w.		0	0	cloudy	
Shreveport, Louisiana	29.86	758.4	30.11	764.8	63	17.2	93	s.	4	1.8		0	6 s		s.	0	0	fair	
Silver City, New Mexico	24.11	612.4	29.96	761.0	34	1.1	65	nw.	1	0.4		0	0			0	0	clear	
Sitka, Alaska	30.01	762.2	30.08	764.0	32.5	0.3	81	se.	20	8.9			10 s		calm	0	0	cloudy	
Smithville, North Carolina	30.40	772.1	30.44	773.2	50	10.0	93	ne.	18	8.0		0	0			0	0	clear	
Spokane Falls, Wash. Ter.	28.20	716.3	30.33	770.4	—12	—24.4	70	w.	3	1.3		0	0			0	0	clear	
Springfield, Illinois	29.56	750.8	30.28	769.1	42.5	5.8	70	se.	17	7.6			10 s		se.	0	0	cloudy	
Springfield, Massachusetts	30.62	777.7	30.76	781.3	12.4	—19.9	42	n.	12	5.4		0	0			0	0	clear	
Springfield, Mo	28.64	727.4	30.21	767.3	55	12.8	83	s.	14	6.3			10 s		s.	0	0	cloudy	
Stockton, Texas	26.85	682.0	29.98	761.5	57.3	14.1	86	calm	0	0			10 s		s.	0	0	cloudy	
Thatcher's Island, Mass	30.63	778.0	30.69	779.5	15.4	— 9.2	76	n.	33	14.8		0	0			0	0	clear	
Toledo, Ohio	29.79	756.7	30.53	775.4	28	— 2.2	77	e.	20	8.9			10 k		e.	0	0	cloudy	
Tucson, Arizona	27.57	700.3	30.05	763.3	37	2.8	92	w.	10	4.5			10 n			inap.	inap.	light rain	
Umatilla, Oregon	30.10	764.5	30.48	774.2	5.5	—14.7	74	se.	8	3.6		0	0			0	0	clear	
Uvalde, Texas	29.00	736.6	30.00	762.0	68	20.0	99	se.	8	3.6			10 s		se.	inap.	inap.	cloudy	
Vicksburg, Mississippi	29.91	759.7	30.18	766.6	63	17.2	93	se.	6	2.7		6 cs	fg	calm	calm	0.02	0.5	fair	
Visalia, California	29.68	753.9	30.06	763.5	35	1.7	93	se.	4	1.8			10 s		s.	0.18	4.6	cloudy	
Washington, D. C	30.58	776.7	30.70	779.8	27	— 2.8	64	ne.	7	3.1		5 c	hz			0	0	fair	
West Los Animas, Colorado	25.67	752.0	29.80	756.9	17	— 8.3	83	nw.	4	1.8		0	0			0	0	clear	
Wickenburg, Arizona																			
Williamsport, Pa	30.09	764.3	30.72	780.3	21	— 6.1	58	n.	2	0.9		0	0			0	0	clear	
Wilmington, N. Carolina	30.40	772.1	30.46	773.7	47	8.3	58	ne.	9	4.0		0	0			0	0	clear	
Winnemucca, Nevada	25.45	646.4	29.97	761.2	1	—17.2	75	se.	14	6.3		0	0			0	0	clear	
Wood's Holl, Mass																			
Yankton, Dakota	28.68	728.5	30.10	764.5	25	— 3.9	73	calm	0	0			10 s			0.01	0.3	cloudy	
Yuma, Arizona	29.90	759.4	30.05	763.3	43.0	6.1	60	nw.	5	2.2		0	0			inap.	inap.	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559.3			53.5	11.9	88	n.	2	0.9			10 n; s			0.22	5.6	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.01	762.2	30.02	762.5	77	25.0	81	e.				2 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C	30.01	762.2	30.03	762.7	77	25.0	95	sw.	4	1.8			10 n		sw.	1.40	35.6	raining	J. I. Plume.
Guadeloupe, W. I	29.92	760.0	29.94	760.5	71	21.7	90	e.				4 k	0			1.063	27.0	hazy	B. Bigar.
Havana, Cuba, W. I	30.19	766.8	30.24	768.1	71	21.7	82	e.	1.2	0.5		0	2 ks		e.	0	0	fair	A. Van Caneghem.
Kingston, Jamaica, W. I	30.07	763.8	30.08	764.0	64.8	18.2	88	n.	1	0.4		0	0			0	0	fine	Robert Johnstone.
Navassa, W. I																			F. M. Everett.
Paramaribo, S. A	30.02	762.5	30.02	762.5	76	24.4	91	e.			2		8 ks	e.		0.110	2.8	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.48	748.8	29.94	760.5	81	27.2	80	calm			0	3 ck	2 s	calm	calm	0	0	fair	Miss Flora A. Nichols.
Rivas, Nicaragua							98	ne.			2	0	1 ks		ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I	30.12	765.0	30.15	765.8	73	22.8	71	n.	4.8	2.1		0	3 s		ne.	0	0	fair	Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	30.69	779.5	30.75	781.0	—38.0	—38.9		n.	10	4.5		0	0			0	0	clear	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, N. 36° 33′, W. 8° 10′	30.46	773.7	59	15.0	81	ne.			2		0					2	wnw.	blue sky	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S. Alert, Colombo, Ceylon, India	29.90	759.4	84	28.9	77	nw.			2		5							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.16	766.1	58.8	14.9	82	ene.			4–6		8							squally	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 12° 50′, E. 51° 24′	30.07	763.8	76	24.4	60	ne.			5		7	ne.				2	ne.	misty	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.98	761.5	75	23.9	64	ese.			4–6		3	e.						squally	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S. 39° 18′, E. 32° 11′	30.07	763.8	66	18.9	68	nne.			3		7	n.				2	sw.	d. clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′, W. 61° 31′	29.96	761.0	76	24.4		ese.			1		3	ene.						misty	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.02	762.5	61	16.1	66	wnw.			3–4		5	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	29.96	761.0	73	22.8	81	ne.			1		5					1	ne.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 12° 18′, E. 43° 43′	29.82	757.4	83	28.3		nnw.			1–2		7	wnw.				1	nnw.	showery	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt. C. A. G. Bridge.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	29.93	760.2	49	9.4	85	calm			0		6							misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 12° 55′, W. 78° 15′	29.95	760.7	74	23.3	81	se.			3–4		5					2	sse.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.43	747.5	52	11.1	86	wnw.			3		6							d. clouds	Capt. L. F. Jones.
H. M. S. Inconstant, N. 8° 00′, E. 108° 00′	29.84	757.9	80	26.7	82	calm			0		0							blue sky	
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′, E. 113° 24′	30.00	762.0	53	11.7	100	ene.			1		10	ne.						overcast	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey, Coquimbo, Chili	30.07	763.8	62	16.7		calm			0		6								Capt. J. T. R. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.87	758.7	59	15.0	100	s.			2		8	nw.						drizzling	Capt. J. E. Erskine.
H. M. S. Northampton, Port Royal, Jamaica, W. I.	30.04	763.0	76	24.4	81	ne.			5		2					1	ne.	d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 22° 11′, E. 36° 53′	29.83	757.7	82.5	28.1	92	se.			2		5	ese.				4	se.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 43° 15′, W. 23° 19′	30.50	774.7	59	15.0	94	ese.			2		8					2	ese.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix, N. 17° 16′, W. 78° 30′	30.10	764.5	79	26.1	78	ene.			3–4		2					3	ene.	d clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, Acera, Lower Guinea	29.85	758.2	81	27.2	95	ssw.			2		5	ssw.						hazy	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.30	769.6	55	12.8		w.			2		0							blue sky	Capt. W. H Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id.	30.31	769.9	20	— 6.7	85	calm			0		2							d. clouds	Lieut. V. B. Oriebar.
H. M. S. Sea Gull																			Capt. M. Byles.
H. M. S. Thalia, N. 37° 58′, W. 14° 47′	30.42	772.7	60	15.6		ese.			4		2	sw.				1	nne.	d. clouds	
H. M. S. Triumph, S. 12° 52′, W. 78° 04′	29.97	761.2	74	23.3	85	ese.			3		2	se.				2	ese.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 21° 21′, E. 114° 05′	29.88	758.9	69	20.6	95	ne.			5–6		10					5	ne.	overcast	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica W. I.	30.07	763.8	73	22.8		calm			0		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Muscat, Arabia	30.12	765.0	61.5	16.4	77	n.			4–5		8	se.						rainy	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon																			
Quanza, Santiago, Cape Verd Ids	30.00	762.0	76.8	24.9	70	ne.			2		0					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 9° 22′, W. 79° 54′	29.95	760.7	76.8	24.9	92	n.			2		8							misty	Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.25	768.3	64	17.8	94	ne.	2	0.9			5			0	0			misty	
N. Yard, Portsmouth, N. H.	30.70	779.8	8	—13.3		ne	5	2.2			0			0	0			clear	
Naval Hospital, Yokohama, Japan	29.66	753.4	48.5	9.2	85	calm			0		10		n	sli't	sli't			light rain	
Adams, Callao, Peru	29.74	755.4	68	20.0	95	sse.			1-2		10			0	0	gr'd		cloudy	
Alaska, Valparaiso, Chili	29.97	761.2	60	15.6	88	calm			0		0			0	0	sm'h		clear	
Alert, Batavia, Java*	29.69	754.1	83	28.3	79	calm			0		5		calm			sm'h		fair	
Alliance, Norfolk, Va	30.48	774.2	38	3.3	72	ne.			2		8			0	0			cloudy	
Ashuelot, Tientsin, China	30.08	764.0	36	2.2	80	calm			0		5		calm					fair	
Brooklyn, Elizabeth Island, Patagonia	29.21	741.9	56	13.3	94	w.	16	7.2			2		w.	0.60	15.2	long	w.	fair	
Colorado, New York, N. Y	30.67	779.0	19	— 7.2	85	n.	10	4.5			0			0	0			clear	
Enterprise, Norfolk, Va*	30.56	776.2	40	4.4	100	nne.			4		8		ene.					cloudy	
Essex, N. 28° 08′, W. 16° 25′	30.33	770.4	67	19.4	64	e.			3		2		e.			sm'h	e.	clear	
Franklin, Norfolk, Va	30.50	774.7	36	2.2	80	nne.	13	5.8			10		ne.	0	0			cloudy	
Galena, Villafranca, France	30.27	768.8	58	14.4	76	s.			1		2					sm'h		clear	
Independence, N. Yard, Mare I'd, Ca'	29.92	760.0	36	2.2	90	calm	0	0			2			0	0			fair	
Kearsarge, New Orleans, La	30.18	766.6	67	19.4	95	se.			1		10							foggy	
Lackawanna, Valparaiso, Chili*	29.91	759.7	62	16.7	100	calm			0		10							misty	
Lancaster, Alexandria, Egypt	30.25	768.3	65	18.3	53	ne.			1		2		ne.			sm'h		fair	
Marion, S. 34° 31′, E. 24° 28′	29.88	758.9	75	23.9	77	e.			3		8		se.	0	0	sm'h		fair	
Michigan, Erie, Pa	30.62	777.7	22	— 5.6	100	e.			2		0							clear	
Minnesota, Newport, R. I	30.67	779.0	17	— 8.3		n.	16	7.2			0							clear	
Monocacy, Yokohama, Japan	29.87	758.7	50	10.0	93	nnw.			1		10		calm					cloudy	
Nipsic, N. 36° 25′, W. 6° 21′	30.41	772.4	60	15.6	65	ene.			3		0					sm'h		clear	
Onward, Callao, Peru†	30.07	763.8	66	18.9	100	sse.			2		10		nnw.			long	w.	foggy	
Palos, Hong Kong, China	29.98	761.5	59	15.0	100	calm			0		10		wnw.					overcast	
Passaic, Washington, D. C.	30.69	779.5	27	— 2.8		n.			3		2		n.					clear	
Pensacola, S. 36° 37′, W. 73° 05′	30.01	762.2	62	16.7	88	ssw.	1	0.4			0			0	0	sm'h		clear	
Powhatan, San Juan, Porto Rico, W.I	30.07	763.8	70	21.1	80	sw.			1		5		n.					fair	
Quinnebaug, Alexandria, Egypt	30.25	768.3	66	18.9	68	ne.			2		2					sm'h		clear	
Ranger, N. 19° 26′, W. 105° 03′*	29.87	758.7	65	18.3	94	ne.			1		0			0	0	long	w.	clear	
Richmond, N. 24° 17′, E. 152° 21′*	30.05	763.3	74	23.3	86	ene.			2		2			0	0	sm'h	n.	fair	
Shenandoah, S. 26° 15′, W. 32° 30′*	29.98	761.5	76	24.4	86	ne.			4		10		ene.			mod.	ene.	rainy	
St. Louis, League Island, Pa	30.88	784.3	23	— 5.0	86	n.	10	4.5			0			0	0			clear	
Swatara, Yokohama, Japan*	29.67	753.6	53	11.7	80	calm			0		10					sm'h		hazy	
Tennessee, Fort Monroe, Va	30.59	777.0	38	3.3	90	ne.	30	13.4			8			0	0	sm'h		threatening.	
Vandalia, Aspinwall, Panama*†	30.05	763.3	79	26.1	82	nne.			2		5		nne.			gr'd	e.	fair	
Wabash, Boston, Mass.	30.69	779.5	9	—12.8		nnw.	11	4.9			0			0	0			clear	
Wachusetts, Departure Bay, B. C.	30.19	766.8	21	— 6.1		sw.			1		2		s.					fair	
Wyoming, Port Royal, S. C	30.34	770.6	59	15.0	88	ene.	16	7.2			8		nw.	c	0			cloudy	
Yantic, N. 13° 22′, W. 80° 55′*	29.95	760.7	75	23.9	95	ne.			5		5		ne.			mod.	ne.	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.				Character.	Direction.		
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapon, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, Halifax, N. S*	30.07	763.8	3	—16.1		nw.	6		2		nw.	3 h'r	3 h'r			clear	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen. N. 53° 10′, W. 10° 00′*	30.31	769.9	48	8.9		wnw.	5		8		nw.			h'vy	nw.	fair	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 45° 32′, W. 43° 45′*	29.83	757.7	42	5.6		nne.	4		10		n.	o	o	long	se.	hazy	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 50° 23, W. 18° 25′*†	30.33	770.4	50	10.0		n.	5		10		n.	o	o	long	nw.	overcast	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 44° 53′, W. 45° 11′	29.81	757.2	47	8.3	92	ese.	5		8		e.			mod.	n.	fair	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, Eng†	29.98	761.5	51	10.6	64	w.	3		5†		w.	o	o			clear.†	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, N. 48° 34′ W. 30° 23′*†	30.40	772.1	56	13.3	87	sse.	5		10		ese.			chop	se.	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,																	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 44° 20′, W. 52° 10′*†	29.64	752.8	41	5.0		wsw.	3		10		nw.			cross		raining	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Gonaives, Hayti, W. I*	30.18	766.6	76	24.4		ne.	1		0			o	o			fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Savanilla, U. S. C.*†	29.79	756.7	72	22.2			4										W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Maracaibo, Venezula, S. A.						ne.	2							mod.	ne.	fine	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 19° —′, W. 75° —	29.85	758.2				ne.	6		1		ne.	o	o	mod.	ne.	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Boston, Mass†	30.71	780.0				n.			0			o	o			clear	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 45° 50′, W. 38° 28′	29.95	760.7	54	12.2		wsw.	4		8							overcast	
Baroda, Capt. C. J. Russell, S. 16° 40′, W. 29° 15′	29.95	760.7	77.5	25.3	82	ene.	5		7							d. clouds	
Caldew, Capt. W. Peterson, S. 40° 04′, W. 38° 22′	30.16	766.1	60	15.6		s.	3		7							d. clouds	
S. S. Cipero, Capt. W. N. Lalley, N. 13° 22′ W. 54° 14′	29.98	761.5	76.5	24.7	77	ne.	1		5						ne.	d. clouds	
S. City of Agra, Capt. Thos. Young,																	
Coppename. Capt. James Buchan, N. 8° 42′, W. 58° 12′	29.96	761.0	76.5	24.7	81	nne.	3		9							showery	
Bk. Glaramara, Capt. R. Morton,																	
Glencairn, Capt. R. S. Tannock, N. 2° 21′, E. 91° 20′	29.88	758.9	80	26.7	95	nne.	4		10							showery	
S. S. Gordon Castle, Capt. W. Waring, N. 36° 45′, W. 0° 56′	30.43	772.9	60.2	15.7	70	nne.	3-4		5							d. clouds	
Bg. Hermine, Capt. S. G. Jones, S. 42° 57′, W. 41° 53′	30.02	762.5	58.3	14.6	81	wnw.	5		8							d. clouds	
Hope, Capt. James Campbell, N. 24° 32′, W. 26° 30′	30.17	766.3	72.4	22.4	71	sse.	4		5							misty	
S. S. Humboldt, Capt. A. W. Jeffery, N. 11° 56′, W. 51° 52′	29.98	761.5	78	25.6	73	nne.	2		3							d. clouds	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 16° 58′, W. 30° 47′	30.05	763.3	76	24.4	81	ese.	5		10							overcast	
May Hulse, Capt. H. Youlden, S. 54° 26′, W. 80° 43′	29.25	742.9	46.6	8.1	62	wsw.	6		6							squally	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	29.97	761.2	72.3	22.4	95	e.	3		3							d. clouds	
Naiad, Capt. John Smith, N. 34° 00′, W. 40° 20′	30.00	762.0	61.4	16.3	88	w.	3		9							overcast	
Pole Star, Capt. F. Norman.																	
Queen of Cambria, Capt. M. Parry. S. 8° 06′, E. 79° 18′	29.83	757.7	82.1	27.8	78	ssw.	4		6							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson,																	
S. Superb, Capt. Berridge																	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, N. 40° 12′, W. 71° 00′*†	30.45	773.4				nnw.	6		8		nw.	o	o	high	nw.		Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman,																	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, Port Eads, La*†	30.25	768.3	64	17.8		calm	0		fog					sm'h		foggy	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,																	E. F. Stembridge, 3d offi
S. S. Gallia, Capt. W. H. P. Hains.																	J. H. Mills, 3d officer.

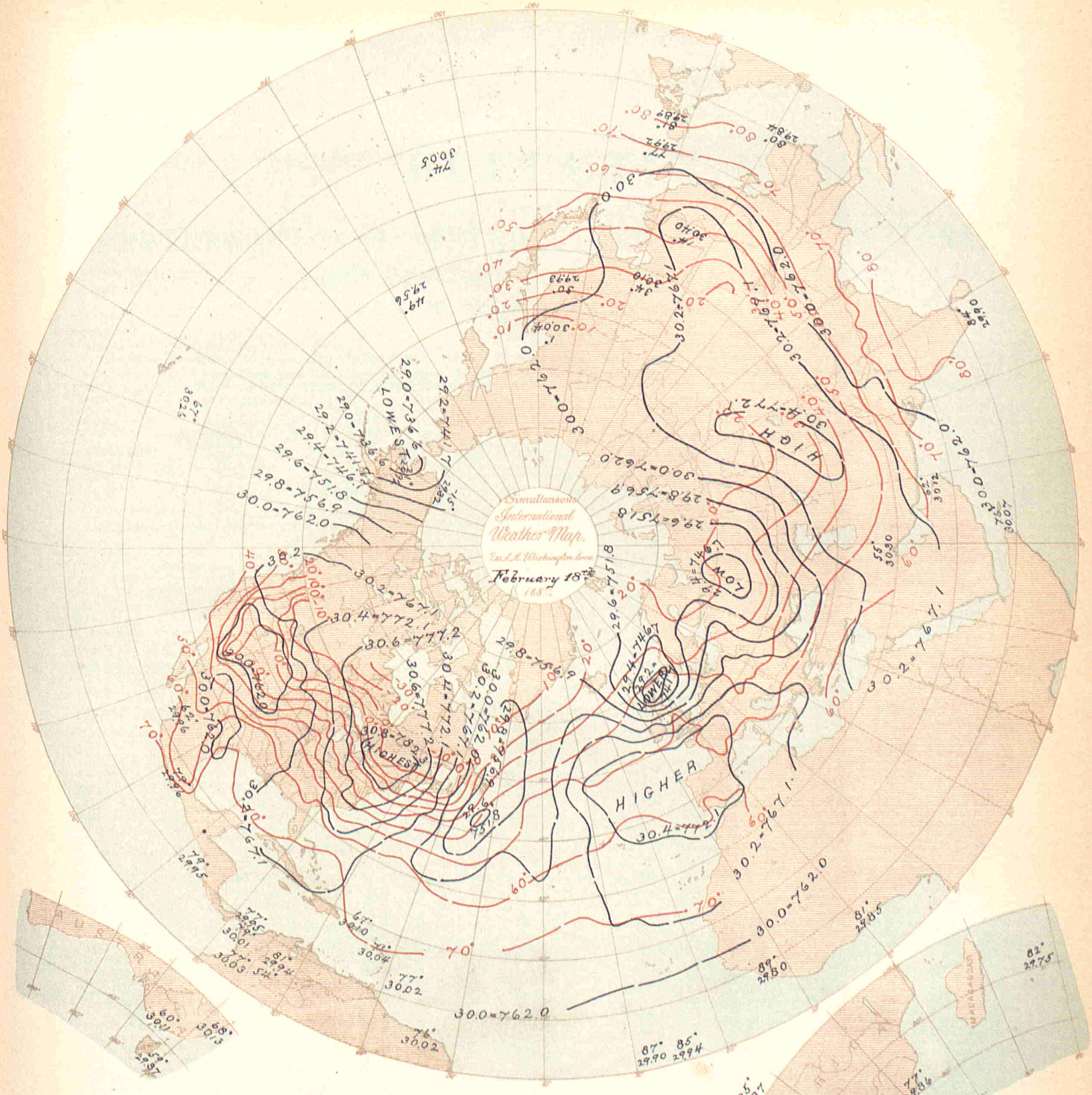
Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Behtan, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt. Périer d'Hauterive, N. 42° 47′, W. 59° 20′*†	29.88	759.0	32.0	0.0		nw.	6		k		nnw.	snow	snow	very h'vy	nnw.	covered	
S. S. St. Laurent, Capt. A. Sérvan,																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein,																	
S. S. Silesia, Capt. A. Albers, N. 49° 41′, W. 0° 38′*†	30.63	778.0	48.9	9.4		w.	4–5		10		w.	0	0	2	wnw.	cloudy	
S. S. Wieland, Capt. C. Hebich, N. 50° 25′, W. 13° 00′*	30.36	771.1	51	10.6		nnw.	5		10		nnw.			3	w.	rainy	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch																	John Inch.
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Rio de Janeiro, Brazil*†	30.00	762.0	80	26.7		wsw.	2		10		sw.	7 h'r	7 h'r			thud'r storm	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *O. H. Mallory & Co., Agents, Nem York.*																	
S. S. Colorado, Capt. M. B. Crowell, New York, N. Y*†	30.80	782.3	18	—7.8		n.	4		0			0	0			clear	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 49° 44′, W. 8° 28′*†	30.44	773.2	53	11.7	86	wsw.	5		10		wsw.	0	0		nw.	overcast	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker,																	F. C. Miller, 2d offi.
S. S. Santiago, Capt. S. F. Phillips, N. 29° 17′, W. 74° 15′†	30.28	769.1	70	21.1		nne.	4		1		nne.	0	0	mod.	ne.	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansoin N. 29° 43′, W. 74° 21′† [man	30.28	769.1	69	20.6		ne.	4								ne.	cloudy	
S. S. City of Alexandria, Capt. L. F. Timmer- N. 36° 02′, W. 75° 00′*†	30.67	779.0	43	6.1		n.	7								nnw.	misty	
S. S. City of Washington, Capt. J. W. Rey- N. 19° 18′, W. 95° 55′*† [nolds	30.20	767.1	78	25.6		var.	1							sm'h		showery	
S. S. Elbe, Capt. W. Willigerod																	
S. S. Lessing, Capt. B. Voss,																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke,																	
S. S. P. Caland, Capt. E Deddes, N. 41° 45′, W. 61° 17′	30.15	765.8	24.8	—4.0		n.	6							7	nnw.	squally	
S. S. Schiedam, Capt. E. M. Chevalier,																	
S. S. Scythia, Capt. M Murphy																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur																	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 41° 06′, W. 11° 06′*	30.47	773.9	70.2	21.2		nnw.	0–1		0			0	0	sm'h	ne.	clear	G. H. Lose, 3d offi.
S. S. Leipzig, Capt. F. Pfeiffer, N. 39° 22′ W, 64° 07′	30.15	765.8	36	2.2	85	nnw.	6		8		nnw.	0	0	r'gh	nnw.	fair	Sander & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	29.95	760.7	42.8	6.0		wsw.	5		10		w.	0	0			covered	
S. S. Mosel, Capt. F. Hesse,																	J. Hesse.
S. S. Neckar, Capt. R. Bussius. N. 49° 10′, W. 27° 07′	30.47	773.9	49.1	9.5		ene.	5		10		ene.	0	0	mod.	wsw.	cloudy	Steinbronn & Tanke-
S. S. Nurnberg, Capt. J. Jaeger,															ene.		
S. S. Oder, Capt. Undeutsch,																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, N. 34° 30′, W. 68° 07′	30.28	769.1				n.	6		3?		n.	2 h'r	2 h'r	cross	n.	cloudy?	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch N. 49° 51′, W. 7° 08′*	30.41	772.4	54.0	12.2	86	wsw.	5–6		8		w.	1 h'r	1 h'r	r'gh	w.	cloudy	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, Yokohama, Japan†	29.85	758.2	49	9.4	85	n.	2		8		nw.	0	0	sm'h		cloudy	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, San Francisce, Cal			47	8.3	85	nnw.	1		4		nw.					clear	
S. S. Oceanic, Capt. J. Metcalfe, N. 42° 22′, E. 164° 50′..*	29.56	750.8	49	9.4	93	sse	4		9		se.			5	se.	overcast	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	30.01	762.2				ne.	4		5?		ne.					clear?	K. S. Nickerson.
S. Seminole, Capt. H. K. Hallett, N. 33° 40′, W. 77° 40′†	30.42	772.7	58	14.4	76	nne.	4		8		ne.	0	0	r'gh	ne.	cloudy	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 40° 46′, W. 124° 26′†..	30.15	765.8	39	3.9	63	n.	5	.....	2	.....	n.	.....	.....	h'vy	nnw.	fair.....	E W. Holmes.
S. S. Willamette, Capt. L. Meyer, Seattle, Wash. Ter*†.....	30.38	771.6	26	—3.3	100	ese.	2	.....	3	.....	e.	0	0	.....	.....	blue sky.....	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann N. 43° 04′, W. 124° 42′†.....	30.22	767.6	35	1.7	61	ene.	5	.....	2	.....	ne.	0	0	mod.	nne.	fair.....	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, San Francisco, Cal†.....	29.99	761.7	41	5.0	91	calm	0	.....	.....	.....	.....	.....	.....	.....	.....	fine	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 32 47′, W. 117° 22′†	30.03	762.7	48	8.9	62	sw.	3	.....	5	.....	wsw.	.....	.....	mod.	wsw.	fair	.....
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†.....	30.40	772.1	29	—1.7	.....	n.	2	.....	0	.....	.....	0	0	sm'h	.....	clear	.....
S. S. Idaho, Capt. H. M. Hayward, San Francisco, Cal†.....	30.03	762.7	40	4.4	82	e.	3	.....	0	.....	.....	.....	.....	.....	.....	clear.....	.....
S. S. Orizaba, Capt. Chas. B. Johnson, ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, N. 34° 44′, W. 120° 48′†.....	30.16	766.1	42	5.6	91	n.	1	.....	8	.....	w.	0	0	mod.	w.	cloudy.....	.....
S. S. State of California, Capt. G. Debney, San Francisco, Cal†.....	30.00	762.0	41	5.0	65	n.	3	.....	5	.....	nw.	0	0	.....	.....	fair.....	.....
S. S. Victoria, Capt. W. E. Plummer, N. 38° 35′. W. 123° 25′†.....	29.99	761.8	42	5.6	58	ne.	4	.....	8	.....	.....	.....	.....	hv'y	w.	cloudy.....	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 33° 53′, W. 129° 15′.....	30.22	767.6	49	9.4	77	n.	5	.....	5	.....	n.	0	0	long	n.	cloudy.....	.....
S. S. City of New York, Capt. W. B. Cobb, N. 24° 10′, W. 153° 30′†	30.26	768.6	67	19.4	90	ne.	5	.....	10	.....	.....	hv'y	h'vy	h'vy	ne.	heavy rain..	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, Sydney, N. S. W†.....	30.13	765.3	68	20.0	70	se.	3	.....	5	.....	se.	0	0	sm'h	.....	fair.....	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, Hong Kong, China†.....	29.80	756.9	57	13.9	81	calm	0	.....	10	.....	.....	1 h'r	light	.....	.....	cloudy	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, Acapulco, Mexico†.....	29.96	761.0	79	26.1	82	sw.	2	.....	2	.....	s.	0	0	.....	.....	clear.....	.....
S. S. Grenada, Capt. M. Connolley, N. 12° 34′, W. 88° 10′†.....	29.95	760.7	79	26.1	90	e.	4	.....	2	.....	e.	0	0	mod.	e.	clear.....	.....
S. S. South Carolina, Capt. W. J. Russell, Panama, Panama†.....	30.01	762.2	79	26.1	86	nw.	2	.....	2	.....	nw.	0	0	sm'h	.....	fair.	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.....	29.90	759.4	73	22.8	81	se.	5	.....	10	.....	se.	.....	.....	.....	.....	rainy.....	.....
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, Off Sombrero, W. I.....	.....	.....	.....	.....	.....	ne.	3	.....	2	.....	.....	0	0	sm'h	.....	fair.....	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes Antwerp, Belgium*†.....	30.42	772.7	55	12.8	.....	wsw.	5	.....	7	.....	wsw.	7 h'r	light	.....	.....	cloudy.....	.....
S. S. Nederland, Capt J. Ueberweg, Antwerp, Belgium.....	.....	.....	49	9.4	.....	nnw.	4	.....	2	.....	nnw.	0	0	.....	.....	fair	Albrecht & Bull.
S. S. Rhyniand, Capt. W. G. Randle, N. 48° 56′ W. 28° 35′*.....	30.46	773.7	48	8.9	85	e.	5	.....	10	.....	e.	0.05	1.3	mod.	e.	cloudy..	C. H. Grant, 2d offi.
S. S. Switzerland, Capt. J. C. Jamison,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A Beynon, Off Sandy Hook, N. J*†.....	30.56	776.2	24	—4.4	48	n.	2	.....	2	.....	ne.	0	0	sm'h	.....	clear.....	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels. N. 46° 57′, W. 38° 02′*.....	29.74	755.4	54	12.2	.....	se.	6	.....	10	.....	s.	7 h'r	mod.	r'gh	sse.	heavy rain..	Olsen & Aasfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W A. Scholten, Capt. G. I. Vis, N. 40° 49′, W. 63° 49′*.....	30.23	767.8	55.4	13.0	93	n.	6	.....	3	.....	n.	0	0	high	n.	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 43° 08′, W. 58° 26′†.....	29.98	761.5	18.7	—7.4	.....	nnw.	6	.....	8	.....	nnw.	7 h'r	rain snow	h'vy	nw.	covered.....	J. T. Eiberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 51° 19′, W. 15° 16′*†.....	30.47	773.9	49	9.4	.....	nw.	6	.....	9	.....	nw.	0	0	h'vy	wnw.	cloudy.....	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 41° 58′, W. 62° 19′*†.....	29.89	759.2	28	—2.2	.....	n	6	.....	8	.....	w.	.....	.....	r'gh	nw.	snowing.....	W. Brownless, 4th off.
S. S. Coltic, Capt. Benjamin Gleadell N. 41° 04′, W. 62° 40′†*.....	29.95	760.7	28	—2.2	77	nw.	6	.....	8	.....	nw.	6 h'r	snow	high	sw.	cloudy.....	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving, ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 44° 27′, W. 44° 00′*.....	29.82	757.4	50	10.0	.....	n.	2	.....	8	.....	n; w.	8 h'r	8 h'r	mod.	cross	cloudy.....	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Pensacola, Florida†	30.33	770.4	63	17.2	100	e.	3	.....	fg.	.....	.....	0	0	.....	.....	dense fog	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 30° 34′, W. 55° 33′*†	30.04	763.0	68	20.0	.....	s.	3	.....	6	.....	s.	0	0	long	ne.	squally	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 19° 13′, W. 43° 40′.*†	30.06	763.5	77	25.0	.....	e.	2	.....	4	.....	e.	0	0	long	n	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 46° 57′, W. 10° 40′*†	30.68	779.3	53	11.7	79	wnw.	2	.....	10	.....	w.	0	0	long	wnw.	overcast	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. Ponce, Porto Rico, W. I.†*	30.08	764.0	80	26.7	.....	sw.	1	.....	2	.....	n.	0	0	.....	.....	clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, N. 1° 40′ W. 25° 35′*†	29.94	760.5	85	29.4	.....	ese.	2	.....	2	.....	e.	3 h'r	light	sm'h	nw.	fair	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 42° 57′, W. 46° 28′*†	29.77	756.1	.....	.....	.....	nw.	1	.....	8	.....	.....	0	0	sm'h	.....	.....	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill. S. 53° 35′, W. 64° 18′†	29.20	741.7	.....	.....	.....	nne.	2	.....	5	.....	w.	mist	mist	sm'h	.....	misty	A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	29.93	760.2	.....	.....	.....	wsw.	5	.....	10	.....	w.	0	0	.....	.....	cloudy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Andersen, Jr.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U. S. N., Washington, D. C†	30.67	779.0	30	—1.1	.....	nne.	3	.....	5	.....	calm	0	0	.....	.....	fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 21° 23′, W. 38° 17′	.....	.....	76	24.4	.....	calm	0	.....	0	.....	.....	0	0	sm'h	.....	fine	.....
Bk. Gamaliel, Capt. D. J. Anthony, N. 24° 08′, W. 67° 30′*†	30.02	762.5	.....	.....	.....	nw.	5	.....	0	.....	.....	0	0	long	se.	clear	.....
Bk. Geo. Booth, Capt. D. Williams, N. 2° 00′, W. 29° 00′*†	29.70	754.4	87	30.6	.....	var.	3	.....	.....	.....	.....	rain	rain	.....	.....	.....	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 32° 02′, W. 48° 52′*†	30.21	767.3	65	18.3	.....	nne.	3	.....	.....	.....	.....	0	0	mod.	ne.	overcast	.....
Schr. Henry Denison, Capt. Jno. Fehring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt, S. 39° 52′, E. 59° 02′*	29.96	761.0	.....	.....	.....	nnw.	4	.....	3	.....	n.	0	0	mod	nne.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte. N. 34° 47′ W. 73° 38′*†	30.55	776.0	.....	.....	.....	nne.	.....	.....	.....	.....	ne.	.....	.....	h'vy	e.	cloudy	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen, N. 39° 18′. E. 0° 40′*†	30.50	774.7	.....	.....	.....	var.	1	.....	.....	.....	.....	0	0	mod.	e.	fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 25° 20′ W. 29° 15′*†	30.40	772.1	70	21.1	84	s.	6	.....	2	.....	s.	.....	.....	mod.	s.	.....	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.15	765.8	61	16.1	88	se.	2	.....	10	.....	se.	.....	.....	.....	.....	rainy	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 28° 04′, W. 27° 20′*†	30.00	762.0	.....	.....	.....	ene.	.....	.....	2	.....	ene.	0	0	.....	.....	.....	J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	30.51	774.9	60	15.6	.....	ne.	3	.....	5	.....	ne.	0	0	.....	.....	clearing	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 25° 38′, W. 38° 40′*	29.65	753.1	75.2	24.0	94	ese.	6	.....	4	.....	e.	.....	.....	.....	.....	raining	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 24° 36′. W. 33° 47′*†	30.11	764.8	76	24.4	81	e.	3	.....	5	.....	s.	0	0	sm'h	.....	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Wm. Woodbury Capt. H. T. Schmidt, N. 48° 41′, W. 13° 26′*†	30.30	769.6	56	13.3	87	wsw.	4	.....	.....	.....	w.	.....	.....	sm'h	w.	covered	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, S. 12° 51′, W. 32° 10′*†	29.95	760.7	.....	.....	.....	ene.	.....	.....	.....	.....	e.	.....	.....	light	e.	.....	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 19, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.34	770.6	60.4	15.8	91	w.			2		0			0	0	clear	Moiroud.
Algiers			30.34	770.7	54.7	12.6	84	n.			1		10			0.287	7.3	covered	Nicolas.
La Calle			30.27	768.9	57.2	14.0	85	nw.			3		7			0.157	4.0	very cloudy	Fonfrède.
Tunis			30.19	766.7															Jacques.
Sfax																			Gau.
Saida			30.17	766.2	45.0	7.2	80	n.			1		4			0.020	0.5	cloudy	Dumas.
Tebessa			30.24	768.1	43.9	6.6	85	n.			3		10			inap.	inap.	covered	Derché.
Geriville					41.4	5.2	72	n.			2		8			0.228	5.8	very cloudy.	Louchamp.
Laghouat			30.34	770.7	46.4	8.0	67	n.			1		4			c	0	cloudy	Herbin.
Biskra			30.26	768.5	64.8	18.2	38	n.			1		9			inap.	inap.	covered	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.05	763.3	30.14	765.5	55.7	13.2	76	sse.	8	3.6			0			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.52	749.9	30.08	763.9	54.9	12.7	47	nw.			5		3			0.551	14.0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.14	740.1	29.93	760.1	38.8	3.8	87	w.	15.4	6.9			10			0.185	4.7		Dr. Wierzbiski.
Eperies	29.04	737.6	29.94	760.4	42.1	5.6	72	s.			3		10 s			0.110	2.8		Julius Mikolik.
Gratz	28.81	731.8	30.08	763.9	48.9	9.4	46	nw.			4		5			0	0		Andreas Rospini.
Hermannstadt	28.65	727.6	30.11	764.8	44.2	6.8	74	n.			2		6			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.77	730.8	30.16	766.1	37.9	3.3	88	w.			3		10			0.087	2.2	raining	The Staff.
Lemberg	28.85	732.9	29.87	758.7	38.3	3.5	78	sw.			2		10			0.114	2.9		Dr. T. Stanecki.
Polt	30.04	763.1	30.16	766.0	51.3	10.7	93	s.			2		10			0	0		I. R. Hydrographic Office
Szathmar	29.56	750.9	30.03	762.8	36.3	2.4	84	e.			2		10			0	0		Joseph Midlinszky, S. J.
Szegedin	29.69	754.1	29.97	761.2	55.0	12.8	80	w.			2		0			0.008	0.2		Karl Stancel.
Trieste	30.06	763.5	30.16	766.1	50.7	10.4	80	calm			0		10			0.028	0.7		Rieder.
Vienna	29.36	745.7	30.09	764.3	44.2	6.8	63	w.			5		9			0.059	1.5		I. R. Central Met. Obs'y
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.39	771.9	30.49	774.4	44.2	6.8	68	wnw.	17	7.6			6			0	0	d. clouds	W. Boswell.
Armagh, Observatory	30.51	774.9	30.76	781.3	47.3	8.5	65	nw.	12	5.4									S. Call.
Bidston, Liverpool Obs'y			30.67	779.0	45.2	7.3	84	w.	32	14.3			7					d. clouds	John Hartnup.
Bolton, Sharples	29.99	761.7	30.54	775.7	43.9	6.6	79	nw.	12	5.4			10					foggy	Thomas Mackereth
Bradford, Yorkshire																0	0		A.S. J. McLandsborough, F. R.
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	83.0	28.3	67	ne.			2		3					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			30.61	777.5	47.6	8.7	60	nw.			1.0		1					blue sky	John McLaren.
Chatham, School M. E.	30.47	773.9	30.60	777.2	47.9	8.8	59	nw.			1		1			blank	blank	d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.56	776.2	30.79	782.1	47.0	8.3	62	n.			3		3					d clouds	The Staff.
Fort Napier, Natal	27.64	702.0	29.86	758.4	73.1	22.8	71	ne.			2		6						Pvt. E. K. Annias, A. H. C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	89.0	31.7	63	ne.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College																			J. O'Donaghue.
Gibraltar, Mediterranean	30.34	770.6	30.40	772.1	63.6	17.6	78	e.			2		0					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	30.33	770.4	30.53	775.4	48.2	9.0	60	nw.			5		2 c					blue sky	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.45	773.4	30.63	778.0	46.4	8.0	57	nnw.			3		2					blue sky	The Staff.
Guernsey	30.44	773.2	30.75	781.0	45.5	7.5	73	n.			3		7					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.62	777.7	30.66	778.7	46.4	8.0	49	n.	19	8.5			1					blue syk	The Staff.
Leicester, Museum	30.36	771.1	30.63	778.0	48.6	9.2	99	nw.			2		1					blue sky	J. C. Smith.
Malta, Mediterranean	30.05	763.3	30.13	765.3	59.2	15.1	78	ne.			3		6					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.30	769.6	30.34	770.6	71.5	21.9	69	ne.			3		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Emall.
Oxford, Radcliffe Obs'y	30.44	773.2	30.67	779.0	46.4	8.0	59	nnw.			4		4					squally	The Staff.
Plymouth	30.68	779.3	30.76	781.3	48.5	9.2	67	n.			2		2					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.41	772.4	43.2	6.2	81	nw.	8	3.6			5					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.21	767.3	30.27	768.8	49.0	9.4	66	sw.			1		2					d clouds	W. H. Lyne.
Sheffield	30.32	770.1	30.61	777.5	48.9	9.4	70	nw.			4		1			0	0	blue sky	W. F. Cooper.
Silloth Rectory	30.59	777.0	30.62	777.7	49.0	9.4	69	nw.			2		5			0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.64	778.2	45.0	7.2	76	nw.	19	8.5			5					d. clouds	I. New.
Stratfield Turgiss	30.46	773.7	30.68	779.3	48.4	9.1	62	nw.			3-4		0					squally	Rev. C. H. Griffiths, F. M. S
Truro, Royal Institution	30.70	779.8	30.75	781.0	50	10.0	64	n.			6		4					d. clouds	W. Newcombe.
Valencia, Observatory	30.82	782.8	30.85	783.6	47.8	8.8	74	nnw.	3	1.3			8					d. clouds	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.04	763.0	30.07	763.8	73.0	22.8	74	e.	7.0	3.1		0	1 k			0	0	clear	John Duthie.
Cape Town, C. G. H. Obs'y	29.80	758.4	29.90	759.4	83.0	28.3	48	ssw.	20	8.9		0	0			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.39	771.9	30.43	772.9	3	—16.1	95	nw.	9	4.0		0	2 s		nw.	0.025	0.6	fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.49	774.4	30.56	776.2	— 4	—20.0	100	w.	8	3.6		0	0			0	0	clear	G. A. Blair.
Cornwall, Ontario	30.13	765.3	30.44	773.2	5.0	—15.0	100	e.			5		10 n			inap.	inap.	cloudy	James Smith, M. A.
Dalhousie, N. B.	30.41	772.4	30.60	777.2	— 8.0	—22.2		w.			2		0			0	0	clear	H. A. Johnson.
Father Point, Quebec*	30.64	778.2	30.66	778.7	— 8	—22.2	82	ne.	3	1.3		5 cs	0	calm		0	0	fair	J. McWilliams.
Fort Garry, Manitoba*	29.43	747.5	30.39	771.9	—12	—24.4	100	w.	9	4.0		0	0			0.080	2.0	clear	James Stewart.
Fredericton, N. B.	30.53	775.4	30.61	777.5	— 4.9	—20.5	82	w.	12	5.4		0	0			0	0	clear	Prof. Harrison.
Granton, Ontario	28.91	734.3	30.06	763.5	32.1	0.1	98	calm	0	0			10 n			0	0	cloudy	James Grant.
Halifax, N. S*	30.33	770.4	30.48	774.2	0	—17.8	95	nw.	12	5.4		0	0			0	0	clear	A. Allison.
Hamilton. Ontario	29.61	752.1	30.02	762.5	31.9	—0.1	93	e.			1		10 ks			0.17	4.3	light rain	Geo. Dickson, B. A.
Kingston, Ontario*	29.93	760.2	30.29	769.4	20	— 6.7	73	sw.	15	6.7			10 n					heavy snow	A. P. Knight, M. A.
Little Glace Bay, N. S.	30.12	765.0	30.16	766.1	7.0	—13.9	77	nw.			6	5 k	0	nw.		0	0	fair	C. H. Rigby.
Montreal, Quebec*	30.26	768.6	30.50	774.7	4	—15.6	65	e.	13	5.8			10 s			0	0	cloudy	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.33	745.0	30.07	763.8	21	— 6.1	87	se.	16	7.2			10 n		se.	0.03	0.8	cloudy	Rev. R. Mosley.
Peterboro, Ontario	29.38	746.2	30.18	766.6	23.4	— 4.8	86	e.			2		10 n			0.50	12.7	cloudy	J. Dixon, B. A.
Port Dover, Ontario	29.36	745.7	30.08	764.0	33	0.6	100	calm	0	0			10 n		sw.	0.05	1.3	threatening.	H. Morgan.
Port Stanley, Ontario	29.40	746.7	30.07	763.8	34	1.1	88	e.	10	4.5			fg			0.02	0.5	light rain	M. Payne.
Quebec, Quebec*	30.30	769.6	30.68	779.3	— 6	—21.1	78	e.			1		fg			0	0	foggy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.69	754.1	30.20	767.1	7	—13.9	91	se.	15	6.7			10 s		se.	inap.	inap.	light snow	W. H. McIntyre.
Saugeen, Ontario*	29.23	742.4	29.97	761.2	33	0.6	92	s.	4	1.8			10 ks			0.05	1.3	cloudy	
St. Andrews, N .B.	30.54	775.7	30.59	777.0	— 2	—18.9	74	n.	1	0.4		0	0			0	0	clear	
St. John, N. B.	30.38	771.6	30.57	776.5	—1.0	—18.3	84	n.	4	1.8		0	0			0	0	clear	G. Murdock, C. E.
St. Pierre, N. F.																			N. F. Land, Com't.
Stratford, Ontario	28.69	728.7	30.02	762.5	32.0	0.0	98	sw.	2	0.9		0	fg			0.064	1.6	foggy	C. I. Macgregor, M. A.
Sydney, C. B*	30.17	766.3	30.24	768.1	4	—15.6	72	nw.	20	8.9		0	0			0	0	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.71	754.6	30.11	764.8	32.0	0.0	96	e.	8	3.6			10 n			0.03	0.8	light rain	Magnetic Observatory.
Windsor, N. S.	30.34	770.6	30.45	773.4	4.0	—15.6	87	w.	9	4.0		0	0			0	0	clear	Prof. W. R. Butler.
Woodstock, Ontario	28.99	736.3	30.10	764.5	31.9	— 0.1	85	e.	2	0.9			10 ks			0.15	3.8	cloudy	Prof. Wolverton
Yarmouth, N. S*	30.46	773.7	30.53	775.4	13	—10.6	64	n.	9	4.0		0	4 k		n.	0	0	fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.61	752.1	29.89	759.2	4	—15.6		w.	2	0.9		0	0			0	0	fair	John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.22	767.6	30.51	774.9	41.9	5.5	64	nnw.			2		10			0	0		N. Titoushkin.
Sung-shu-chwang†	24.91	632.8			18.5	— 7.5		calm			0		10			1.18	30.		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.24	768.2	30.27	768.8	41.9	5.5	78	e.	1.6	0.7			10			0	0	covered	M. Marc Dechevrens,
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.59	751.5	29.63	752.7	39.9	4.4	54	nnw.	34	15			3						Oversergent Fischer.
Fanöe	29.94	760.5	29.96	761.0	38.7	3.7	60	nw.			7		4						Overloerer Lauridsen.
Godthaab, Greenland	29.72	755.0	29.77	756.1	4.6	—15.2		nne.			6		3						S. Kleinschmidt.
Stykkisholm, Iceland	29.70	754.4	29.74	755.5	35.6	2.0		sw.			4		10					raining	A. O. Thorlacius.
Thorshavn	30.19	766.9	30.23	767.8	41.9	5.5	77	nw.	21.3	9.5			7					raining	Overloerer Bergh.
Vestervig	29.81	757.2	29.90	759.5	38.5	3.6	52	nw.			8		0						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.86	758.4	30.54	775.7	44.2	6.8	85	se.			1	0	8 n					sprinkling	M. Labroue, Director.
Alençon, Normal School	30.02	762.6	30.58	776.6	46.4	8	94	sw.			3		10 n		n.	0.031	0.8	raining	M. Nicot, Director.
Arras, Engineer School	30.30	769.7	30.58	776.6	43.5	6.4	75				4		k			0.087	2.2		M. Klein, Commandant.
Avignon, Normal School	30.16	766.0	30.24	768.0	53.6	12	43	n.			6		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.97	761.1	30.55	775.9	43.0	6.1	56	ne.			1		4		n.	0.16	4.	slightly cl'dy.	M. Saillard, Director.
Beauvais, Normal School	30.34	770.7	30.62	777.8	44.2	6.8	49	nne.			2		5		n.	0.031	0.8	cloudy	M. Frère Eugène Marié
Besançon, Normal School			30.44	773.1	43.7	6.5	97	ne.			1		10 n		s.	0.256	6.5	covered	M. Gobin, Director.
Bordeaux, Observatory	30.29	769.4	30.57	776.4	46.6	8.1	59	nw.			3		5			0.051	1.3	cloudy	M. Rayet, Director.
Bourges, Normal School	30.02	762.6	30.60	777.1	46.4	8	55	n.			2		0			0.059	1.5	clear	M. Postel, Director.
Brest, Naval Observatory	30.53	775.4	30.77	781.6	48.2	9.0	63	nne.			2		7		nne.	0.071	1.8		M. de Kennaree, Dir.
Caen, Normal School	30.60	777.1	30.67	779.0	46.8	8.2	83	nw.			2		2		s.	0.083	2.1	slightly cl'dy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.10	764.4	30.43	772.8	43.5	6.4	81	w.			4		5		nw.	0.157	4.0	cloudy	M. Jadot, Director.
Charleville, Normal School	30.07	763.7	30.60	777.3	39.6	4.2	90	nnw.			1		8			0	0	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.13	739.9	30.55	776.0	39.6	4.2	70	n.			2		10		n.	0.039	1.0	covered	M. Allnard, Director.
Cluny, Normal School	29.65	753.2	30.53	775.5	42.1	5.6	75	nw.			2		fg		nw.	0.154	3.9	foggy	M. de Villemontée, Dir.
Commercy, Normal School.	29.62	752.3	30.52	775.1	41.9	5.5	73	wnw.			1		5 kn	wnw.	wnw.	0.142	3.6	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.62	701.6	30.20	767.1	46.4	8	59	n.			3	c	0			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.02	737.1	30.16	766.0	53.1	11.7	43	nw.			2		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.63	752.7	30.43	772.9	45.1	7.3	56	nnw.			3		kn		nne.	0	0		M. Ablard, Director.
Guéret, Normal School	28.93	734.7	30.58	776.7	40.1	4.5	71	ne.			3		kn		ne.	0.091	2.3		M. Rivoire, Director.
Lamballe, Normal School	30.45	773.5	30.74	780.7	48.2	9	86	n.			1		5		n.	0 059	1.5	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.92	760.0	30.50	774.7	50.0	10	72	ne.			1					0.063	1.6		M. Chauvin, Director.
Lorient, Naval Observatory	30.65	778 4	30.74	780.9	50.9	10.5	65	nne.			2		5		n.	0	0	½ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.40	746.7	30.50	774.8	38.3	3.5	83	n.			2		10		n.	0.020	0.5	covered	M. André, Director.
Mans, Normal School	30.32	770.1	30.64	778.3	44.4	6.9	61	s.			4		2		n.	0	0	slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.91	759.6	30.18	766.6	55.2	12.9	39	nw.			1		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.04	635.9	29.88	758.9	35.6	2.0	59	wnw.	24.2	10.8			7		wsw.	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.15	765.8	30.28	769.2	55.8	13.2	35				4		2		n.	0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	29.68	753.9	30.49	774.4	45.7	7.6	71	nw.			1		5 ckn		nw.	0.094	2.4	cloudy	M. Hasse, Director
Nantes, Observatory	30.55	775.9	30.71	780.0	48.9	9.4	48	n.			2-3	0	0			0	0	clear	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.26	768.6	30.37	771.4	53.6	12.0	42	n.	26.2	11.7			7	nw.	nw.	0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.34	541.9			14.9	— 9.5		ne.			2		10		ne.	0.102	2.6	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.32	744.6	30.42	772.6	45.0	7.2	80	n.			4		0			0	0	clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.41	645.4			23.2	— 4.9	100	nne.			4		10			0.087	2.2	foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	30.62	777.8	30.65	778.6	49.3	9.6	79	ne.			2		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.37	771.4	30.59	777.0	46.8	8.2	57	n.			1		0			0.059	1.5	clear	M. Mouillot, Director.
Rodez, Normal School	28.22	716.7	30.45	773.5	39.2	4	87	nw.			2		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.58	776.7	30.63	777.9	46.4	8	69	n.			1		5			0.047	1.2	cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.56	776.1	30.71	780.1	45.5	7.5	65	nnw.			2		5		w.	0.059	1.5	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.43	772.9	30.60	777.1	46.0	7.8	46	nnw.			4		2		n.	0.043	1.1	slightly cl'dy	M. Renou, Director.
Toulouse, Observatory	29.79	756.7	30.52	775.3	48.9	9.4	71	nw.			3		10		nw.	0	0	covered	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.10	764.5	30.59	777.0	44.2	6.8	51	n.			3					0.051	1.3		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.31	769.9	30.60	777.3	45.0	7.2	47	nnw.			2		5		n.	0.028	0.7		M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.33	745.0	30.19	766.8	39.7	4.3	60	nw.			4	0	5 k		wnw.	0.087	2.2	snowing	Prof. Dr. Hoh.
Berlin	29.72	754.9	29.90	759.5	40.3	4.6	68	sw.			6		7			0.051	1.3		Prof. Dr. Arndt.
Breslau	29.38	746.2	29.91	759.6	39.9	4.4	63	w.			6		10			0.169	4.3		Royal University Obs'y.
Carlsruhe	29.95	760.6	30.40	772.2	43.7	6.5	50	w.			5		1	w.		0.094	2.4	raining	Albert Senz.
Cassel	29.42	747.3	30.13	765.4	36.0	2.2	76	nw.			6	0	8 n		w.	0.165	4.2	snowing	Dr. H. Möhl.
Frankfort on the Main	29.91	759.8	30.30	769.5	43.7	6.5	51	wnw.			3		7			0.028	0.7		Physical Society.
Friedrichshafen	28.91	734.4	30.41	772.4	39.2	4.0	84	w.			5		10	w.		0.024	0.6		Wilhelm, Chief Tel.
Hamburg	29.89	759.2	29.98	761.6	40.3	4.6	71	nw.			7		7	nw.		0.028	0.7	snowy	E. Preller.
Kiel	29.87	758.6	29.88	759.0	40.3	4.6	67	nw.			9		5			0.228	5.8		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.62	752.4	30.06	763.4	41.5	5.3	59	w.			5		8	wnw.		0.276	7.0		H. Leppig, Asst.
Magdeburg	29.80	757.0	30.00	761.9	38.8	3.8	80	wnw.			6	0	7 ks		w.	0.047	1.2	snow & sleet	Dr. Assmann.
Memel	29.21	741.9	29.25	743.0	36.5	2.5	89	w.			8		10					raining	Issermann.
Munich	28.43	722.0	30.30	769.7	33.8	1.0	83	nw.			2		10	w.		0.102	2.6		Central Station.
Neufahrwasser	29.46	748.2	29.47	748.6	36.1	2.3	84	wsw.			8		10	wnw.		0.122	3.1	rain & snow	A. Lothes.
Neustadt, Palatinate	29.80	756.8	30.33	770.3	43.3	6.3	68	w.			4		3	w.		0.303	7.7		Dicknether.
Stuttgart	29.38	746.2	30.31	769.8	41.5	5.3	65	w.			5		6	nw.		0.193	4.9		Prof. Dr. Schoder.
Wustrow	29.73	755.2	29.76	755.9	38.8	3.8	90	wnw.			8	0	5 s			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.87	758.8	30.27	768.8	59.5	15.3		e.			1.0		0			0	0	clear	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	30.02	762.6	30.08	763.9	72.2	22.3	54	wnw.	30	13.4			0			0	0	blue sky	
Deesa	29.48	748.8	29.96	761.0	76.0	24.4	12	wnw.	10.5	4.7			0			0	0	blue sky	
Bombay	29.93	760.2	29.97	761.2	78.1	25.6	44	nnw.	11	4.9			0			0	0	blue sky	
Poona, Yarrowda.	28.04	712.3	29.89	759.2	82.1	27.8	13	wnw.	19	8.5			1	wsw.		0	0	d. clouds	
Belgaum	27.35	694.8	29.88	758.8	80.1	26.7	36	sw.	8	3.6			3	ne.		0	0	d. clouds	
Lahore	29.29	743.8	30.06	763.6	60.6	15.9	32	n.	1.8	0.8			0			0	0	blue sky	
Roorkee	29.06	738.0	30.00	761.9	60.0	15.6	47	nw.	5.0	2.2			5			0	0		
Agra	29.43	747.6	30.02	762.4	69.7	20.9	23	nw.	5.7	2.6			6			0	0		
Nagpur	28.82	732.1	29.85	758.2	87.9	31.1	24	calm	3.1	1.4			0			0	0	blue sky	
Jubbulpore	28.57	725.8	29.94	760.5	76.8	24.9	30	ne.	1.8	0.8			0			0	0	blue sky	
Lucknow	29.56	750.9	29.95	760.6	73.2	22.9	19	w.	8.0	3.6			0			0	0	blue sky	
Allahabad	29.64	752.8	29.96	760.9	71.8	22.1	27	w.	6.0	2.7			0			0	0	blue sky	
Patna	29.73	755.1	29.92	759.9	72.1	22.3	57	w.	7.1	3.2			0			0	0	blue sky	
Hazaribagh	27.89	708.5	29.92	760.0	74.8	23.8	15	nw.	12.0	5.4			0			0	0	squally	
Cuttack	29.84	757.9	29.92	760.0	85.0	29.4	28	calm	1.0	0.4			0			0	0	blue sky	
Calcutta, Allpore	29.91	759.6	29.93	760.2	71.4	21.9	43	w.	2.0	0.9			0			0	0	blue sky	
Dhubri	29.79	756.6	29.91	759.8	67.2	19.6	64	calm	1.4	0.6			0			0	0	blue sky	
Chittagong	29.85	758.2	29.94	760.5	69.4	20.8	48	wnw.	1.7	0.7			0			0	0	blue sky	
Sibsagar	29.59	751.5	29.94	760.4	61.9	16.6	84	ne.	3.2	1.4			8	w.	w.	0.32	8.1	d. clouds	
Jeypore	28.54	725.0	30.03	762.8	66.3	19.1	24	nne.	4.1	1.8			6		nne.	0	0	d. clouds	
Zanzibar, Africa	29.83	757.7			85.7	29.8	63	ne.	13.2	5.9			6k;fk		ene.	0	0	d. clouds	
Trichinopoly	29.64	752.8			90.7	32.6	31	calm	0	0			5			0	0	d. clouds	
Bellary	28.39	721.1			92.5	33.6	20	w.	6.3	2.8			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.73	755.1	30.15	765.9	48.6	9.2	53	calm	0	0			10			0	0		Prof. Giovanni Clodig
Milan	29.66	753.3	30.20	767.0	46.6	8.1	79	sw.	2.5	1.1			4	w.		0	0		Prof. Schiaparelli.
Padua	30.05	763.3	30.17	766.2	45.9	7.7	79	n.	1.3	0.6			3			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.25	743.0	30.19	766.9	42.3	5.7	91	nnw.	3.1	1.4			3	ne.		0	0		Prof. P. F. Denza.
Genoa	29.99	761.8	30.19	766.8	55.6	13.1	66	s.	6.3	2.8			8	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.22	716.9	30.21	767.4	43.0	6.1	82	w.	4.9	2.2			6			0	0		Prof. D. C. Bruno.
Pesaro	30.12	765.1	30.17	766.4	39.6	4.2	100	n.	7.4	3.3			10			0	0		Prof. Luigi Guidi.
Florence	29.95	760.7	30.21	767.4	52.5	11.4	72	nw.			2		3	sw.		0	0		Prof. Costantino Pitter.
Leghorn	30.07	763.8	30.16	766.0	54.7	12.6	77	sw.	0	0			3			0	0		Prof. P. Monte.
Rome	30.02	762.4	30.20	767.0	57.7	14.3	52	nw	3.8	1.7			0			0	0		Prof. P. S. Ferrari.
Lecce	29.93	760.1	30.19	766.7	59.4	15.2	56	ese.	11.2	5.0			0			0	0		Prof. C. de Giorgi.
Cosenza	29.30	744.2	30.22	767.5	55.4	13.0	75	wsw.	1.8	0.8			2	sw.		0	0		Prof. D. Conti.
Cagliari	29.97	761.2	30.17	766.2	58.8	14.9	46	nw.			2		3			0	0		Prof. A. Pacinotti.
Palermo	29.95	760.6	30.20	767.1	56.5	13.6	63	ene.	6.3	2.8			2			0.102	2.6		Prof. G. Ciacciatore.
Syracuse	30.15	765.9	30.20	767.1	56.1	13.4	59	ne.	9.4	4.2			9	ene.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.65	753.2	30.18	766.6	57.9	14.4	56	sw.	1.3	0.6			1	sw.		0	0		Prof. T. Brioschi.
Stelvio	22.15	562.7			22.3	— 5.4	61	sw.			2		10			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.19	563.5			26.8	— 2.9	63	ne.			2		5			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.98	761.5	30.02	762.5	35.9	2.2	79	ese.	6.0	2.7		0	5 s			0	0	fair	
Hakodate	30.02	762.5	30.03	762.7	31.3	— 0.4	75	e.	2.4	1.1			6		w.	0	0	cloudy	
Hiroshima, I. M. Obs'y	30.01	762.2	30.03	762.7	43.5	6.4	80	ene.	2.9	1.3		0	0			0	0	clear	K. Sasaki.
Kanazawa	30.17	766.3	30.27	768.8	41.9	5.5	84	se.	4.1	1.8		ck	1s		w.	0.190	4.8	fair	S. Endo.
Kioto	29.85	758.2	30.03	762.7	43.7	6.5	86	wsw.	2.0	0.9		0	0			0	0	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.89	759.2	30.09	764.3	45.1	7.3	69	n.	6.1	2.7			10 s			0	0	cloudy	S. Takehayashi.
Niigata	29.92	759.9	29.96	761.0	44.2	6.8	84	n.	1.3	0.6		10 ck	0			0.030	0.8	covered	
Nobiru	29.99	761.7	30.01	762.2	44.1	6.7	80	sse.	7.8	3.5			10 s			0.005	0.1	covered	H. Midzushina.
Supporo					25.1	— 3.8	82	calm	0	0			2			0.028	0.7	clear	
Tokei Obs'y, Yeddo	29.94	760.5	30.01	762.2	44.7	7.1	88	ne.	3.0	1.3			10 s			0.020	0.5	covered	The Staff.
Wakayama	29.99	761.7	30.04	763.0	43.7	6.5	89	e.	2.3	1.0		0	0			0.012	0.3	clear	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.39	619.4	30.16	766.1	51.4	10.8	77	nnw.			1	8 ck	0			0	0	cloudy	Prof. M. Leal.
Mazatlan	29.74	755.5	30.01	762.2	64.0	17.8	86	ssw.	0	0		0	1 s			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.11	587.2	30.26	768.6	48.9	9.4	69	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.25	616.0	30.43	772.9	55.4	13.0	73	s.			5	1c	1 k	s.	s.	0	0		M. Tena, M. D.
Pabellon, Aguascalientes	23.98	608.9	30.08	764.0	50.7	10.4	64									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.42	594.9	30.27	768.7	46.4	8.0	77	calm	0	0		0	2		sw.	0	0	clear	Prof. P. Spina.
San Luis Potosi	24.20	614.5	30.23	767.8	59.7	15.4	61	e.			1	3	0	w.		0	0	hazy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.56	573.0	30.26	768.6	50.0	10.0	54	wsw.	6.6	2.8		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.67	753.6	29.86	758.4	77.8	25.4	78	ese.	7.0	3.1		0	6 n;ks		wsw.	0	0	fair	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.54	775.6	30.54	775.6	38.3	3.5		nnw.			6					0.008	0.2		
Groningen	30.19	766.7	30.24	768.1	39.2	4.0		nnw.			5					0.079	2.0		
Helder	30.35	770.8	30.35	770.8	38.8	3.8		nnw.			7					0.063	1.6		
Hellevoetsluis	30.45	773.4	30.45	773.4	43.0	6.1	85	nw.			4					0.039	1.0		
Utrecht	30.36	771.1	30.41	772.3	39.0	3.9	74	nw.			4		8			0.016	0.4	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.96	761.0	30.02	762.6	35.2	1.8	57	nnw.	31	14			5			0.563	14.3		
Brono	29.70	754.4	29.74	755.4	29.8	— 1.2	50	nne.	18	8			2			0	0		
Christiania	29.53	750.0	29.68	753.8	36.0	2.2	59	nw.	27	12			1			0.327	8.3		
Gjæsvær	29.45	747.9	29.47	748.5	21.9	— 5.6		ne.			6		10					snowing	
Lodingen	29.66	753.3	29.71	754.5	23.0	— 5.0	60	n.			2		2			0.039	1.0		
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					61.2	16.2	81	ese.	15.0	6.7			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.30	744.2	30.31	769.9	59.0	15.0	47	ne.	5.6	2.5			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.27	768.9	30.36	771.2	61.7	16.5	60	ese.	0.7	0.3			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory.	30.03	762.8	30.40	772.1	57.7	14.3	70	nne.	4.9	2.2			1			0	0		The Staff.
Ponta Delgada, Azores	30.35	770.8	30.42	772.6	62.2	16.8	72	ese.	12.5	5.6			3			0	0		
Saint Paul de Loando	29.65	753.2	29.85	758.2	83.5	28.6	79	nw.	0.7	0.3			3	s.		0	0		
Serra da Estrella	25.53	648.4	30.41	772.3	39.2	4.0	59	se.	13.6	6.1			3			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.28	743.6	30.48	774.2	4.8	—15.1		s.	13	6		0	6 k			0	0		Major K. Lasarew.
Archangel	29.76	755.9	29.78	756.4	11.8	—11.2	89	e.	2	1			0			0	0		Capt. Sseliwerstow.
Astrakhan	30.02	762.6	29.94	760.5	37.0	2.8	84	wsw.	2	1			10 s			0	0		Capt. Wisganow.
Barnaul	30.10	764.4	30.64	778.3	18.7	— 7.4	89	sw.	2	1			9			0	0		Meteorological Obs'y.
Dorpat	29.01	736.8	29.26	743.1	28.4	— 2.0	88	s.	20	9			10 n			0.165	4.2	snowing	Observatory.
Ekaterinburg	28.89	733.9	29.90	759.4	26.8	— 2.9	57	ssw.	13	6			9			0	0	solar halo	Meteorological Obs'y.
Kasan	29.83	757.6	30.11	764.9	20.3	— 6.5	80	wnw.	9	4			10					snowing	Observatory.
Kertch	30.06	763.6	30.08	764.1	35.4	1.9	66	nw.	9	4		0	8 n			0	0		Lagorio & Sastyrex.
Kieff	29.28	743.8	29.95	760.7	30.4	— 0.9	52	ssw.	7	3		c	5 ks			0.035	0.9	light clouds	Observatory.
Lugan	29.72	754.9	29.94	760.4	27.0	— 2.8	79	wnw.	18	8			10			0.004	0.1		Meteorological Obs'y.
Moscow	29.32	744.8	29.83	757.7	23.9	— 4.5	52	nw.	4	2		0	3 ks			0.016	0.4		Meteorological Obs'y.
Nikolaiev	30.08	764.1	30.15	765.9	36.3	2.4	65	n.	9	4		0	4 k			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor.	30.06	763.6	30.15	765.8	11.1	—11.6	86	calm	0	0			10			0	0		Lieut. Iwanow.
Pekin, China	30.17	766.3	30.31	769.9	30.9	— 0.6	29	nw.	11	5		0	0			0	0		Physical Observatory.
St. Petersburg	29.49	749.1	29.51	749.5	22.3	— 5.4	71	sse.	22	10			10 n			0.177	4.5		Central Physical Obs'y.
Tashkend, Laboratory	28.78	731.1	30.47	773.8	30.0	— 1.1	80	nnw.	2	1			0			0	0		Teich, A. M.
Tiflis	28.55	725.1	30.01	762.2	39.0	3.9	49	n.	4	2			10			0	0		Physical Observatory.
Vladivostok	29.98	761.5	30.05	763.2	23.9	— 4.5	100	n.	4	2			10 ks					snowing	
Warsaw	29.28	743.7	29.71	754.6	41.7	5.4	69	ssw.	27	12		cs	9 ks						Astronomical Obs'y.
Wilna	29.08	738.7	29.51	749.6	35.2	1.8	88	s.	7	3			10			0.012	0.3	heavy cld's	Berg, Assistant.
Yeniseisk	30.24	768.0	30.55	775.9	24.1	— 4.4	73	sw.	9	4			10			0	0		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.57	776.5	46	7.8	92	wnw.			6		10			0.2	5.	rainy	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.21	767.3	30.32	770.0	53.2	11.8	67	s.	3.1	1.4			2 k			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.49	774.5	30.55	776.0	49.6	9.8	95	ne.	1.1	0.5			10			0.614	15.6	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.43	696.8	30.51	775.0	43.9	6.6	71	n.	7.6	3.4		0	8			0	0	cloudy.	Domingo Martin.
Madrid, Royal Obs'y	28.11	713.9	30.38	771.7	53.1	11.7	34	ne.	18.1	8.1		1	0			0	0	light clouds.	The Staff.
Murcia, Met. Obs'y	30.19	766.8	30.34	770.7	57.2	14.0	71	n.	2.0	0.9		0	0			inap.	inap.	clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.56	750.8	30.48	774.1	52.9	11.6	58	ne.	37.4	16.7		0	7			0	0	cloudy	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.15	765.9	30.22	767.6	71.8	22.1	75	e.	1.1	0.5			10 k		ne.	0	0	cloudy	Benito Vines, S. J.
Manilla, Philippine Islands	29.86	758.4	29.92	759.9	81.8	27.7	73	e.	1.1	0.5		0	k			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.24	768.0	30.34	770.6	60.6	15.9	53	calm	0	0		0	0			0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I.	30.02	762.5	30.11	764.8	73.8	23.2	92	se.	12.1	5.4		4 k	2 kn	se.	se.	0.177	4.5	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.83	757.7	29.96	761.0	76.2	24.6	77	nw.	6.8	3.0		0	0			0	0	clear	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.54	750.3	29.58	751.3	11.8	—11.2	85	ne.			4		10			0	0		
Umea	29.30	744.3	29.35	745.6	18.0	— 7.8	94	ne.			7		10			0.346	8.8		
Hernosand	29.22	742.2	29.27	743.5	26.4	— 3.1	80	ene.			7		10			0.177	4.5		
Stockholm	28.83	732.3	29.01	736.8	29.8	— 1.2	92	nw.			6		10			0.165	4.2	snowing	
Wisby	29.00	736.5	29.06	738.0	31.6	— 0.2	92	w.			8		10			0.327	8.3		
SUB SERIES.																			
Upsala	28.93	734.8	29.02	737.0	30.2	— 1.0	84	nnw.	26.2	11.7			10		nw.	0.028	0.7	snowing	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.97	735.8	30.43	772.9	42.8	6.0	67	se.			1					0	0	covered	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.30	769.7	48.0	8.9	52	s.	10	4.5			4		wnw.	0	0		The Observatory.
Valona			30.24	768.1	60.4	15.8		sw.			1		0			0	0	clear	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.13	765.3	62.1	16.7	71	sw			1	0	7 ks		sw.	0	0		Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.45	773.4	30.54	775.7	23.5	— 4.7	73	sw.	2	0.9			10 s			0	0	cloudy	
Alpena, Michigan	29.26	743.2	29.97	761.2	30	— 1.1	88	se.	7	3.1			10 s			0.04	1.0	threatening	
Atlanta, Georgia	29.24	742.7	30.46	773.7	44.0	6.7	100	e.	11	4.9			10 s		calm	0	0	threatening	
Atlantic City, New Jersey	30.55	776.0	30.56	776.2	35	1.7	89	se.	15	6.7			10 s		se.	0	0	cloudy	
Augusta, Georgia	30.32	770.1	30.52	775.2	53.3	11.8	36	ne.	5	2.2			10s;sk			0	0	cloudy	
Baltimore, Maryland	30.50	774.7	30.54	775.7	33	0.6	88	e.	5	2.2			10 n			0.03	0.8	sleeting	
Barnegat, New Jersey	30.53	775.4	30.55	776.0	32.8	0.4	81	se.	16	7.2			10 s		se.	0	0	cloudy	
Bismarck, Dakota	28.48	723.4	30.46	773.7	—18	—27.8	100	nw.	18	8.0		0	0			0.07	1.8	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.50	698.5	30.46	773.7	— 5	—20.6	100	calm	0	0		0	0			0	0	clear	
Boston, Massachusetts	30.50	774.7	30.66	778.7	12.0	—11.1	61	nw.	4	1.8			10 s			0	0	cloudy	
Brownsville, Texas	29.92	760.0	29.98	761.5	72.4	22.4	90	se.	12	5.4		0	0			0	0	clear	
Buffalo, New York	29.30	744.2	30.10	764.5	35.6	2.0	87	s.	7	3.1			10 n			0.04	1.0	light rain	
Burlington, Vermont	30.17	766.3	30.48	774.2	12.0	—11.1	73	s.	7	3.1			10 s		s.	0	0	cloudy	
Cairo, Illinois	29.72	754.9	30.14	765.5	63.5	17.5	86	s.	12	5.4		10 c	0	s.		0	0	cloudy	
Campo, California	27.31	693.7	29.95	760.7	30	— 1.1	88	calm	0	0			8 k		w.	0.30	7.6	cloudy	
Camp Thomas, Arizona	27.07	687.6	29.90	759.4	37	2.8	92	se.			1	0	0			0	0	clear	
Cape Henry, Virginia	30.49	774.4	30.51	774.9	44	6.7	76	se.	14	6.3			10 s			0	0	cloudy	
Cape May, New Jersey	30.52	775.2	30.56	776.2	37	2.8	82	se.	13	5.8			10 s			0	0	cloudy	
Castroville, Texas	29.16	740.7	30.00	762.0	68	20.0	90	se.	10	4.5			10 s		se.	0	0	cloudy	
Cedar Keys, Florida	30.33	770.4	30.35	770.9	65	18.3	84	e.	6	2.7		5 cs	0			0	0	fair	
Champaign, Illinois	29.22	742.2	30.09	764.3	46.4	8.0	95	n.	5	2.2			10 n		n.	1.72	43.7	light rain	
Charleston, S. Carolina	30.39	771.9	30.45	773.4	54	12.2	86	ne.	6	2.7		5 c	5 s	calm	e.	0	0	cloudy	
Charlotte, N. Carolina	29.59	751.6	30.48	774.2	41.0	5.0	100	n.	4	1.8			10s;fog			inap.	inap.	cloudy	
Chattanooga, Tennessee	29.54	750.3	30.40	772.1	53.0	11.7	80	s.	10	4.5			10 s		s.	inap.	inap.	cloudy	
Cheyenne, Wyoming	23.95	608.3	30.20	767.1	11.5	—11.4	65	sw.	3	1.3		0	0			0	0	clear	
Chicago, Illinois	29.34	745.2	30.09	764.3	39.9	4.4	90	nw.	8	3.6			10 s			0.07	1.8	cloudy	
Chincoteague, Virginia	30.50	774.7	30.52	775.2	40	4.4	82	se	10	4.5			10 s		sw.	0	0	cloudy	
Cincinnati, Ohio	29.45	748.0	30.14	765.5	59.1	15.1	81	s.	8	3.6			10 s		sw.	inap.	inap.	cloudy	
Cleveland, Ohio	29.32	744.7	30.11	764.8	42.2	5.7	95	s.	14	6.3			10 n		sw.	0.36	9.1	light rain	
Coleman City, Texas	28.11	714.0	29.99	761.7	64	17.8	93	se.	8	3.6			10 s		se.	0	0	cloudy	
Columbus, Ohio	29.23	742.4	30.13	765.3	50	10.0	86	s.	7	3.1			10 ks		w.	0.10	2.5	cloudy	
Concho, Texas	27.98	710.7	30.00	762.0	67	19.4	84	s.	20	8.9			10 s		s.	0	0	cloudy	
Davenport, Iowa	29.48	748.8	30.18	766.6	32	0.0	78	nw.	8	3.6			10 ks		nw.	0.10	2.5	cloudy	
Dayton, Washington T'y	28.64	727.4	30.44	773.2	— 0.7	—18.2	55	e.	4	1.8		0	0			0	0	clear	
Deadwood, Dakota	25.39	644.9	30.31	769.9	— 3	—19.4	71	s.	2	0.9		0	0			0	0	clear	
Decatur, Texas					64	17.8	78	s.	22	9.8			10 s			inap.	inap.	cloudy	
Delaware Breakwater, Del.	30.50	774.7	30.52	775.2	38	3.3	89	se.	22	9.8			10 s		se.	0	0	cloudy	
Denison, Texas	29.19	741.4	30.03	762.7	65.4	18.0	90	se.	7	3.1			10 s			0	0	cloudy	
Denver, Colorado	24.74	628.4	30.26	768.6	14.0	—10.0	83	n.	3	1.3			10 n		calm	inap.	inap.	light snow	
Des Moines, Iowa	29.39	746.5	30.36	771.1	19	— 7.2	70	n.	16	7.2			10 s		n.	0.60	15.2	cloudy	
Detroit, Michigan	29.31	744.5	30.06	763.5	42.0	5.6	92	s.	9	4.0			10n;fg		calm	0.06	1.5	light rain	
Dodge City, Kansas	27.58	700.5	30.32	770.1	10.5	—11.9	78	ne.	24	10.7			10 s		ne.	0.01	0.3	cloudy	
Dubuque, Iowa	29.40	746.7	30.16	766.1	30.8	— 0.7	68	nw.	8	3.6		1 k	9 s	nw.	nw.	0.08	2.0	cloudy	
Duluth, Minnesota	29.41	747.0	30.17	766.3	10	—12.2	85	w.	7	3.1			10 s		w.	0.23	5.8	cloudy	
Eagle Pass, Texas	29.13	739.9	29.97	761.2	69.0	20.6	90	se.	8	3.6			10 s			0	0	cloudy	
Eagle Rock, Idaho	25.31	642.9	30.21	767.3	—29	—33.9	100	n.	5	2.2		0	0			0	0	clear	
Eastport, Maine	30.51	774.9	30.58	776.7	1	—17.2	55	n.	12	5.4		0	0			0	0	clear	
El Paso, Texas	26.10	662.9	29.98	761.5	39	3.9	43	calm	0	0		0	0			0	0	clear	
Erie, Pennsylvania	29.30	744.2	30.07	763.8	37	2.8	89	s.	24	10.7			10 s		s.	0.30	7.6	cloudy	
Escanaba, Michigan	29.29	744.0	30.01	762.2	33	0.6	88	sw.	6	2.7			10 s		sw.	0.35	8.9	cloudy	
Fort Apache, Arizona	24.91	632.7	30.01	762.2	28	— 2.2	70	sw.	1	0.4			10 s		calm	0	0	cloudy	
Fort Assinnaboine, Montana	27.25	692.1	30.29	769.4	—22	—30.0	40	calm	0	0		0	0			0	0	clear	
Fort Bennett, Dakota	28.81	731.8	30.54	775.7	—11	—23.9	50	nw.	4	1.8		0	0			0.17	4.3	clear	
Fort Benton, Montana	27.28	692.9	30.28	769.1	—26	—32.2	42	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	28.34	719.8	30.52	775.2	—22	—30.0	100	w.	3	1.3		0	0			0.09	2.3	clear	
Fort Custer, Montana	26.99	685.5	30.35	770.9	—14	—25.6	52	calm	0	0		0	0			inap.	inap.	clear	
Fort Davis, Texas	25.05	636.3	30.01	762.2	48	8.9	80	sw.	5	2.2		0	7 ks		calm	0	0	fair	
Fort Elliott, Texas	27.34	694.4	30.24	768.1	20	— 6.7	73	ne.	28	12.5			10 n		ne.	inap.	inap.	light sleet	
Fort Gibson, Indian T'y	29.47	748.5	30.07	763.8	48.0	8.9	89	n.	12	5.4			10 n			inap.	inap.	light rain	
Fort Grant, Arizona	25.06	636.5	29.92	760.0	36	2.2	92	e.	4	1.8			10 s			0	0	cloudy	
Fort Griffin, Texas	28.61	726.7	29.98	761.5	65	18.3	84	se.	7	3.1			10 s		s.	0	0	cloudy	
Fort Keogh, Montana	27.74	704.6	30.42	772.7	—16	—26.7	44	sw.	1	0.4		0	0			0.02	0.5	clear	
Fort Macon, North Carolina	30.48	774.2	30.49	774.4	48	8.9	93	n.	8	3.6		10 cs	0	n.		0	0	cloudy	
Fort McKavett, Texas	27.70	703.6	30.08	764.0	65	18.3	90	se.	10	4.5			9 ks		s.	0.04	1.0	cloudy	
Fort Missoula, Montana	26.96	684.8	30.39	771.9	—19	—28.3	100	calm	0	0		0	0			0	0	clear	
Fort St. Michaels, Alaska	29.43	747.5	29.46	748.3	— 9	—22.8	100	w.	7	3.1		0	5 s			0.05	1.3	fair	
Fort Shaw, Montana	26.37	669.8	30.22	767.6	0	—17.8	72	sw.	16	7.2		0	0			0	0	clear	
Fort Sill, Indian Territory	28.75	730.2	30.06	763.5	40.5	4.7	94	n.	28	12.5			10 s			0.02	0.5	cloudy	
Fort Stevenson, Dakota	28.44	722.4	30.46	773.7	—18	—27.8	100	nw.	7	3.1		0	0			0.22	5.6	clear	
Fort Verde, Arizona					35.2	1.8	82	se.			2		10 n		se.	0.02	0.5	light snow	
Fort Washakie, Wyoming	24.42	620.3			—21.5	—29.7	100	nw.	4	1.8		0	0			0	0	clear	
Fredericksburg, Texas	28.21	716.5	30.01	762.2	65	18.3	90	sw.	14	6.3			10 ks		sw.	0	0	cloudy	
Galveston, Texas	30.06	763.5	30.10	764.5	69	20.6	95	se.	12	5.4		3 c	2 ks	w.	se.	0	0	fair	
Grand Haven, Michigan	29.30	744.2	30.01	762.2	40.0	4.4	89	w.	14	6.3			10 s		w.	0.25	6.3	cloudy	
Hatteras, North Carolina	30.46	773.7	30.48	774.2	51	10.6	93	ne.	3	1.3		9 k	0	n.		0	0	cloudy	
Helena, Montana	25.92	658.4	30.32	770.1	—20	—28.9	43	calm	0	0		0	0			inap.	inap.	clear	
Henrietta, Texas	28.98	736.1	30.03	762.7	62	16.7	100	se.	7	3.1			10 s			0.03	0.8	cloudy	
Huron, Dakota	28.99	736.3	30.51	774.9	—10.3	—23.5	70	nw.	17	7.6		0	0			0.05	1.3	clear	
Indianapolis, Indiana	29.26	743.2	30.11	764.8	52	11.1	93	se.	3	1.3			10n;fg		se;e	0.50	12.7	heavy rain	
Indianola, Texas	30.02	762.5	30.05	763.3	68.4	20.2	93	se.	12	5.4		0	0			0	0	clear	
Jacksboro, Texas	28.76	730.5	30.00	762.0	63	17.2	90	se.	12	5.4			10 ks		se.	0	0	cloudy	
Jacksonville, Florida	30.37	771.4	30.42	772.7	63	17.2	84	e.	3	1.3		2 cs	fg.			0	0	clear	
Keokuk, Iowa	29.49	749.0	30.19	766.8	32.5	0.3	83	nw.	8	3.6			10 s		nw.	0.39	9.9	cloudy	
Key West, Florida	30.23	767.8	30.26	768.6	71.5	21.9	73	e.	13	5.8		1 c	4 s		e.	0.01	0.3	fair	
Kittyhawk, North Carolina	30.50	774.7	30.52	775.2	46	7.8	83	e.	9	4.0			10 s			0	0	cloudy	
Knoxville, Tennessee	29.32	744.7	30.40	772.1	52.5	11.4	83	e.	3	1.3			10 s			inap.	inap.	cloudy	
La Crosse, Wisconsin	29.37	746.0	30.21	767.3	21	— 6.1	70	w.	10	4.5		0	0 s		w.	0.45	11.4	fair	
La Mesilla, New Mexico	25.97	659.6	29.98	761.5	32.2	0.1	62	calm	0	0		0	1 s			0	0	clear	
Leavenworth, Kansas	29.35	745.5	30.30	769.6	22	— 5.6	73	n.	14	6.3			10 s		nw.	0.22	5.6	cloudy	
Lewiston, Idaho	29.69	754.1	30.56	776.2	4	—15.6	52	ne.	5	2.2		0	0			0	0	clear	
Little Rock, Arkansas	29.76	755.9	30.08	764.0	65	18.3	90	s.	9	4.0		3 ck	3 s		sw.	0.01	0.3	fair	
Los Angeles, California	29.66	753.4	30.06	763.5	38.1	3.4	73	n.	5	2.2		0	5 s		calm	0	0	fair	
Louisville, Kentucky	29.54	750.3	30.13	765.3	60	15.6	87	s.	13	5.8			10 s		s.	0	0	cloudy	
Lynchburg, Virginia	29.77	756.1	30.49	774.4	38.5	3.6	82	s.	1	0.4			10 n		s.	0.17	4.3	light rain	
Mackinac City, Michigan																			
Madison, Wisconsin	29.05	737.9	30.14	765.5	30	— 1.1	78	nw.	17	7.6		8 cs	0	nw.		0.71	18.0	cloudy	
Marquette, Michigan	29.18	741.2	29.96	761.0	30	— 1.1	78	w.	10	4.5			10 s		nw.	0.42	10.7	cloudy	
Mason, Texas	28.29	718.6	30.02	762.5	68	20.0	81	s.	16	7.2			10 s		s.	0	0	cloudy	
Memphis, Tennessee	29.83	757.7	30.18	766.6	64	17.8	84	se.	3	1.3			10 s			0	0	cloudy	
Milwaukee, Wisconsin	29.26	743.7	30.08	764.0	36	2.2	89	w.	9	4.0			10 s		w.	0.16	4.1	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.25	768.3	30.29	769.4	64	17.8	93	se.	4	1.8			10 s		se.	0	0	cloudy	
Montgomery, Alabama	30.08	764.0	30.32	770.1	66.6	19.2	82	se.	6	2.7			10 s		s.	0	0	cloudy	
Moorhead, Minnesota	29.26	743.2	30.36	771.1	—15	—26.1	100	nw.	8	3.6		0	0			0.20	5.1	clear	
Morgantown, W. Virginia	29.22	742.2	30.29	769.4	52.5	11.4	80	sw.	2	0.9			10 s		sw.	0.34	8.6	cloudy	
Mt. Washington, N. H.	23.85	605.8	30.47	773.9	5.0	—15.0	60	nw.	19	8.5			9 s		nw.	0	0	cloudy	
Nashville, Tennessee	29.69	754.1	30.25	768.3	59.9	15.5	82	se.	8	3.6			10 ks		s.	inap.	inap.	cloudy	
New Haven, Connecticut	30.50	774.7	30.62	777.7	18	— 7.8	60	ne.	6	2.7		10 c	0	sw.		0	0	cloudy	
New London, Connecticut	30.56	776.2	30.61	777.5	21	— 6.1	84	sw.	4	1.8			10 s		sw.	0	0	cloudy	
New Orleans, Louisiana	30.16	766.1	30.22	767.6	65.0	18.3	90	e.	7	3.1		4 cs	1 ks		s.	0	0	fair	
Newport, Rhode Island	30.60	777.2	30.65	778.5	20.8	— 6.2	62	n.	4	1.8			10 s		w.	0	0	cloudy	
New River, N. Carolina					44	6.7	76	n.			1		10 s			0	0	cloudy	
New Shoreham, Rhode I'd.	30.61	777.5	30.64	778.2	24.8	— 4.0	73	se.	4	1.8		4 cs	4 s	se.	se.	0	0	cloudy	
New York, New York	30.40	772.1	30.59	777.0	24	— 4.4	88	e.	11	4.9			10 s		e.	0	0	cloudy	
Norfolk, Virginia	30.50	774.7	30.52	775.2	44	6.7	83	se.	2	0.9			10 n		sw.	inap.	inap.	light rain	
North Platte, Nebraska	27.33	694.1	30.43	772.9	— 1.6	—18.7	66	nw.	12	5.4		0	0			0.02	0.5	clear	
Olympia, Washington T'y	30.28	769.1	30.32	770.1	19.0	— 7.2	84	se.	2	0.9		0	6 s		calm	0	0	fair	
Omaha, Nebraska	29.28	743.7	30.55	776.0	5.0	—15.0	69	n.	17	7.6			10 s		n.	0.37	9.4	cloudy	
Ogdaamie, Pt. Barrow, Alas.	29.38	746.2	29.40	746.7	—13.2	—25.1	74	nne.	23	10.3			10 s			0	0	cloudy	
Oswego, New York	29.87	758.7	30.22	767.6	25.0	— 3.9	88	se.	14	6.3			10 n		sw.	0.02	0.5	light snow	
Palestine, Texas	29.48	748.8	30.06	763.5	66	18.9	73	s.	16	7.2		0	6 ks			0	0	fair	
Pensacola, Florida	30.28	769 1	30.30	769.6	66.7	19.3	93	e.	9	4.0			10 s		se.	0	0	cloudy	
Philadelphia, Pa.	30.46	773.7	30.57	776.5	33	0.6	78	e.	7	3.1			10 s			0	0	cloudy	
Pike's Peak, Colorado	17.38	441.4	30.10	764.5	— 0.5	—18.1	90	sw.	12	5.4		0	3 s			0.02	0.5	clear	
Pioche, Nevada	23.89	606.8	30.05	763.3	9	—12.8	83	n.	11	4.9		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.34	745.2	30.20	767.1	40.0	4.4	80	e.	6	2.7			10 s			0.39	9.9	cloudy	
Port Eads, Louisiana	30.24	768.1	30.25	768.3	63.5	17.5	97	se.	8	3.6			10 s		se.	0	0	cloudy	
Port Huron, Michigan	29.32	744.7	30.05	763.3	36.2	2.3	100	s.	6	2.7			fg		calm	inap.	inap.	dense fog	
Portland, Maine	30.59	777.0	30.64	778.2	14.0	—10.0	64	nw.	3	1.3			10 s		calm	0	0	cloudy	
Portland, Oregon	30.26	768.6	30.33	770.4	20.0	— 6.7	56	e.	7	3.1		0	0			0	0	clear	
Portsmouth, N. Carolina					57	13.9	74	se.	7	3.1			10 ks		se.	0	0	cloudy	
Prescott, Arizona	24.53	623.1	29.89	759.2	27	— 2.8	88	s.	7	3.1			10 s		calm	0	0	cloudy	
Provincetown, Mass.	30.61	777.5	30.64	778.2	20	— 6.7	76	calm	0	0			10 s			inap.	inap.	cloudy	
Punta Rassa, Florida	30.30	769.6	30.31	769.9	65	18.3	78	ne.	10	4.5		7 c	hz	calm		0	0	fair	
Red Bluff, California	29.79	756.7	30.17	766.3	28.2	— 2.1	67	n.	14	6.3		0	0			0	0	clear	
Rio Grande City, Texas	29.73	755.1	29.98	761.5	70	21.1	90	se.	8	3.6			10 s		se.	0	0	cloudy	
Rochester, New York	29.44	747.8	30.15	765.8	31	— 0.6	88	s.	15	6.7			10 n		sw.	0.05	1.3	sleeting	
Roseburg, Oregon	29.69	754.9	30.26	768.6	19	— 7.2	76	ne.	1	0.4		0	0			0	0	clear	
Sacramento, California	30.03	762.7	30.11	764.8	32.7	0.4	88	n.	12	5.4		0	0			inap.	inap.	clear	
St. Louis, Missouri	29.46	748.3	30.10	764.5	51.6	10.9	100	n.	9	4.0			10 n			0.86	21.8	heavy rain	
St. Paul, Minnesota	29.33	745.0	30.27	768.8	5.0	—15.0	79	w.	6	2.7		0	0			0.47	11.9	clear	
St. Vincent, Minnesota	29.36	745.7	30.33	770.4	—15	—26.1	100	nw.	11	4.9		0	0			0.21	5.3	clear	
Salt Lake City, Utah	25 62	650.7	30.18	766.6	10	—12.2	60	calm	0	0		0	0			inap.	inap.	clear	
San Antonio, Texas	29.27	743.4	29.99	761.7	67.5	19.7	93	se.	10	4.5			10 k		se.	0	0	cloudy	
San Diego, California	29.91	759.7	29.98	761.5	42.3	5.7	82	ne.	5	2.2			10 n			0.06	1.5	light rain	
Sandusky, Ohio	29.35	745.5	30.07	763.8	52	11.1	93	s.	16	7.2			10 n			0.43	10.9	light rain	
Sandy Hook, New Jersey	30.53	775.4	30.57	776.5	32.0	0.0	78	se.	6	2.7		10 k	0	se.		0	0	cloudy	
San Francisco, California	30.03	762.7	30.10	764.5	38	3.3	45	n.	10	4.5		0	0			0	0	clear	
Santa Fé, New Mexico	23.02	584.7	30.06	763.5	37	2.8	58	se.	11	4.9		0	0			0	0	clear	
Savannah, Georgia	30.37	771.4	30.46	773.7	56	13.3	90	ne.	5	2.2			10 s			inap.	inap.	cloudy	
Shreveport, Louisiana	29.88	758.9	30.13	765.3	64	17.8	93	s.	6	2.7		0	8 s			0	0	cloudy	
Silver City, New Mexico	23.97	608.8	29.82	757.4	33	0.6	57	calm	0	0		0	0			0	0	clear	
Sitka, Alaska	29.48	748.8	29.55	750.6	37.6	3.1	84	se.	20	8.9			10 n		se.	3.26	82.8	light rain	
Smithville, North Carolina	30.45	773.4	30.49	774.4	47	8.3	86	n.	7	3.1			10 s		n.	0	0	cloudy	
Spokane Falls, Wash. Ter.	28.34	719.8	30.48	774.2	—11	—23.9	74	calm	0	0		0	0			0	0	clear	
Springfield, Illinois	29.44	747.8	30.17	766.3	41	5.0	92	nw.	15	6.7			10 n		nw.	1.72	43.7	thnd'r str'm	
Springfield, Massachusetts	30.48	774.2	30.62	777.7	18.8	— 7.3	70	e.	2	0.9			10 s		w.	0	0	cloudy	
Springfield, Mo.	28.61	726.7	30.18	766.6	46.5	8.1	85	n.	11	4.9			10 n			0.08	2.0	light rain	
Stockton, Texas	26.82	681.2	29.96	761.0	57.0	13.9	93	se.	12	5.4		0	5 s		se.	0	0	fair	
Thatcher's Island, Mass.	30.58	776.7	30.04	778.2	23.0	— 5.0	94	ne.	6	2.7			10 s			0	0	cloudy	
Toledo, Ohio	29.34	745.2	30.08	764.0	41	5.0	90	w.	5	2.2			10n;fg			0.22	5.6	light rain	
Tucson, Arizona	27.45	697.2	29.93	760.2	45	7.2	86	se.	2	0.9			10 n			inap	inap.	light rain	
Umatilla, Oregon	30.20	767.1	30.58	776.7	6.5	—14.2	75	se.	7	3.1		0	0			0	0	clear	
Uvalde, Texas	28.97	735.8	29.97	761.2	69	20.6	84	se.	12	4.4			10 ks		se.	0.02	0.5	cloudy	
Vicksburg, Mississippi	29.94	760.5	30.21	767.3	65	18.3	90	se.	3	1.3		8 cs	fg.	calm	calm	0	0	cloudy	
Visalia, California	29.62	752.3	30.00	762.0	33.5	0.8	84	nw.	4	1.8			10 s			0	0	cloudy	
Washington, D. C.	30.40	772.1	30.52	775.2	32	0.0	100	e.	3	1.3			10 n			0.06	1.5	light rain	
West Los Animas, Colorado	26.12	663.4	30.25	768.3	16	— 8.9	83	ne.	8	3.6			10 s		ne.	0	0	threatening	
Wickenburg, Arizona																			
Williamsport, Pa.	29.78	756.4	30.41	772.4	29	— 1.7	100	se.	9	4.0			10 n		s.	inap.	inap.	sleeting	
Wilmington, N. Carolina	30.44	773.2	30.50	774.7	45	7.2	53	ne.	5	2.2			10 s		calm	0	0	cloudy	
Winnemucca, Nevada	25.65	651.5	30.17	766.3	— 8	—22.2	61	ne.	10	4.5		0	0			0	0	clear	
Wood's Holl, Mass.																			
Yankton, Dakota	29.14	740.1	30.56	776.2	— 3	—19.4	48	nw.	11	4.9		0	0			0	0	clear	
Yuma, Arizona	29.80	756.9	29.95	760.7	39.9	4.4	76	sw.	2	0.9		0	1 s			0	0	clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.02	559 3			53.0	11.7	85	calm	0	0		3 k	4 ks;s			0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.03	762.7	30.04	763.0	76	24.4	81	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.99	761.7	30.01	762.2	76	24.4	95	calm	0	0			10 n		calm	0.95	24.1	raining	J. I. Plume.
Guadeloupe, W. I.	29.92	760 0	29.94	760.5	73	22.8	95	e.				0	3 ks			0.039	1.0	clear	B. Bigar.
Havana, Cuba, W. I.	30.23	767.8	30.28	769.1	74	23.3	76	se.	1.2	0.5			10 ks		e.	0	0	cloudy	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.09	764.3	30.10	764.5	68.2	20.1	82	calm	0	0		0	0			0	0		Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	76.5	24.7	88	e.			2		8 ps	e.		1.870	47.5	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.50	749.3	29.96	761.0	80	26.7	76	calm			0		2 ks	calm	calm	0	0	hazy	Miss Flora A. Nichols.
Rivas, Nicaragua							96	ne.			4	0	1 ks		ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.11	764.8	30.14	765.5	74	23.3	72	ne.	9.6	4.3		3 cs	4 s	ne.	ne.	0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.52	775.2	30.57	776.5	—25.0	—31.7		sw.	8	3.6		2 c	0	sw.		0	0	fair	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, N. 35° 54′, W. 6° 39′	30.39	771.9	58.5	14.7	79			ne.	3		2	calm						d. clouds	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S. Alert, N. 7° 10′, E. 77° 50′	29.90	759.4	81.5	27.5	76			nnw.	1		2							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.18	766.6	60.5	15.8	73			ene.	3		9	e.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 12° 46′, E. 48° 14′	30.04	763.0	75	23.9	56			ene.	5		0					3	ene.	blue sky	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.87	758.7	77	25.0	69			ese.	6		0							squally	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S. 39° 31′, E. 35° 20′	30.01	762.2	60	15.6	88			sse.	4		8	sw.				2	sw.	d clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′, W. 61° 31′	30.03	762.7	77	25.0				calm	0		2	ene.						misty	Capt. C. Domville.
H. M. Dock Yard, Bermuda, W. I.	30.36	771.1	54	12.2	76			nnw.	4–5		4	nnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	29.81	757.2	72	22.2	85			ne.	3–4		0					2–3	ne.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S 12° 18′, E. 44° 21′	29.86	758.4	83	28.3				nnw.	1		6							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt. C. A. G. Bridge.
H. M. S. Fawn, Aden, Arabia	30.04	763.0	76.7	24.8	64			ene.	2		3	e.						d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.02	762.5	47	8.3	85			nw.	1		4	nw.				1	nw.	d. clouds	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 13° 00′, W. 77° 10′	29.93	760.2	68	20.0	92			sse.	2		10					2	sse.	foggy	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.33	745.0	49	9.4	93			calm	0		10							overcast	Capt. L. F. Jones.
H. M. S. Inconstant, N. 6° 00′, E. 106° 30′	29.87	758.7	81	27.2	78			sw.	1		2	ssw.						d. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′ E. 113° 24′	30.05	763.3	53	11.7	100			n.	1–2		10	n.						drizzling	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.98	761.5	62	16.7				calm	0		4								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.90	759.4	59	15.0	76			se.	1		2	nw.						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, Port Royal, Jamaica, W. I.	30.03	762.7	75	23.9	90			wnw.	1		2							d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 25° 35′, E. 34° 40′	29.95	760.7	80.5	26.9	92			sse.	1		3	ssw.				3	sse.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 45° 07′, W. 20° 42′	30.66	778.7	55	12.8	93			ese.	4		10					2	ese.	overcast	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, N. 5° 34′, — 0° 00′	29.90	759.4	78	25.6	100			se.	1		10							raining	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.22	767.6	63	17.2				calm	0		0							blue sky	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	30.30	769.6	23	— 5.0	86			calm	0		2							d. clouds	Lieut. V. B. Oriebar.
H. M. S. Sea Gull																			Capt. E. T. Church.
H. M. S. Thalia, N. 35° 52′, W. 15° 33′	30.42	772.7	62	16.7				e.	4		6					1	nne.	d. clouds	
H. M. S. Triumph, S. 13° 17′, W. 77° 00′	29.97	761.2	68	20.0	94			sse.	2		1	se.				3	sse.	foggy	Capt. A. H. Markham.
H. M. S. Tyne, N. 17° 00′, E. 113° 50′	29.98	761.5	67	19.4	97			ene.	1		3	ne.				2	ne.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.08	764.0	76	24.4				nw.	1		3							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, Muscat, Arabia	30.18	766.6	68.5	20.3	56			nnw.	1–2		3	nnw.						d. clouds	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	29.95	760.8	78.8	26.0	55	ne			3		0					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 10° 20′, W. 80° 20′	29.97	761.3	75.6	24.2	88	ne.			3		4							misty	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.32	770.1	69	20.6	90	ene.	6	2.7			10		ene.	0	0			hazy	
N. Yard, Portsmouth, N. H.	30.64	778.2	11	—11.7		ne.	6	2.7			9		ne.	0	0			cloudy	
Naval Hospital																			
Yokohama, Japan	29.83	757.7	46	7.8	80	n.			1		10		ne.	0.08	2.0			misty	
Adams.																			
Callao, Peru	29.73	755.1	69	20.6	95	se.			1		10			0	0	gr'd		cloudy	
Alaska.																			
Valparaiso, Chili	29.97	761.2	61	16.1	88	calm			0		0			0	0	sm'h		clear	
Alert.																			
Batavia, Java*	29.71	754.6	81	27.2	87	sw.			2		10		calm			sm'h		cloudy	
Alliance.																			
Norfolk, Va.	30.48	774.2	47	8.3	77	ene.			0–1		10			light	light			drizzling	
Ashuelot.																			
Tientsin, China	30.28	769.1	33	0.6	89	nnw.			2		0							clear	
Brooklyn.																			
Sandy Point, Patagonia	29.39	746.5	48	8.9	100	sw.	10	4.5			2		s. w	0	0			fair	
Colorado.																			
New York, N. Y.	30.67	779.0	25	— 3.9		ene.	3	1.3			10		s.	0	0			cloudy	
Enterprise.																			
Norfolk, Va*	30.51	774.9	48	8.9	92	e.			1		10							drizzling	
Essex.																			
N. 26° 44′, W. 16° 54′	30.30	769.6	65	18.3	73	e.			3		2		e.			sm'h	e.	clear	
Franklin.																			
Norfolk, Va.	30.57	776.5	45	7.2	76	calm	0	0			10		calm	0	0			cloudy	
Galena.																			
Villafranca, France	30.12	765.0	61	16.1	77	sse.			1		0					sm'h		clear	
Independence.																			
N. Yard, Mare I'd, Ca'	29.97	761.2	37	2.8	71	calm	0	0			0			0	0			clear	
Kearsarge.																			
New Orleans, La.	30.22	767.6	65	18.3	89	calm			0		10		s; e.					hazy	
Lackawanna.																			
Valparaiso, Chili*	29.96	761.0	63	17.2	100	calm			0		10							cloudy	
Lancaster.																			
Alexandria, Egypt	30.19	766.8	62	16.7	66	ene.			1		2		ene.			sm'h		fair	
Marion.																			
S. 34° 57,′ E. 20° 33′	29.83	757.7	74	23.3	76	ese.			4		2		calm	0	0	mod.	ese.	fair	
Michigan.																			
Erie, Pa.	29.94	760.5	38	3.3	81	sse.			7		10		se.					cloudy	
Minnesota.																			
Newport, R. I.	30.65	778.5	22	— 5.6		ne.	3	1.3			8		ene.					cloudy	
Monocacy.																			
Yokohama, Japan	30.03	762.7	47	8.3	92	n.			1		10		calm					cloudy	
Nipsic.																			
Cadiz, Spain	30.36	771.1	60	15.6	60	e.			1		0					sm'h		clear	
Onward.																			
Callao, Peru†	30.06	763.5	67	19.4	60	se.			1		10		nnw.			long	w.	misty	
Palos.																			
Hong Kong, China	30.05	763.3	57	13.9	87	ne.			1		10		wnw.					overcast	
Passaic.																			
Washington, D. C.	30.54	775.7	34	1.1		se.			1		10		se.					rainy	
Pensacola.																			
Lota, Chili	30.04	763.0	59	15.0	88	calm	0	0			2		sw.	0	0	sm'h		fair	
Powhatan.																			
N. 19° 07′, W. 68° 30′	30.16	766.1	74	23.3	81	n.			3		5		n.			mod.	n.	fair	
Quinnebaug.																			
Alexandria, Egypt	30.20	767.1	65	18.3	63	ne.			3		5		calm			sm'h		fair	
Ranger.																			
N. 19° 17′, W. 104° 50′*	29.92	760.0	71	21.7	100	wnw.			1		2		calm	0	0	sm'h		fair	
Richmond.																			
N. 25° 06′, E. 151° 32′*	30.04	763.0	75	23.9	81	se.			2		5		e.	0	0	sm'h	n.	fair	
Shenandoah.																			
S. 27° 26′, W. 30° 35′*	30.02	762.5	73	22.8	95	ne.			5		10		ne.			mod.	ne.	cloudy	
St. Louis.																			
League Island, Pa.	30.88	784.3	34	1.1	79	se.	7	3.1			10		se.	0	0			cloudy	
Swatara.																			
Yokohama, Japan*	29.85	758.2	49	9.4	78	nnw.			2		10					sm'h		threatening.	
Tennessee.																			
Fort Monroe, Va.	30.50	774.7	44	6.7	84	se.	9	4.0			10			inap.	inap.	sm'h		drizzling	
Vandalia.																			
Aspinwall, Panama*†	30.06	763.5	78	25.6	82	nne.			5		5		nne.			long	nne.	showery	
Wabash.																			
Boston, Mass.			13	—10.6		nnw.	2	0.9			8		nw.	0	0			cloudy	
Wachusetts.																			
Departure Bay, B. C.	30.18	766.6	27	— 2.8		calm			0		10							overcast	
Wyoming.																			
Port Royal, S. C.	30.44	773.2	55	12.8	93	ne.	7	3.1			10		calm	0	0			overcast	
Yantic.																			
N. 15° 35′, W. 81° 35′*	30.02	762.5	76	24.4	86	ne.			4–5		2		ne.			mod.	ne.	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, Halifax, N. S*	30.33	770.4	2	—16.7		nw.	2		1		nnw.	0	0			clear	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, N. 50° 56′, W. 13° 00′*	30.83	783.1	52	11.1		sw.	2		3					light	nw.	clear	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 44° 15′, W. 48° 15′*	29.73	755.1	31	—0.6		nw.	4		10		wnw.	8 h'r	snow	short	wsw.	cloudy	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 49° 39′, W. 25° 28′*†	30.33	770.4	54	12.2		sse.	6		8		s.	0	0	r'gh	s.	cloudy	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 43° 04′, W. 51° 08′	29.70	754.4	21	—6.1	100	w.	6		2		nw.			mod.	w.	snowing	Gauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	30.53	775.4	46	7.8	76	wsw.	4		5		wsw.	0	0			fine	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, N. 50° 26′, W. 21° 48′*†	30.71	780.0	54	12.2	79	wsw.	2		5		ese.			sm'h	sse.		Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,																	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 46° 30′, W. 46° 15′*†	29.53	750.0	32	0.0		nnw.	3		10		nnw.			light cross	se.;w	light snow	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Daw, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents. New York.																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Portau Prince, Hayti, W. I*	30.17	766.3	78	25.6		ne.	3		0			0	0			fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 12° 50′, W. 75° 45′*†	29.80	756.9	74	23.3			5										W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 12° 20′, W. 71° 00′						ne.	2							mod.	ne.	fine	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 23° —′, W. 74° —′	30.00	762.0				e.	6		6		ene.	0	0	cross	e.	cloudy	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,																	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 43° 26′, W. 35° 33′	29.86	758.4	59	15.0		wnw.	6		10							overcast	
Baroda, Capt. C. J. Russell, S. 19° 40′, W. 27° 15′	30.02	762.5	80.0	26.7	82	ne.	5		3							d. clouds	
Bk. Caldew, Capt. W. Paterson S. 38° 50′, W. 36° 55′	30.15	765.8	63.5	17.5		nnw.	5		3							d. clouds	
S. S. Cipero, Capt. W. N. Lailey N. 15° 40′, W. 52° 26	30.01	762.2	73.8	23.2	81	ne.	1		4							d. clouds	
S. City of Agra, Capt. Thos. Young																	
Coppename, Capt. James Buchan N. 8° 54′, W. 57° 01′	29.99	761.7	78	25.6	77	n.	3		6						ne.	blue sky	
Bk. Glaramara, Capt. R. Morton,																	
Glencairn, Capt. R. S. Tannock, N. 3° 21′, E. 93° 21′	29.86	758.4	82	27.8	91	nnw.	5		5							d. clouds	
S. S. Gordon Castle, Capt. W. Waring, N. 37° 06′, E. 4° 29′	30.28	769.1	60	15.6	88	sse.	2		9							squally	
Hermine, Capt. S. G. Jones, S. 40° 34′, W. 39° 29′	30.00	762.0	63.7	17.6	89	wnw.	6		2							blue sky	
Hope, Capt. James Campbell N. 22° 19′, W. 27° 50′	30.13	765.3	73.5	23.1	77	sse.	4		6							misty	
S. S. Humboldt, Capt. A. W. Jeffery, N. 15° 00′, W. 54° 05′	30.05	763.3	75	23.9	76	nne.	2		8							raining	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 15° 45′, W. 5° 35′	30.12	765.0	75.5	24.2	76	ese.	4		4							d. clouds	
May Hulse, Capt. H. Youlden, R. N. R., S. 51° 05′, W. 81° 42′	29.98	761.5	47.9	8.8	77	wsw.	6		5							d. clouds	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	29.76	755.9	74.4	23.6	95	e.	3		8							d. clouds	
Naiad, Capt. J. Smith, N. 35° 33′, W. 38° 41′	30.01	762.2	61.5	16.4	100	s.	5		9							showery	
Pole Star, Capt. F. Norman,																	
Queen of Cambria, Capt. M. Parry. S. 6° 23′, E. 80° 12′	29.77	756.1	77.2	25.1	90	nw.	6		10							raining	
S. S. Strathleven, Capt. C. W. Pearson																	
S. Superb, Capt. Berridge																	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham,																	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman, N. 37° 35′, W. 74° 40′*†	30.51	774.9	53	11.7		ese.	5		10			0	0	mod.	e.	overcast	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey,																	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,																	E. F. Stembridge, 3d offi.
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d officer.

MERCHANT-MARINE SERIES.—Continued.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt. Périer d'Hauterive, N. 44° 29′, W. 52° 25′*†	29.84	758.0	42.8	6.0		wnw.	3	ck	0	nw.		0	0	sm'h	nw.	covered	
S. S. St. Laurent, Capt. A. Sérvan,																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein,																	
S. S. Silesia, Capt. A. Albers. N. 49° 35′, W. 8° 25′*†	30.92	785.4	47.8	8.8		n.	4-5					0	0	3	n.	clear	
S. S. Wieland, Capt. C. Hebich, N. 49° 55′, W. 5° 30′*	30.71	780.0	54	12.2		n	5					0	0	3	n.	fair	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch																	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt. Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 22° —′, W. 40° —′*†.	30.00	762.0	80	26.7		sw.	2		8		sw.	2 h'r	2 h'r	sm'h			J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 37° 54′, W. 74° 37′*†	30.62	777.7	38	3.3		ese.	4		10		ese.	0	0	short	e.	cloudy	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 49° 37′, W. 13° 34′*†	30.81	782.6	53	11.7	86	s.	4		5		s.	0	0	long	wnw.	fine	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, N. 37° 42′, W. 74° 20′*†	30.69	779.5	43	6.1		ese.	4		5		s.	0	0	mod.	ese.	threatening.	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips, N. 32° 48′, W. 74° 15′..†	30.54	775.7	61	16.1		ene.	3		3		ne.	0	0	hv'y	ne.	clear	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, N. 32° 50′, W. 74° 42′† [man	30.56	776.2	62	16.7		e.	2-3								ne.	overcast	
S. S. City of Alexandria, Capt. L. F. Timmer- N. 31° 20′, W. 77° 25*†′ [nolds	30.61	777.5	66	18.9		e.	6								ne.	d. clouds	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Elbe, Capt. W. Willigerod																	
S. S. Lessing, Capt. B. Voss																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke																	
S. S. P. Caland, Capt. E. Deddes, N. 40° 49′, W. 66° 12′	30.56	776.2	28.4	—2.0		nnw.	4							4	nw.		
S. S. Schiedam, Capt. E. M. Chevalier,																	
S. S. Scythia, Capt. M. Murphy																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur																	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 36° 54′, W. 12° 49′*	30.45	773.4	73.6	23.1		wsw.	2		2		ese.	0	0	sm'h	e.	clear	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer, N. 40° 55′, W. 58° 50′	30.14	765.5	27	—2.8	77	nnw.	6		5		nnw.	14 h'r	snow	r'gh	nnw.	snowing	Sander & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	30.33	770.4	42.8	6.0		nnw.	6		8		nw.	hail	shr's	mod.	nw.	cloudy	
S. S. Mosel, Capt. F. Hesse, N. 40° 42′, W. 69° 37′†	30.69	779.5	26.4	—3.1		n.	3		7		ne.	0	0	sm'h		cloudy	J. Hesse.
S. S. Neckar, Capt. R. Bussius, N. 48° 32′, W. 34° 52′	29.97	761.2	52.2	11.2		sse.	4		8		s.	2 ½	hour	mod.	var.	cloudy	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	
S. S. Oder, Capt. C. Undeutsch,																	Montz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, N. 35° 59′, W. 73° 00′	30.58	776.7				ene.	2		6		ene.	1 h'r	light	mod.	ne.	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch, N. 49° 23′, W. 13° 24′*	30.86	783.8	54.0	12.2	93	sse.	4		2		sse.	1 h'r	1 h'r	long	nw.	clear	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, Yokohama, Japan†	29.94	760.5	48	8.9	92	n.	1		8		nw.	0	0	sm'h		cloudy	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 37° 42′, W. 125° 13′†*	30.10	764.5	48	8.9	62	nw.	6		8		nw.			mod.	nw.	overcast	
S. S. Oceanic, Capt. J. Metcalfe, N. 44° 23′, E. 171° 17′*	29.68	753.9	43	6.1	83	se.	4		9		se.			5	sw.	overcast	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Savannah, Georgia*†	30.19	766.8				ne.	1		10		ne.					smoky	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett S. 35° 05′, W. 75° 20′†	30.57	776.5	66	18.9	68	se.	3		8		s.			mod; cross	ene; se.	cloudy	H. K. Hallett.

MERCHANT-MARINE SERIES.—Continued

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	OBSERVERS.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 43° 09′, W. 124° 42′†	30.20	767.1	34	1.1	61	nne.	1	.....	2	.....	n.	.....	.....	light	nnw.	fair	E W. Holmes.
S. S. Willamette, Capt. L. Meyer, Seattle, Wash. Ter*†	30.30	769.6	26	—3.3	100	calm	0	.....	6	.....	.....	0	0	.....	.....	d. clouds	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann N. 39° 11′, W. 124° 02′†	30.13	765.3	41	5.0	65	ne.	2	.....	.....	.....	.....	0	0	sm'h	n.	fair	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 40° 14′, W. 124° 31′†	30.13	765.3	43	6.1	67	n.	3	.....	0	.....	.....	.....	.....	mod.	nw.	fair	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 33° 33′, W. 118° 08′†	29.95	760.7	44	6.7	84	w.	2	.....	10	.....	w.	.....	.....	sm'h	.....	rainy	.....
S. S. G. W. Elder, Capt. H. G. Morse, Puget Sound, Wash. Ter†	30.18	766.6	34	1.1	.....	e.	4	.....	6	.....	se.	0	0	sm'h	.....	clear	.....
S. S. Idaho, Capt. H. M. Hayward, San Francisco, Cal†	30.27	768.8	40	4.4	56	n.	3	.....	0	.....	.....	.....	.....	.....	.....	clear	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, Monterey, Cal.†	30.08	764.0	34	1.1	79	se.	1	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.03	762.7	38	3.3	37	n.	4	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. Victoria, Capt. W. E. Plummer, N. 41° 17′, W. 124° 15′†	30.07	763.8	39	3.9	56	sse.	4	.....	0	.....	.....	.....	.....	hv'y	w.	clear	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 31° 33′, W. 134° 27′	30.34	770.6	56	13.3	74	n.	2	.....	8	.....	n.	0	0	long	n.	cloudy	.....
S. S. City of New York, Capt. W. B. Cobb, N. 26° 20′, W. 150° 40′†	30.32	770.1	66	18.9	84	ene.	5	.....	0	.....	.....	0	0	h'vy	ne.	clear	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 35° 18′, W. 121° 32′†	30.20	767.1	47	8.3	62	ne.	2	.....	2	.....	ne.	0	0	mod.	n.	fine	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, Sydney, N. S. W†	30.11	764.8	69	20.6	70	se.	4	.....	5	.....	s.	0	0	sm'h	.....	fair	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, Hong Kong, China†	30.09	764.3	57	13.9	81	ne.	2	.....	10	.....	ne.	12 h'r	light	.....	.....	cloudy	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 15° 50′, W. 97° 20′†	29.98	761.5	77	25.0	72	ene.	3	.....	1	.....	ese.	0	0	small	sse.	clear	.....
S. S. Grenada, Capt. M. Connolley, N. 13° 48′, W. 90° 30′†	29.99	761.7	82	27.8	100	nw.	1	.....	2	.....	nnw.	0	0	light	se.	hazy	.....
S. S. South Carolina, Capt. W. J. Russell, Panama, Panama†	30.03	762.7	78	25.6	82	calm	0	.....	0	.....	.....	light	light	sm'h	.....	fair	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	29.91	759.7	68	20.0	74	se.	1	.....	5	.....	se.	.....	.....	.....	.....	fine	.....
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, St. Kitts, W. I.	.....	.....	.....	.....	.....	ne.	2	.....	5	.....	.....	0	0	sm'h	.....	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes Antwerp, Belgium*†	30.53	775.4	43	6.1	.....	wnw.	6	.....	5	.....	wnw.	6 h'r	light	.....	.....	fair	.....
S. S. Nederland, Capt. J. Ueberweg, N. 50° 28′, W. 1° 00′*†	31.12	790.4	50	10.0	.....	wnw.	2	.....	2	.....	wnw.	0	0	long	.....	fair	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, N. 49° 38′ W. 21° 08′*	30.76	781.3	52	11.1	79	ssw.	4	.....	5	.....	ssw.	0	0	light	ssw.	fair	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A Beynon, N. 41° 00′, W. 70° 48′*†	30.53	775.4	26	—3.3	64	nne.	2	.....	0	.....	.....	0	0	sm'h	.....	clear	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels. N. 45° 15′, W. 44° 52′*	29.33	745.0	43	6.1	.....	wnw.	6	.....	10	.....	w.	0	0	mod.	s.	cloudy	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis. N. 40° 30′, W. 58° 45′*	30.02	762.5	55.2	12.9	87	nw.	7	.....	6	.....	n.	6 h'r	snow	high	nw.	foggy	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 41° 42′, W. 62° 42′†	30.44	773.2	20.3	—6.5	.....	nnw.	4	.....	6†	.....	nnw.	0	0	cross	nnw.	covered?	J. T. Eberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 50° 49′, W. 22° 12′*†	30.68	779.3	54	12.2	.....	s.	5	.....	1	.....	s.	0	0	light	s.	clear	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 40° 28′, W. 69° 36′*†	30.35	770.9	30	—1.1	.....	nne.	1	.....	8	.....	.....	0	0	sm'h	.....	d. clouds	W. Brownless, 4th offi.
S. S. Celtic, Capt. Benjamin Gleadell N. 41° 51′, W. 55° 29′†*	29.75	755.6	23	—5.0	72	nw.	6	.....	8	.....	nw.	18 h'r	snow	high	sw.	cloudy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 43° 45′, W. 48° 46′*	29.81	757.2	23	—5.0	.....	w.	2	.....	9	.....	wnw. sw.	10 h'r	snow	r'gh	sw.	hailing	Shaw & Smith

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. N. 29° 45′, W. 87° 27′†	30.39	771.9	67	19.4	94	ese.	3	8 cs	0	sw.	.....	0	0	short	se.	cloudy	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 29° 39′, W. 51° 43′*†	30.10	764.5	60	15.6	.....	nnw.	4	.....	4	.....	nw.	2 h'r	h'vy	r'gh	n.	squally	C. Bailey.
Bk. Alpha, Capt. O. Grönn N. 19° 11′, W. 45° 15′*†	30.05	763.3	79	26.1	.....	ese.	3	.....	3	.....	ese.	0	0	sm'h	.....	fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby, N. 46° 25′ W. 14° 00′*†	30.70	779.8	55	12.8	73	e.	4	.....	10	.....	e.	1 h'r	light	long	nnw.	overcast	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, Ponce, Porto Rico, W. I.*†	30.04	763.0	80	26.7	.....	sw.	1	.....	2	.....	n.	0	0	.....	.....	clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, 0° 00′, W. 26° 30′*†	29.96	761.0	85	29.4	.....	sse.	4	.....	1	.....	se.	0	0	sm'h	se.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 42° 34′, W. 48° 30′*†	29.72	754.9	.....	.....	.....	nnw.	6	.....	.....	.....	nnw.	8 h'r	snow	mod.	wsw.	.....	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill, S. 55° 18′ W. 64° 07′†	29.10	739.1	.....	.....	.....	w.	2	.....	5	.....	w.	sh'rs	sh'rs	long	sw.	rainy	A. J. Pettengill.
S. Enoch Train, Capt. H. D. Chapman, Bremerhaven, Germany*	29.93	760.2	.....	.....	.....	wnw.	7	.....	5	.....	nw.	sh'rs	sh'rs	.....	.....	hailing	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C†	30.57	776.5	38	3.3	80	e.	2	.....	10	.....	calm	0.03	0.8	.....	.....	raining	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaauw, N. 21° 15′, W. 39° 18′	.....	.....	78	25.6	.....	e.	2	.....	0	.....	.....	0	0	sm'h	.....	.....	.....
Bk. Gamaliel, Capt. D. J. Anthony, N. 24° 40′, W. 68° 30′*†	30.00	762.0	.....	.....	.....	n.	3	.....	0	.....	.....	0	0	.....	se.	clear	.....
Bk. Geo. Booth, Capt. D. Williams, S. 0° 07′, W. 29° 14′*†	29.75	755.6	86	30.0	.....	.....	1	.....	.....	.....	.....	sh'rs	sh'rs	.....	.....	fine	D. Williams.
Bk. Granville, Capt. R. Bonney N. 31° 31′, W. 47° 21′*†	30.10	764.5	64	17.8	.....	sse	1	.....	.....	.....	.....	0	0	sm'h	.....	overcast	.....
Schr. Henry Denison, Capt. Jno. Fehring	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 40° 05′. E. 61° 01′*	29.77	756.1	.....	.....	.....	ene.	2	.....	5?	.....	ene.	0	0	long	ne. wsw.	cloudy?	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. E. Cann.
Brt. Kryolith, Capt. Adam Smith,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Smith.
Schr. Moravian, Capt. Geo T. L. Compte N. 32° 47′, W. 73° 32′*†	31.10	789.9	.....	.....	.....	nne.	.....	.....	.....	.....	e.	.....	.....	light	e.	cloudy	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen, N. 39° 37′, E. 0° 38′ *†	30.50	774.7	.....	.....	.....	var.	1	.....	.....	.....	.....	0	0	sm'h	.....	fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 23° 36′, W. 31° 17′*†	30.40	772.1	71	21.7	90	sse.	5	.....	2	.....	sse.	.....	.....	mod.	se.	.....	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.20	767.1	55	12.8	73	calm	0	.....	8	.....	sw.	.....	.....	.....	.....	rainy	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 29° 40′, W. 27° 20′*†	30.00	762.0	.....	.....	.....	var.	.....	.....	5?	.....	var.	0	0	.....	.....	cloudy?	J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	30.31	769.9	60	15.6	.....	se.	1	.....	10	.....	.....	0	0	.....	.....	threatening.	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 28° 00′, W. 40° 50′*	29.69	754.1	76.8	24.9	96	se.	6	.....	5	.....	se.	.....	.....	.....	.....	showery	H. N. T. Sumner.
Bk. Sunbeam, Capt. Joseph Hand, N. 24° 19′, W. 35° 15′*†	30.11	764.8	76	24.4	81	s.	5	.....	5	.....	s.	0	0	mod.	e.	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 48° 13′, W. 10° 55′*†	30.60	777.2	50	10.0	100	ene.	6	.....	.....	.....	e.	.....	.....	sm'h	wnw.	clear	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, S. 15° 16′, W. 32° 58′*†	30.15	765.8	.....	.....	.....	ne.	.....	.....	.....	.....	nne.	.....	.....	rg'h	ne.	.....	N. P. Dutton.

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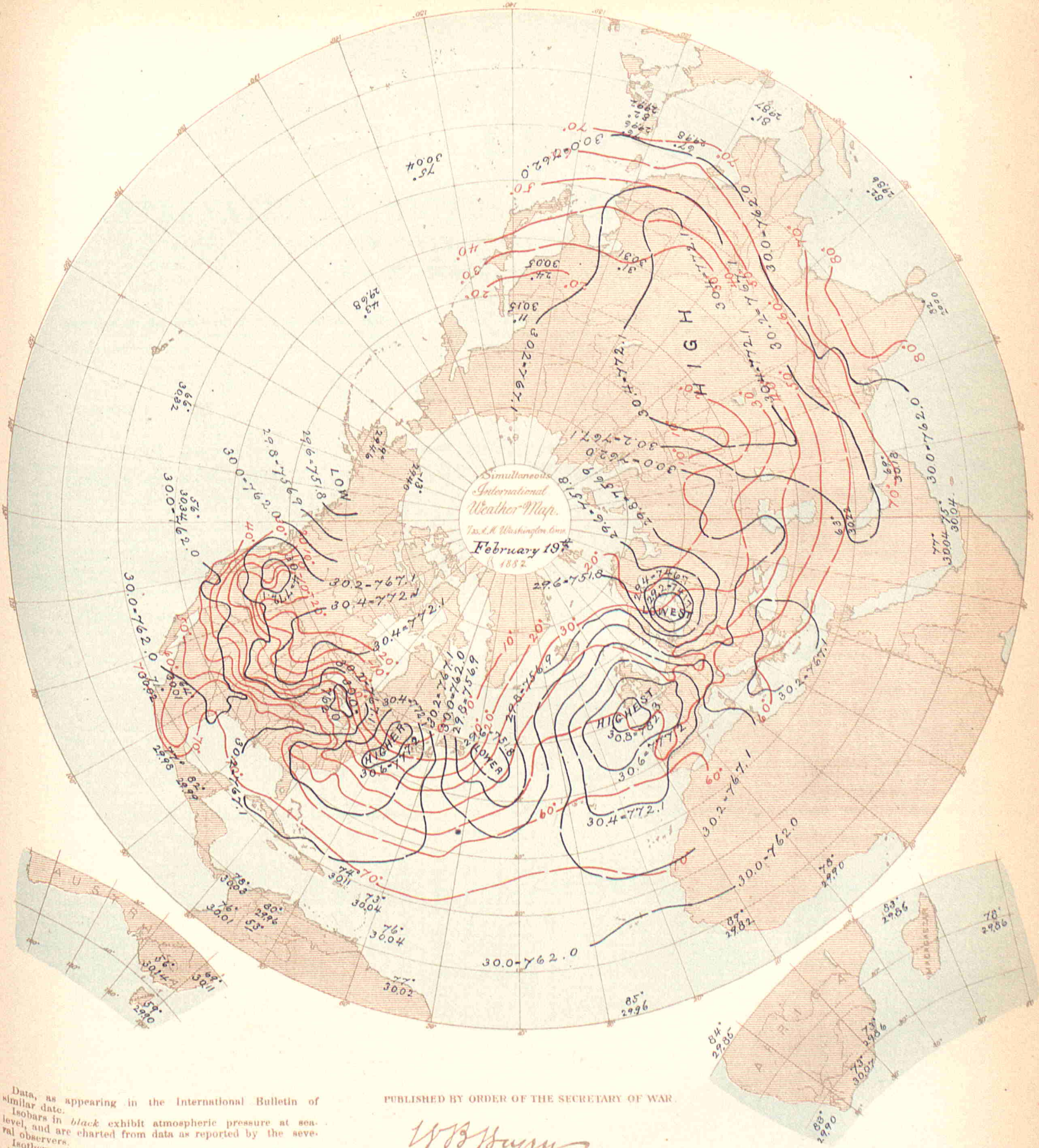
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 20, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.36	771.1	60.8	16.0	87	w.			2		0			0	0	clear	Moiroud.
Algiers			30.42	772.6	55.8	13.2	81	e.			1		0			0.228	5.8	clear	Nicolas.
La Calle			30.31	769.9	57.2	14.0	65	nnw.			3		4			0.138	3.5	cloudy	Fonfrède.
Tunis			30.21	767.4															Jacques.
Sfax																			Gau.
Saida			30.37	771.4	48.6	9.2	81	n.			1		5			0	0	cloudy	Dumas.
Tebessa			30.28	769.2	44.6	7.0	71	wnw.			5		1			0	0	very fair	Derché.
Geriville					41.7	5.4	66	nne.			2		7			0.091	2.3	very cloudy	Louchamp.
Laghouat			30.39	772.0	51.8	11.0	52	w.			1		0			0	0	clear	Herbin.
Biskra			30.30	769.7	64.8	18.2	29	n.			4		0			0	0	clear	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.92	759.9	30.01	762.2	65.0	18.3	72	sse.	5	2.2			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.86	758.5	30.44	773.1	41.0	5.0	46	ne.			4		5			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.52	749.8	30.33	770.4	32.0	0.0	89	nnw.	6.3	2.8			10			0.035	0.9		Dr. Wierzbiski.
Eperies	29.31	744.5	30.23	767.9	35.6	2.0	71	nw.			5	2 cs	0	se.		0.039	1.0		Julius Mikolik.
Gratz	29.12	739.7	30.43	773.0	37.4	3.0	52	nw.			5		0			0	0		Andreas Rospini.
Hermannstadt	28.70	729.0	30.21	767.2	36.1	2.3	66	wnw.			5		10			0.008	0.2		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.18	741.2	30.61	777.5	32.2	0.1	83	wnw.			3		10			0.098	2.5	snowy	The Staff.
Lemberg	29.08	738.5	30.11	764.7	33.6	0.9	63	ne.			3		8						Dr. T. Stanecki.
Pola	30.31	769.9	30.43	772.9	46.6	8.1	53	ene.			4		0			0.039	1.0		I. R. Hydrographic Office
Szathmar	29.72	754.8	30.19	766.8	38.1	3.4	46	nw.			3		3			0.012	0.3		Joseph Midlinszky, S. J
Szegedin	29.93	760.2	30.22	767.6	40.1	4.5	68	nw.			4		8			0	0		Karl Stancel.
Trieste	30.31	769.8	30.41	772.4	48.2	9.0	27	ne.			1		4			0	0		Rieder.
Vienna	29.74	755.3	30.49	774.5	35.6	2.0	59	wnw.			4		5			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.25	768.3	30.35	770.9	52.0	11.1	62	w.	16	7.2			7			blank	blank	d. clouds	W. Boswell.
Armagh, Observatory	30.49	774.4	30.73	780.5	49.6	9.8	75	s.	14	6.3			9					overcast	S. Call.
Bidston, Liverpool Obs'y			30.72	780.3	46.0	7.8	85	wsw.	34	15.2			9					raining	John Hartnup.
Bolton, Sharples	30.16	766.1	30.72	780.3	42.1	5.6	95	wsw.	12	5.4			10					overcast	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.27	768.8	30.66	778.7	45.1	7.3	85	sw.			2		9			0.01	0.3	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadbes	30.02	762.5	30.04	763.0	80.0	26.7	74	ne.			4		3					overcast	Corpl. J. Surgenor, A. H. C.
Cardington			30.74	780.8	47.4	8.6	74	nw.			1.0		8					d. clouds	John McLaren.
Chatham, School M. E.	30.67	779.0	30.81	782.6	42.9	6.1	76	sw.			1		9					overcast	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.70	779.8	30.94	785.9	47.6	8.7	62	nw.			2		9					blue sky	The Staff.
Fort Napier, Natal	27.58	700.5	29.80	756.9	76.2	24.6	56	se.			2		3					d. clouds	Pvt. E. K. Annis, A. H. C.
Free Town, Sierra Leone	29.60	751.8	29.83	757.7	80.0	31.1	69	sw.			1		5					gloomy	Sergt. John Robinson.
Galway, Queen's College			30.77	781.5				sw.			1		9			0	0	d. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.23	767.8	30.28	769.1	59.5	15.3	86	e.			6		5					foggy	Cpl. O. Baldwin.
Glasgow, Observatory	30.35	770.9	30.55	776.0	48.1	8.9	86	w.			4		10 k					overcast	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.62	777.7	30.81	782.6	42.0	5.6	79	wsw.			1		10					d. clouds	The Staff.
Guernsey	30.62	777.7	30.93	785.6	46.9	8.3	72	n.			1		6					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.78	781.8	30.82	782.8	43.9	6.6	67	w.	11	4.9			8					overcast	The Staff.
Leicester, Museum	30.49	774.4	30.74	780.8	46.3	7.9	98	nw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	29.90	759.4	29.97	761.2	57.0	13.9	87	ne.			3		9					d. clouds	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.26	768.6	30.31	769.9	75.5	24.2	62	ne.			2		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	30.57	776.5	30.80	782.3	44.6	7.0	71	wsw.			3		8					d. clouds	The Staff.
Plymouth	30.84	783.3	30.92	785.4	42.0	5.6	91	calm			0		4					foggy	John Merrifield.
Sandwick Manse, Orkneys			30.20	767.1	48.2	9.0	96	w.	40	17.9			10					drizzling	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.00	762.0	30.07	763.8	52.0	11.1	37	w.			1		2					d. clouds	W. H. Lyne.
Sheffield	30.40	772.1	30.69	779.5	47.4	8.6	81	w.			3		4			0.01	0.3	d. clouds	W. F. Cooper.
Silloth Rectory	30.60	777.2	30.64	778.2	46.0	7.8	87	w.			3		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.71	780.0	44.4	6.9	84	w.	24	10.7			10					overcast	I. New.
Stratfield Turgiss	30.61	777.5	30.84	783.3	45.3	7.4	71	nw.			2		7					d. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.80	782.3	30.86	783.8	52	11.1	66	nw.			4		6					d. clouds	W. Newcombe.
Valencia, Observatory	30.88	784.3	30.91	785.1	49.0	9.4	74	wsw.	16	7.2			10					d. clouds	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.58	751.3	29.61	752.1	70.4	21.3	76	ne.	17.2	7.7		0	5 ks			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.73	755.1	29.77	756.1	76.2	24.6	63	nw.	8	3.6		0	0			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.					14.6	— 9.7		calm	0	0			10 n			inap.	inap.	snowing	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.89	759.2	29.94	760.5	12	—11.1	100	se.	8	3.6			10 n			0.10	2.5	light snow	H. J. Cundall, C. E.
Chatham, N. B*	29.87	758.7	29.93	760.2	11	—11.7	100	e.	2	0.9			10 n		calm	0.36	9.1	light snow	G. A. Blair.
Cornwall, Ontario	29.85	758.2	30.06	763.5	21.0	— 6.1	90	nw.			1		9 s			0.080	2.0	cloudy	James Smith, M. A.
Dalhousie, N. B.	29.76	755.9	29.94	760.5	4.0	—15.6		calm			0		10 n			0.05	1.3	snowing	H. A. Johnson.
Father Point, Quebec*	29.95	760.7	29.98	761.5	10	—12.2	91	ne.	15	6.7		0	5 k		ne.	0.20	5.1	clearing	J. McWilliams.
Fort Garry, Manitoba*	29.51	749.5	30.50	774.7	—22	—30.0	100	calm	0	0		0	0			0	0	clear	James Stewart.
Fredericton, N. B.	29.84	757.9	29.91	759.7	14.1	— 9.9	80	n.	4	1.8			10 s			0.140	3.6	cloudy	Prof. Harrison.
Granton, Ontario	29.04	737.6	30.21	767.3	26.2	— 3.2	98	calm	0	0			10 n			0	0	cloudy	James Grant.
Halifax, N. S*	29.83	757.7	29.96	761.0	18	— 7.8	100	ne.	2	0.9			10 n			0.330	8.4	light snow	A. Allison.
Hamilton, Ontario	29.71	754.6	30.12	765.0	28.5	— 1.9	81	w.			1		10 ks			0	0	cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.76	755.9	30.12	765.0	25	— 3.9	88	n.	4	1.8			10 s		n.	0.22	5.6	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.	29.92	760 0	29.96	761.0	12.2	—11.0	77	w.			2	4 c	0	w.		0	0	fair	C. H. Rigby.
Montreal, Quebec*	29.85	758.2	30.07	763.8	19	— 7.2	84	n.	12	5.4		0	0			0.12	3.0	clear	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.44	747.8	30.19	766.8	16	— 8.9	83	n.	10	4.5		0	2 s		n.	0	0	fair	Rev. R. Mosley.
Peterboro, Ontario	29.44	747.8	30.24	768.1	23.4	— 4.8	86	nw.			2	0	0			0	0	clear	J. Dixon, B. A.
Port Dover, Ontario	29.43	747.5	30.16	766.1	29	— 1.7	89	n.	6	2.7			10 n			0.04	1.0	cloudy	H. Morgan.
Port Stanley, Ontario	29.48	748.8	30.15	765.8	29	— 1.7	80	n.	5	2.2			10 n		nw.	0.07	1.8	cloudy	M. Payne.
Quebec, Quebec*	29.64	752.8	29.99	761.7	11	—11.7	100	w.			1	0	5 s		w.	0.16	4.1	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.70	754.4	30.20	767.1	7	—13.9	87	nw.	6	2.7		0	5 s		nw.	0.05	1.3	fair	W. H. McIntyre.
Sangeen, Ontario*	29.43	747.5	30.19	766.8	25	— 3.9	96	n.	7	3.1			10 ks			0.06	1.5	cloudy	
St. Andrews, N .B.	29.80	756.9	29.83	757.7	22	— 5.6	87	nw.	3	1.3		5 k	5 ks	nw.		0.03	0.8	cloudy	
St. John, N. B.	29.68	753.9	29.85	758 2	27.0	— 2.8	94	n.	9	4.0			10 n			0.100	2.5	snowing	G. Murdock, C. E.
St. Pierre, N. F.																			N. F. Land, Com'r.
Stratford, Ontario	28.80	731.5	30.16	766.1	25.0	— 3.9	90	nw.	6	2.7			10 s			0.089	2.3	cloudy	C. I. Macgregor, M. A.
Sydney, C. B*	29.95	760.7	30.02	762.5	9	—12.8	91	sw.	3	1.3			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.78	756.4	30.19	766.8	26	— 3.3	76	nw.	8	3.6			10 ks		nw.	0.09	2.3	cloudy	Magnetic Observatory.
Windsor, N. S.	29.80	756.9	29.90	759.4	16.5	— 8.6	92	e.	2	0.9			10 n			0.20	5.1	cloudy	Prof. W. R. Butler.
Woodstock, Ontario	29.04	737.6	30.17	766.3	27.7	— 2.4	86	calm	0	0		4 c	6 ks	w.		0	0	cloudy	Prof. Wolverton
Yarmouth, N. S*	29.80	756.9	29.87	758.7	31	— 0.6	92	sw.	2	0.9			10 n			0.01	0.3	heavy snow	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.73	755.1	30.01	766.2	6	—14.4		w.	2	0.9		0	0			0.40	10.2	fair	John Delany.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.38	771.6	30.68	779.3	38.7	3.7	66	n.			3		10			0	0		N. Titoushkin.
Sung-shu-chwang†	25.03	635.7			17.1	— 8.3		calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.31	769.8	30.34	770.5	38.5	3.6	76	n.	3.6	1.6			10			0	0	covered	M. Marc Dechevrens.

DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.20	767.0	30.24	768.2	40.5	4.7	87	wnw.	25	11			8						Oversergent Fischer.
Fanöe	30.32	770.1	30.34	770.6	42.6	5.9	91	w.			4		9						Overloerer Lauridsen.
Godthaab, Greenland	29.51	749.5	29.55	750.6	15.3	— 9.3	81	ene.			4		9						S. Kleinschmidt.
Stykkisholm, Iceland	29.98	761.4	30.02	762.5	25.0	— 3.9		se.			7		5						A. O. Thorlacius.
Thorshavn	30.00	762.0	30.04	762.9	47.5	8.6	93	calm	0	0			5						Overloerer Bergh.
Vestervig	30.10	764.6	30.19	766.9	42.6	5.9	93	w.			6		10					raining	Loearer Oesterbol.

FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	30.03	762.8	30.70	779.8	46.4	8	77	ne.			2	0	0			0.008	0.2	clear	M. Labroue, Director.
Alençon, Normal School	30.35	770.8	30.90	784.8	42.8	6	88	nw.			2		k		s.	0.008	0.2		M. Nicot, Director.
Arras, Engineer School	30.53	775.5	30.80	782.4	45.0	7.2	83	nw.			2		10 k			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.40	772.2	30.48	774.2	54.0	12.2	43	n.			4		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.25	768.4	30.84	783.4	41.5	5.3	80	nne.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.59	777.0	30.88	784.3	43.7	6.5	79	nw.			1		8		nw.	0	0	very cloudy	M. Frère Eugène Marié
Besançon, Normal School			30.70	779.8	41.4	5.2	71	ne.			1	10 c	0		se.	0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	30.47	773.8	30.74	780.8	46.8	8.2	52	ne.			2		0			0.043	1.1	clear	M. Rayet, Director.
Bourges, Normal School	30.26	768.5	30.84	783.2	44.6	7	49	n.			2		0			0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.69	779.5	30.93	785.7	50.0	10.0	64	ne.			1		6			0	0		M. de Kennaree, Dir.
Caen, Normal School	30.81	782.6	30.89	784.7	47.1	8.4	83	nnw.			1		2		e.	0	0	slightly cl'dy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.43	773.0	30.78	781.8	47.1	8.4	81	wsw.			1		2		n.	0.012	0.3	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	30.25	768.3	30.78	781.7	47.5	8.6	92	sw.			2		5			0	0	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.31	744.4	30.74	780.7	40.5	4.7	51	ne.			2		8		ne.	0.035	0.9	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.50	749.2	30.80	782.2	41.0	5	65	n.			6		10		n.	0	0	covered	M. de Villemontée, Dir.
Commercy, Normal School	29.76	755.8	30.67	778.9	41.4	5.2	78	nw.			1		5 kn		nw.	0	0	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.82	706.6	30.43	772.8	43.7	6.5	24									0	0		M. Jeangirard, Director.
Grésasque, du. Rhone	29.26	743.3	30.41	772.4	53.6	12	40	nw.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.82	757.5	30.63	777.9	43.7	6.5	44	nne.			2	c	0		ne.	0	0		M. Ablard, Director.
Guéret, Normal School	29.13	739.9	30.79	782.1	39.2	4	67	e.			3		1		ne.	0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.63	778.0	30.92	785.3	48.9	9.4	71	n.			1		5		n.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	30.09	764.2	30.68	779.2	44.6	7	91	ene.			1					0.024	0.6		M. Chauvin, Director.
Lorient, Naval Observatory	30.83	783.1	30.93	785.7	50.0	10.0	66	nne.			2		5		n.	0	0	¼ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.61	752 1	30.72	780.4	40.5	4.7	47	n.			3	0	2 n		n.	0	0	clear	M. André, Director.
Mans, Normal School	30.54	775.8	30.87	784.1	41.7	5.4	58	ne.			1		2		nne.	0	0	slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	30.14	765.5	30.41	772.5	55.0	12.8	38	nw.			1		3		ene.	0	0		M. Stephan, Director
Montlouis l'Institutenr	25.13	638.2	29.97	761.2	36.0	2.2	22	n.	28.0	12.5			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.37	771.3	30.50	774.7	51.8	11	43	nne.			3		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.98	761.4	30.79	782.0	46.8	8.2	59	n.			1		8 kn		n.	0.142	3.6	very cloudy	M. Hasse, Director
Nantes, Observatory	30.74	780.9	30.91	785.0	50.2	10.1	61	nne.			1-2	0	8k; kn		n.	0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.42	772.7	30.54	775.6	50.2	10.1	28	nw.	29.8	13.3			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.43	544.4			14.2	— 9.9		ne.			2		10		w.	0.039	1.0	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.55	750.5	30.66	778.8	43.2	6.2	85	n.			4		0			0	0	clear	M. Tallien.
Puy de Dôme Obs'y, Summit	25.57	649.4			21.7	—5.7	100	ne.			6		10			0.134	3.4	covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.78	781.8	30.81	782.6	49.1	9.5	97	ne.			2		0			0	0	clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.64	778.3	30.86	783.9	47.5	8.6	58	se.			1		0			0	0	clear	M. Mouillot, Director.
Rodez, Normal School	28.33	719.6	30.58	776.7	38.5	3.6	47	ne.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.82	782.8	30.87	784.0	46.4	8	86	n.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.75	781.0	30.91	785.0	46.8	8.2	66	nnw.			1		5		nnw.	0	0	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.67	779.1	30.84	783.3	46.0	7.8	63	sw.			1		5		n.	0	0	½ covered	M. Renou, Director.
Toulouse, Observatory	29.95	760.8	30.69	779.5	46.0	7.8	51	nw.			2		1		w.	0	0	clear	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.33	770.3	30.82	782.8	46.0	7.8	64	nw.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.56	776.3	30.85	783.7	49.1	9.5	57	nw.			1		6		n.	0	0		M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.77	756.1	30.64	778.2	37.4	3.0	77	nnw.			3	0	5 k		wnw.	0.087	2.2		Prof. Dr. Hoh.
Berlin	30.28	769.1	30.46	773.7	39.2	4.0	67	w.			4		8			0.059	1.5	raining	Prof. Dr. Arndt.
Breslau	29.87	758.6	30.41	772.3	34.0	1.1	53	wnw.			6		2			0.016	0.4		Royal University Obs'y.
Carlsruhe	30.30	769.7	30.77	781.6	41.0	5.0	68	sw.			2		10	nw.		0.016	0.4		Albert Senz.
Cassel	29.84	757.8	30.55	776.0	40.6	4.8	75	w.			3	0	7 n		w.	0.043	1.1		Dr. H. Möhl.
Frankfort on the Main	30.34	770.6	30.72	780.4	44.1	6.7	63	nw.			1		8			0.075	1.9		Physical Society.
Friedrichshafen	29.26	743.1	30.77	781.6	38.3	3.5	70	sw.			3		6	wsw.		0.008	0.2		Wilhelm, Chief Tel.
Hamburg	30.41	772.3	30.50	774.7	42.4	5.8	92	w.			4		10			0.016	0.4	hazy	E. Preller.
Kiel	30.40	772.2	30.42	772.6	41.4	5.2	84	w.			4		10			0.008	0.2		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.15	765.8	30.60	777.1	37.8	3.2	74	nw.			3		9	nw.		0	0		H. Leppig, Asst.
Magdeburg	30.35	770.9	30.55	776.0	40.6	4.8	74	wnw.			2	c	9 ks		nw.	0.063	1.6		Dr. Assmann.
Memel	30.01	762.2	30.06	763.4	32.2	0.1	69	nnw.			5	2 c	2						Issermann.
Munich	28.79	731.2	30.69	779.6	33.6	0.9	78	nw.			4		9	nw.		0.024	0.6	light snow	Central Station.
Neufahrwasser	30.20	767.0	30.21	767.4	36.7	2.6	55	nw.			4		0			0.098	2.5		A. Lothes.
Neustadt, Paintinate	30.19	766.7	30.72	780.4	42.3	5.7	63	calm.			0		9	n.		0.047	1.2		Dicknether.
Stuttgart	29.76	755.9	30.71	779.9	39.2	4.0	63	nw.			1		7	n.		0	0		Prof. Dr. Schoder.
Wustrow	30.37	771.3	30.39	771.9	38.1	3.4	92	wsw.			4		10			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.69	754.1	30.09	764.3	50.7	10.4		s.			0.5		10			0.634	16.1	raining	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	30.07	763.8	30.12	765.1	72.0	22.2	27	wsw.	18	8.0			0			0	0	blue sky	
Deesa	29.50	749.3	29.98	761.6	76.5	24.7	12	nw.	9.0	4.0			0			0	0	blue sky	
Bombay	29.90	759.5	29.94	760.5	77.6	25.3	48	nnw.	23	10.3			0			0	0	blue sky	
Poona, Yarrowda	28.02	711.8	29.87	758.6	82.8	28.2	11	wnw.	17	7.6			0			0	0	blue sky	
Belgaum	27.34	694.5	29.85	758.3	82.1	27.8	22	sw.	3	1.3			0			0	0	misty	
Lahore	29.34	745.2	30.11	764.9	63.4	17.4	24	calm	1.1	0.5			0			0	0	blue sky	
Roorkee	29.14	740.1	30.08	763.9	61.4	16.3	27	nw.	4.5	2.0			0			0	0		
Agra	29.48	748.7	30.06	763.5	71.3	21.8	16	nw.	6.8	3.0						0	0		
Nagpur	28.82	732.1	29.86	758.4	85.5	29.7	21	nw.	3.7	1.6			0			0	0	blue sky	
Jubbulpore	28.59	726.2	29.97	761.3	72.7	22.6	25	n.	3.6	1.6			0			0	0	blue sky	
Lucknow	29.61	752.0	29.99	761.7	75.2	24.0	16	wnw.	6.6	3.0			3	n.		0	0	d. clouds	
Allahabad	29.66	753.2	29.98	761.4	72.8	22.7		nw.	2.3	1.0			0			0	0	blue sky	
Patna	29.75	755.7	29.94	760.5	74.5	23.6	31	w.	4.9	2.2			0			0	0	blue sky	
Hazaribagh	27.91	708.9	29.95	760.6	73.8	23.2	16	nnw.	8.9	4.0			0			0	0	blue sky	
Cuttack	29.82	757.4	29.90	759.5	82.6	28.1	55	sse.	0.9	0.4			1			0	0	blue sky	
Calcutta, Alipore	29.92	760.0	29.94	760.5	76.6	24.8	41	w.	2.0	0.9			0			0	0	blue sky	
Dhubri	29.81	757.3	29.94	760.4	69.1	20.6	60	calm	1.5	0.7			0			0	0	blue sky	
Chittagong	29.86	758.4	29.95	760.8	72.4	22.4	58	w.	2.1	0.9			0			0	0	blue sky	
Sibsagar	29.63	752.6	29.98	761.4	63.7	17.6	79	ne.	3.4	1.5			6	e.	e.	0	0	d. clouds	
Jeypore	28.58	725.8	30.06	763.5	69.0	20.6	20	nw.	5.9	2.6			0			0	0	blue sky	
Zanzibar, Africa	29.82	757.4			86.2	30.1	55	nne.	13.4	6.0			1			0	0	blue sky	
Trichinopoly	29.62	752.3			91.0	32.8	37	e.	2	0.9			2			0	0	d. clouds	
Bellary	28.39	721.1			91.0	32.8	14	wnw.	8.5	3.8			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.97	761.3	30.40	772.1	50.4	10.2	32	ne.	3.8	1.7			0			0	0		Prof. Giovanni Clodig
Milan	29.89	759.2	30.43	772.9	54.1	12.3	10	n.	14.3	6.4			0			0	0		Prof. Schiaparelli.
Padua	30.30	769.6	30.41	772.5	48.4	9.1	42	s.	3.8	1.7			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.51	749.6	30.45	773.5	48.0	8.9	35	s.	3.8	1.7			0			0	0		Prof. P. F. Denza.
Genoa	30.20	767.0	30.39	772.0	52.2	11.2	16	n.	7.4	3.3			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.48	723.4	30.47	773.9	43.9	6.6	31	sw.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.36	771.1	30.41	772.4	46.6	8.1	44	ne.	12.5	5.6			0			0.146	3.7		Prof. Luigi Guidi.
Florence	30.11	764.8	30.37	771.5	50.0	10.0	27	ne.			6		0			0	0		Prof. Costantino Pitter.
Leghorn	30.21	767.4	30.30	769.6	51.1	10.6	31	ene.	3.8	1.7			0			0	0		Prof. P. Monte.
Rome	29.99	761.8	30.17	766.4	56.5	13.6	16	nne.	18.6	8.3			0			0	0		Prof. P. S. Ferrari.
Lecce	29.79	756.6	30.05	763.2	51.6	19.9	67	nw.	9.4	4.2			6	nw.		0	0		Prof. C. de Giorgi.
Cosenza	29.18	741.2	30.10	764.5	52.5	11.4	76	wnw.	6.9	3.1			7	nw.		0	0		Prof. D. Conti.
Cagliari	29.95	760.6	30.14	765.6	55.2	12.9	59	nw.			4		10			0	0		Prof. A. Pacinotti.
Palermo	29.83	757.7	30.09	764.2	56.1	13.4	62	nne.	13.0	6.1			6	n.		0.177	4.5		Prof. G. Ciacciatore.
Syracuse	29.97	761.1	30.01	762.3	56.5	13.6	69	ne.	14.3	6.4			9	ne.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.58	751.4	30.11	764.9	52.2	11.2	42	nne.	18.1	8.1			1	nne.		0	0		Prof. T. Brioschi.
Stelvio	22.35	567.7			11.3	—11.5		ne.			4		0			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.37	568.1			24.3	— 4.3	43	n.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.82	757.4	29.85	758.2	35.9	2.2	83	w.	1.3	0.6			10 n			0.008	0.2	light rain	
Hakodate	29.81	757.2	29.82	757.4	37.0	2.8	83	wsw.	10.8	4.8			9			0.125	3.2	overcast	
Hiroshima, I. M. Obs'y	29.91	759.7	29.92	759.9	43.7	6.5	62	nnw.	7.4	3.3			10 s			0	0		K. Sasaki.
Kanazawa	30.17	766.3	30.28	769.1	38.9	3.8	87	se.	6.6	2.9		ck	10 n		w.	0.190	4.8	light rain	S. Endo.
Kioto	29.72	754.9	29.90	759.4	41.8	5.4	75	nw.	2.0	0.9			10 s			0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.84	757.9	30.05	763.3	42.5	5.8	68	nw.	2.4	1.1		0	5 s			0.010	0.3		S. Takehayashi.
Niigata	29.84	757.9	29.88	758.9	39.6	4.2	90	sw.	4.1	1.8		10 ck	0			0.145	3.7	covered	
Nobiru	29.83	757.7	29.85	758.2	37.1	2.8	87	nnw.	3.6	1.6		0	5 s			0.060	1.5	fair	H. Midzushina.
Sapporo					31.7	— 0.2	100	e.	3.0	1.3			10			imap.	imap.	snowing	
Tokei Obs'y, Yeddo	29.77	756.1	29.84	757.9	44.0	6.7	91	ene.	4.4	2.0			10 n			0.044	1.1	light rain	The Staff.
Wakayama	29.86	758.4	29.91	759.7	44.1	6.7	76	nw.	1.8	0.8		10ck	0			0	0	cloudy	Y. Kuwamnea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.44	621.1	30.25	768.2	51.4	10.8	76	nw.			1	5 c	0	w.		0	0	½ cloudy	Prof. M. Leal.
Mazatlan	29.85	758.2	30.12	765.0	62.0	16.7	80	nw.	11.0	4.9		3 ck	0	sw.		0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.4	30.26	768.7	49.8	9.9	69	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.30	619.3	30.50	774.9	54.0	12.2	80	se.			6	1 c	1 k	s.	s.	0	0		M. Tena, M. D.
Pabellon, Aguascalientes	23.99	609.2	30.10	764.4	48.9	9.4	69									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.45	595.7	30.35	770.9	45.5	7.5	82	calm	0	0		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.20	614.7	30.23	768.0	58.8	14.9	58	e.			1	6	0	w.		0	0	½cloudy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.56	573.0	30.28	769.1	48.1	9.0	70	sw.	10.7	4.6		0	2 s			0	0	clear	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.71	754.6	29.90	759.4	81.0	27.2	64	wsw.	4.0	1.8	.....	0	8 k;ks	.....	sw.	0.10	2.5	fair.....	Oliver & Figot.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.76	781.2	30.76	781.2	45.0	7.2	.....	w	.....	.....	4	.....	.....	.....	.....	0.047	1.2	.....	
Groningen	30.54	775.6	30.59	777.0	43.7	6.5	.....	w.	.....	.....	4	.....	.....	.....	.....	0.039	1.0	.....	
Helder	30.63	778.1	30.63	778.1	42.4	5.8	.....	w.	.....	.....	4	.....	.....	.....	.....	0.024	0.6	.....	
Hellevoetsluis	30.71	780.1	30.71	780.1	43.9	6.6	82	w.	.....	.....	4	.....	.....	.....	.....	0.020	0.5	.....	
Utrecht	30.64	778.2	30.69	779.4	46.2	7.9	81	w.	.....	.....	2	.....	8	.....	.....	0	0	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.89	759.1	29.95	760.7	45.0	7.2	98	w.	25	11	.....	.....	10	.....	.....	0.890	22.6	raining.....	
Brono	29.56	750.9	29.60	751.9	27.0	— 2.8	74	nnw.	27	12	.....	.....	10	.....	.....	0	0	.....	
Christiania	29.68	753.9	29.83	757.7	38.7	3.7	69	ssw.	4	2	.....	.....	5	.....	.....	0	0	.....	
Gjæsvær	28.58	725.8	28.60	726.4	21.2	— 6.0	.....	se.	.....	.....	6	.....	3	.....	.....	.....	.....	.....	
Lodingen	28.90	734.0	28.95	735.2	22.8	— 5.1	93	w.	.....	.....	7–8	.....	10	.....	.....	0.413	10.5	snowing.....	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	60.1	15.6	71	se.	19.9	8.9	.....	.....	4	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.35	745.6	30.38	771.6	53.2	11.8	46	ene.	17.4	7.8	.....	.....	8	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.22	767.7	30.31	769.9	62.6	17.0	52	ne.	3.1	1.4	.....	.....	5	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	30.03	762.7	30.40	772.1	52.5	11.4	47	ne.	23.0	10 3	.....	.....	6	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.38	771.6	30.45	773.4	61.9	16.6	66	ese.	9.8	4.4	.....	.....	4	.....	.....	0	0	.....	
Saint Paul de Loando	29.67	753.5	29.86	758.5	86.0	30.0	74	w.	0.7	0.3	.....	.....	2	sse.	.....	0	0	.....	
Serra da Estrella	25.54	648.6	30.50	774.6	31.6	— 0.2	76	sse.	40.9	18.3	.....	.....	1	.....	.....	0	0	.....	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.23	742.5	30.45	773.4	— 1.3	—18.5	.....	sse.	4	2	.....	0	3 s	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	29.53	750.1	29.55	750.6	9.7	—12.4	88	ese.	9	4	.....	.....	8 ks	.....	.....	0	0	.....	Capt. Sselliwerstow.
Astrakhan	30.37	771.5	30.29	769.4	30.0	— 1.1	65	wsw.	11	5	.....	10 cp	0	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	30.04	762.9	30.59	776.9	13.1	—10.5	84	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	29.48	748.7	29.73	755.2	23.7	— 4.6	74	wnw.	13	6	.....	.....	10 n	.....	.....	0	0	.....	Observatory.
Ekaterinburg	29.01	736.9	30.01	762.3	29.5	— 1.4	74	wsw.	13	6	.....	.....	10	.....	.....	0.004	0.1	.....	Meteorological Obs'y.
Kasan	29.69	754.0	29.98	761.4	15.1	— 9.4	72	sse.	2	1	.....	.....	10	.....	.....	0.024	0.6	light snow...	Observatory.
Kertch	30.13	765.2	30.15	765.7	42.3	5.7	58	s.	7	3	.....	0	8 n	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	29.19	741.4	29.84	758.0	36.3	2.4	47	wsw.	7	3	.....	c	7 ks	.....	.....	0	0	.....	Observatory.
Lugan	29.80	756.8	30.01	762.2	34.3	1.3	76	ssw.	13	6	.....	.....	10	.....	.....	blank	blank	.....	Meteorological Obs'y.
Moscow	29.00	736.5	29.49	749.1	28.9	— 1.7	86	s.	7.8	3.5	.....	.....	10 s	.....	.....	0.134	3.4	snowing.....	Meteorological Obs'y.
Nikolaiev	29.99	761.7	30.06	763.5	36.0	2.2	96	nnw.	9	4	.....	.....	10 n	.....	.....	0	0	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor.	30.00	762.0	30.09	764.2	8.6	—13.0	89	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	30.28	769.0	30.42	772.5	26.8	— 2.9	36	nw.	13	6	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.51	749.6	29.53	750.0	25.3	— 3.7	82	nw.	11	5	.....	.....	10 n	.....	.....	0.035	0.9	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.62	727.0	30.26	768.6	38.3	3.5	60	calm	0	0	.....	.....	2	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.85	732.8	30.34	770.5	38.3	3.5	44	nw.	22	10	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	29.94	760.5	30.01	762.2	19.8	— 6.8	87	n.	9	4	.....	.....	10 k	.....	.....	0	0	.....	
Warsaw	29.76	755.8	30.20	767.1	32.0	0.0	65	nw.	25	11	.....	.....	10 ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.45	748.1	29.89	759.3	27.7	— 2.4	75	nw.	9	4	.....	.....	10	.....	.....	0.055	1.4	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.26	768.6	30.57	776.5	21.4	— 5.9	74	w.	11	5	.....	.....	10	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.42	772.9	50	10.0	93	w.	.....	.....	4	.....	10	.....	.....	0.3	8.	hazy.....	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.34	770.6	30.45	773.4	54.9	12.7	63	sw.	3.4	1.5	.....	.....	0	.....	.....	0	0	clear.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.72	780.2	30.78	781.7	46.8	8.2	68	se.	2.9	1.3	.....	2	3	ne.	.....	0.012	0.3	cloudy.	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.53	699.2	30.66	778.8	39.2	4.0	61	n.	15.0	6.7	.....	0	0	.....	.....	0	0	clear.....	Domingo Martin.
Madrid, Royal Obs'y	28.19	716.0	30.49	774.4	49.6	9.8	31	ne.	21.0	9.4	.....	0	0	.....	.....	0	0	clear.....	The Staff.
Murcia, Met. Obs'y	30.28	769.0	30.43	772.9	57.7	14.3	64	se.	4.3	1.9	.....	2	4	nw.	.....	0	0	cloudy.....	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.61	752.0	30.53	775.5	51.6	10.9	46	ne.	37.8	16.9	.....	0	0	.....	.....	0	0	clear.....	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.11	764.7	30.17	766.4	71.6	22.0	74	ese.	11.4	5.1	.....	9 ck	0	e.	.....	0	0	cloudy	Benito Vines, S. J.
Manilla, Philippine Islands	29.87	758.6	29.93	760.1	79.8	26.6	75	ese.	1.3	0.6	.....	0	2 ks	.....	e.	0.039	1.0	clear.....	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.18	766.6	30.28	769.1	60.3	15.7	58	e.	22.9	10.3	.....	2	2	e.	se.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.04	763.1	30.13	765.4	73.4	23.0	92	se.	17.2	7.7	.....	2 s	5 k	se.	se.	0.165	4.2	d. clouds.....	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.82	757.4	29.96	761.0	76.3	24.6	79	nw.	6.3	2.8	.....	0	6 ks	.....	nne.	0	0	cloudy.....	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.14	740.2	29.18	741.2	20.8	— 6.2	90	sw.	.....	.....	2	.....	0	.....	.....	0.051	1.3	.....	
Umea	29.29	744.0	29.34	745.3	31.6	— 0.2	92	w.	.....	.....	2	.....	1	.....	.....	0	0	.....	
Hernosand	29.40	746.8	29.45	748.1	36.1	2.3	60	wsw.	.....	.....	4	.....	5	.....	.....	0.130	3.3	.....	
Stockholm	29.59	751.5	29.76	756.0	36.0	2.2	51	wsw.	.....	.....	4	.....	2	.....	.....	0.067	1.7	.....	
Wisby	29.91	759.7	29.97	761.2	33.1	0.6	68	w.	.....	.....	6	.....	0	.....	.....	0.031	0.8	.....	
Sub-Series.																			
Upsala	29.64	752.8	29.72	755.0	33.1	0.6	63	sw.	13.0	5.8	.....	.....	3	nw.	.....	0	0	.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.17	740.9	30.64	778.3	39.2	4.0	48	nne.	.....	.....	2	.....	.....	.....	.....	0	0	clear.....	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.11	764.9	51.4	10.8	50	se.	6	2.5	.....	.....	6	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	30.04	763.1	55.0	12.8	.....	s.	.....	.....	1	.....	5	.....	.....	0	0	cloudy.....	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.19	766.9	58.6	14.8	53	n.	.....	.....	1	3 c	0	sw.	.....	0.10	2.5	.....	Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	29.94	760.5	30.03	762.7	38.7	3.7	57	calm	0	0		9 cs	0			0.10	2.5	cloudy	
Alpena, Michigan	29.52	749.8	30.23	767.8	21.5	— 5.8	84	nw.	7	3.1			10 n			0.08	2.0	light snow	
Atlanta, Georgia	28.98	736.1	30.20	767.1	51.5	10.8	93	e.	9	4.0			10 s		calm	0	0	cloudy	
Atlantic City, New Jersey	30.05	763.3	30.06	763.5	41	5.0	96	nw.	4	1.8			10 s		nw.	0.35	8.9	cloudy	
Augusta, Georgia	30.04	763.0	30.24	768.1	56.4	13.6	93	calm	0	0		2 cs	fg.			0	0	clear	
Baltimore, Maryland	30.04	763.0	30.09	764.3	44	6.7	93	e.	2	0.9			10s;fg			0.77	19.6	threatening.	
Barnegat, New Jersey	30.04	763.0	30.06	763.5	38.3	3.5	89	nw.	5	2.2			10 s		w.	0.49	10.2	cloudy	
Bismarck, Dakota	28.29	718.6	30.27	768.8	—19	—28.3	100	e.	3	1.3		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.47	697.7	30.43	772.9	12	—11.1	91	e.	1	0.4		0	6 s		calm	0	0	fair	
Boston, Massachusetts	29.81	757.2	29.97	761.2	28.0	— 2.2	82	w	7	3.1		5 c	fg.	w.		0.03	0.8	fair	
Brownsville, Texas	29.76	755.9	29.81	757.2	73	22.8	90	s.	24	10.7		7 c	0			0	0	fair	
Buffalo, New York	29.38	746.2	30.18	766.6	29	— 1.7	81	n.	10	4.5			10 s		n.	0.03	0.8	cloudy	
Burlington, Vermont	29.76	755.9	30.07	763.8	25.5	— 3.6	63	n.	17	7.6		4 ck	5 s	nw.	n.	0.02	0.5	cloudy	
Cairo, Illinois	29.49	749.0	29.91	759.7	53.0	11.7	92	se.	2	0.9			10 s		se.	0.06	1.5	threatening.	
Campo, California	27.62	701.5	30.26	768.6	19.3	— 7.1	87	sw.	1	0.4		0	0			0.25	6.3	clear	
Camp Thomas, Arizona	27.35	694.7	30.18	766.6	34	1.1	85	nw.			1	2 cs	4 ks	nw.	nw.	inap.	inap.	fair	
Cape Henry, Virginia	30.06	763.5	30.08	764.0	57	13.9	80	sw.	18	8.0		0	0			0.21	5.3	clear	
Cape May, New Jersey	30.04	763.0	30.07	763.8	43	6.1	83	n.	11	4.9			fg.			0.39	9.9	dense fog	
Castroville, Texas	28.99	736.3	29.83	757.7	70	21.1	84	s.	8	3.6			10 s			0	0	cloudy	
Cedar Keys, Florida	30.21	767.3	30.23	767.8	68	20.0	84	se.	6	2.7		0	7 ks		se.	0	0	fair	
Champaign, Illinois	29.14	740.1	30.01	762.2	35.3	1.8	85	ne.	5	2.2			10 n		ne.	0.94	23.9	light rain	
Charleston, S. Carolina	30.18	766.6	30.24	768.1	60	15.6	93	sw.	7	3.1		0	0			0	0	clear	
Charlotte, N. Carolina	29.27	743.4	30.16	766.1	53.0	11.7	93	sw.	12	5.4		0	5 s;fg		sw.	0.02	0.5	fair	
Chattanooga, Tennessee	29.30	744.2	30.16	766.1	57.5	14.2	88	se.	3	1.3		6 ck	fg.	s.	calm	0	0	fair	
Cheyenne, Wyoming	23.72	602.5	29.97	761.2	15.2	— 9.3	56	nw.	20	8.9			10 s			inap.	inap.	cloudy	
Chicago, Illinois	29.35	745.5	30.10	764.5	32.8	0.4	82	ne.	16	7.2			10 s			0	0	cloudy	
Chincoteague, Virginia	30.04	763.0	30.06	763.5	48	8.9	100	nw.	8	3.6			10 s		nw.	0.34	8.6	cloudy	
Cincinnati, Ohio	29.35	745.5	30.04	763.0	47	8.3	86	n.	5	2.2			10 n			1.52	38.6	light rain	
Cleveland, Ohio	29.38	746.2	30.17	766.3	33.5	0.8	83	ne.	10	4.5			10 s			0.44	11.2	cloudy	
Coleman City, Texas	28.08	713.2	29.96	761.0	31	— 0.6	100	nw.	32	14.3			10 n		n.	0.78	19.8	light rain	
Columbus, Ohio	29.19	741.4	30.09	764.3	43	6.1	100	ne.	6	2.7			10 n		ne.	1.79	45.5	heavy rain	
Concho, Texas	27.95	709.9	29.97	761.2	36	2.2	100	nw.	24	10.7		0	0			2.10	53.3	clear	
Davenport, Iowa	29.38	746.2	30.08	764.0	29	— 1.7	67	ne.	12	5.4			10 s		ne.	0.03	0.8	cloudy	
Dayton, Washington T'y	28.46	722.9	30.27	768.8	17	— 8.3	73	sw.	1	0.4			10 s		sw.	0	0	cloudy	
Deadwood, Dakota	25.17	639.3	30.09	764.3	1	—17.2	75	calm	0	0		0	0			0	0	clear	
Decatur, Texas					34	1.1	100	n.	20	8.9			10 s			0.85	21.6	heavy rain	
Delaware Breakwater, Del.	30.04	763.0	30.06	763.5	41	5.0	100	n.	14	6.3			10s;fg		w	0.26	6.6	cloudy	
Denison, Texas	28.94	735.1	29.78	756.4	42.0	5.6	100	se.	8	3.6			10 n			0.81	20.6	light rain	
Denver, Colorado	24.46	621.3	29.98	761.5	22.0	— 5.0	76	nw.	2	0.9			10 s		calm	0.10	2.5	cloudy	
Des Moines, Iowa	29.12	739.6	30.09	764.3	18	— 7.8	67	ne.	12	5.4			10 s		ne.	0.01	0.3	cloudy	
Detroit, Michigan	29.42	747.3	30.18	766.6	36.0	2.2	79	ne.	13	5.8		0	1 s		e.	0.01	0.3	clear	
Dodge City, Kansas	27.27	692.6	30.01	762.2	12.9	—10.6	100	n.	9	4.0			10 n			0.14	3.6	light snow	
Dubuque, Iowa	29.38	746.2	30.14	765.5	22.2	— 5.4	73	ne.	10	4.5			10 s		n.	0	0	cloudy	
Duluth, Minnesota	29.57	751.1	30.33	770.4	5	—15.0	76	w.	14	6.3			10 s		w.	0	0	cloudy	
Eagle Pass, Texas	29.03	737.3	29.87	758.7	69.1	20.6	93	s.	8	3.6			10 s			0	0	cloudy	
Eagle Rock, Idaho	25.40	645.1	30.30	769.6	—13	—25.0	61	w.	5	2.2		0	6 s			0	0	fair	
Eastport, Maine	29.79	756.7	29.86	758.4	25	— 3.9	73	nw.	11	4.9			10 s		nw.	0.06	1.5	cloudy	
El Paso, Texas	26.26	667.0	30.14	765.5	33	0.6	71	w.	9	4.0		0	0			0	0	clear	
Erie, Pennsylvania	29.40	746.7	30.17	766.3	34	1.1	88	n.	8	3.6			10 s			0.21	5.3	cloudy	
Escanaba, Michigan	29.53	750.0	30.25	768.3	18	— 7.8	91	n.	7	3.1			10 n		n.	inap.	inap.	light snow	
Fort Apache, Arizona	25.06	636.5	30.16	766.1	18	— 7.8	61	nw.	2	0.9			10 s		calm	0.48	12.2	cloudy	
Fort Assinnaboine, Montana	27.08	687.8	30.12	765.0	— 6	—21.1	64	sw.	11	4.9		0	0			0	0	clear	
Fort Bennett, Dakota	28.54	724.9	30.27	768.8	4	—15.6	76	se.	6	2.7			10 s			0	0	cloudy	
Fort Benton, Montana	27.12	688.8	30.12	765.0	—16	—26.7	44	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	28.07	713.0	30.25	768.3	—24	—31.1	100	calm	0	0		0	0			0	0	clear	
Fort Custer, Montana	26.77	679.9	30.13	765.3	—10	—23.3	57	s.	3	1.3		0	0			0	0	clear	
Fort Davis, Texas	25.10	637.5	30.06	763.5	35	1.7	72	s.	26	11.6		0	0			0	0	clear	
Fort Elliott, Texas	27.08	687.8	29.98	761.5	13	—10.6	64	ne.			2	0	0			0.16	4.1	clear	
Fort Gibson, Indian T'y	29.12	739.6	29.72	754.9	39.5	4.2	100	e.	8	3.6			10 n			0.38	9.7	heavy rain	
Fort Grant, Arizona	25.28	642.1	30.14	765.5	28	— 2.2	61	ne.	5	2.2		0	7 s			0.01	0.3	fair	
Fort Griffin, Texas	28.64	727.4	30.01	762.2	28	— 2.2	77	calm	0	0			10 s		n.	0.98	24.9	cloudy	
Fort Keogh, Montana	27.48	698.0	30.16	766.1	—27	—32.8		sw.	5	2.2		0	0			0	0	clear	
Fort Macon, North Carolina	30.21	767.3	30.22	767.6	57	13.9	86	w.	7	3.1		8 k	hz.	w.	calm	0	0	cloudy	
Fort McKavett, Texas	27.72	704.1	30.10	764.5	44.3	6.8	76	w.	30	13.4			10 ks		s.	0.01	0.3	cloudy	
Fort Missoula, Montana	26.83	681.5	30.26	768.6	— 1	—18.3	100	nw.	1	0.4		0	0			0	0	clear	
Fort St. Michaels, Alaska	29.61	752.1	29.65	753.1	—21	—29.4	100	sw.	5	2.2		0	5 s			0	0	fair	
Fort Shaw, Montana	26.23	666.2	30.08	764.0	16	— 8.9	70	sw.	21	9.4		0	8 s			0	0	cloudy	
Fort Sill, Indian Territory	28.64	727.4	29.95	760.7	24.3	— 4.3	95	nw.	12	5.4			10 n			1.07	27.2	sleeting	
Fort Stevenson, Dakota	28.24	717.3	30.26	768.6	—30	—34.4	100	nw.	3	1.3		0	0			0	0	clear	
Fort Verde, Arizona					27.1	— 2.7	67	n.			1	0	0			0.02	0.5	clear	
Fort Washakie, Wyoming	24.27	616.4			—16.6	—27.0	52	w.	3	1.3		0	0			0	0	clear	
Fredericksburg, Texas	28.06	712.7	29.86	758.4	66	18.9	93	sw.	10	4.5			10 ks		sw.	0.01	0.3	threatening.	
Galveston, Texas	29.89	759.2	29.93	760.2	69	20.6	90	s.	10	4.5			10 s			0.23	5.8	cloudy	
Grand Haven, Michigan	29.43	747.5	30.14	765.5	30.0	— 1.1	78	ne.	10	4.5			10 s		ne.	0	0	cloudy	
Hatteras, North Carolina	30.15	765.8	30.17	766.3	58	14.4	86	sw.	24	10.7		4 c	fg.	w.		0.04	1.0	fair	
Helena, Montana	25.77	654.5	30.17	766.3	—10	—23.3	57	calm	0	0			10 s			0	0	cloudy	
Henrietta, Texas	28.96	735.6	30.01	762.2	26	— 3.3	100	n.					10 n			0.39	9.9	light rain	
Huron, Dakota	28.75	730.2	30.27	768.8	0.2	—17.7	59	ne.	11	4.9			10 s			0	0	cloudy	
Indianapolis, Indiana	29.16	740.7	30.01	762.2	39	3.9	86	e.	6	2.7			10 n		e.	2.00	50.8	light rain	
Indianola, Texas	29.83	757.7	29.86	758.4	70.7	21.5	90	s.	19	8.5		5 k	5 ks	s.	s.	0	0	threatening	
Jacksboro, Texas	28.71	729.2	29.95	760.7	30	— 1.1	100	nw.	17	7.6			10 n			0.68	17.3	thund'rst'm.	
Jacksonville, Florida	30.22	767.6	30.28	769.1	61	16.1	87	se.	3	1.3		0	fg.			0	0	clear	
Keokuk, Iowa	29.28	743.7	29.98	761.5	29.5	— 1.4	84	ne.	10	4.5			10 s		ne.	0.02	0.5	cloudy	
Key West, Florida	30.17	766.3	30.20	767.1	72.0	22.2	71	e.	10	4.5			9 s		e.	inap.	inap.	cloudy	
Kittyhawk, North Carolina	30.13	765.3	30.15	765.8	56	13.3	90	sw.	15	6.7		4 c	0	nw.		inap.	inap.	fair	
Knoxville, Tennessee	29.07	738.4	30.15	765.8	58	14.4	87	sw.	5	2.2			10 s		sw.	inap.	inap.	threatening	
La Crosse, Wisconsin	29.35	745.5	30.19	766.8	12	—11.1	80	n.	12	5.4			10 s		n.	0	0	cloudy	
La Mesilla, New Mexico	26.09	662.7	30.10	764.5	29.7	— 1.3	72	w.	2	0.9		0	1 s			0	0	clear	
Leavenworth, Kansas	28.98	736.1	29.93	760.2	25	— 3.9	88	n.	10	4.5			10 n			0.27	6.9	sleeting	
Lewiston, Idaho	29.46	748.3	30.33	770.4	25	— 3.9	67	ne.	8	3.6			10 s		ne.	0	0	cloudy	
Little Rock, Arkansas	29.48	748.8	29.81	757.2	66	18.9	93	s.	12	5.4			10 s		s.	0.57	14.5	cloudy	
Los Angeles, California	29.83	757.7	30.23	767.8	34.2	1.2	79	ne.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	29.33	745.0	29.92	760.0	52.5	11.4	95	ne.	12	5.4			10 n		calm	2.50	63.5	light rain	
Lynchburg, Virginia	29.35	745.5	30.07	763.8	50.0	10.0	86	nw.	1	0.4		5 c	fg	w.		0.06	1.5	fair	
Mackinac City, Michigan																			
Madison, Wisconsin	29.09	738.9	30.18	766.6	19	— 7.2	84	ne.	11	4.9			10 s		n.	0	0	cloudy	
Marquette, Michigan	29.50	749.3	30.28	769.1	19	— 7.2	70	ne.	5	2.2			10 s		calm	0.01	0.3	cloudy	
Mason, Texas	28.14	714.7	29.86	758.4	68.8	20.4	84	w.	14	6.3			10 s		w.	0	0	cloudy	
Memphis, Tennessee	29.58	751.3	29.93	760.2	66	18.9	93	se.	8	3.6			10 n		se.	0.47	11.9	light rain	
Milwaukee, Wisconsin	29.34	745.2	30.14	765.5	28	— 2.2	88	n.	13	5.8			10 s		ne.	0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.06	763.5	30.10	764.5	63.0	17.2	93	se.	5	2.2		7 c	0			0.03	0.8	fair	
Montgomery, Alabama	29.90	759.4	30.14	765.5	62	16.7	78	s.	5	2.2		2 cs	0			0	0	clear	
Moorhead, Minnesota	29.29	744.0	30.39	771.9	—15	—26.1	100	calm	0	0			10 s			0	0	cloudy	
Morgantown, W. Virginia	29.06	738.1	30.13	765.3	48.8	9.3	84	calm	0	0			10 n			0.90	22.9	light rain	
Mt. Washington, N. H.	23.27	591.0	29.89	759.2	6.5	—14.2	91	nw.	70	31.2			fg		nw.	0.52	13.2	dense fog	
Nashville, Tennessee	29.44	747.8	30.00	762.0	63.7	17.6	91	s.	12	5.4			10 n		s.	0.31	7.9	light rain	
New Haven, Connecticut	29.90	759.4	30.02	762.5	34	1.1	94	w.	6	2.7		10 c	sk	sw.		0.22	5.6	cloudy	
New London, Connecticut	29.97	761.2	30.02	762.5	35	1.7	89	w.	5	2.2			10 s		calm	0.23	5.8	cloudy	
New Orleans, Louisiana	29.98	761.5	30.04	763.0	67.0	19.4	90	se.	10	4.5		2 c	hz			0	0	clear	
Newport, Rhode Island	29.93	760.2	29.98	761.5	35.7	2.1	90	w.	9	4.0		6 c	2 ks	nw.	w.	0.16	4.1	cloudy	
New River, N. Carolina					53	11.7	93	sw.			1	3 cs	4 s			0	0	fair	
New Shoreham, Rhode I'd.	29.97	761.2	30.00	762.0	39.0	3.9	89	nw.	12	5.4		4 cs	4 ks	n.	n.	0.47	11.9	cloudy	
New York, New York	29.87	758.7	30.06	763.5	38	3.3	89	sw.	4	1.8			10 s		sw.	0.20	5.1	cloudy	
Norfolk, Virginia	30.07	763.8	30.10	764.5	55	12.8	86	w.	14	6.3		2 c	3 ks	n.		0.12	3.0	fair	
North Platte, Nebraska	26.98	685.3	30.08	764.0	12.6	—10.8	82	e.	6	2.7			10 s			0.02	0.5	cloudy	
Olympia, Washington T'y.	30.10	764.5	30.14	765.5	30.5	— 0.8	92	s.	3	1.3			10 n		calm	0.19	4.8	light snow	
Omaha, Nebraska	28.78	731.0	30.06	763.5	12.5	—10.8	89	ne.	12	5.4			10 n			inap.	inap.	light snow	
Ooglaamie, Pt. Barrow, Alas.	29.72	754.9	29.74	755.4	—16.2	—26.8	63	nne.	22	9.8			10 s			0	0	cloudy	
Oswego, New York	29.76	755.9	30.11	764.8	32.0	0.0	68	nw.	10	4.5		4 cs	3 k	nw.	nw.	0.10	2.5	fair	
Palestine, Texas																			
Pensacola, Florida	30.11	764.8	30.14	765.5	67.4	19.7	86	se.	17	7.6		5 cs	0			0	0	fair	
Philadelphia, Pa.	29.98	761.5	30.09	764.3	42	5.6	82	w.	2	0.9			10 ks		w.	0.35	8.9	cloudy	
Pike's Peak, Colorado	17.18	436.4	29.90	759.4	— 6.5	—21.4	86	ne.	8	3.6			10 n		ne.	0.09	2.3	light snow	
Pioche, Nevada	24.07	611.4	30.23	767.8	6	—14.4	79	nw.	4	1.8		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.27	743.4	30.13	765.3	44.7	7.1	80	n.	5	2.2			10s; fg		n.	0.25	6.3	cloudy	
Port Eads, Louisiana	30.08	764.0	30.09	764.3	65.2	18.4	97	se.	16	7.2		2 cs	hz	sw.		0	0	clear	
Port Huron, Michigan	29.45	748.0	30.18	766.6	28.0	— 2.2	80	ne.	16	7.2			10 s		ne.	0	0	cloudy	
Portland, Maine	29.88	758.9	29.92	760.0	27.0	— 2.8	82	nw.	3	1.3			8 s		nw.	0.23	5.8	cloudy	
Portland, Oregon	30.15	765.8	30.22	767.6	26.2	— 3.2	88	n.	2	0.9			10 n		calm	0.01	0.3	light snow	
Portsmouth, N. Carolina					56	13.3	80	sw.	13	5.8		6 c	0	s.		0	0	fair	
Prescott, Arizona	24.75	628.6	30.11	764.8	6	—14.4	79	calm	0	0		0	0			0.03	0.8	clear	
Provincetown, Mass.	29.93	760.2	29.96	761.0	33	0.6	88	nw.	10	4.5			10 s			0.05	1.3	cloudy	
Punta Rassa, Florida	30.21	767.3	30.22	767.6	64	17.8	87	e.	6	2.7		2 c	0	w.		0	0	clear	
Red Bluff, California	29.98	761.5	30.36	771.1	31.4	— 0.3	83	nw.	1	0.4		0	2 s			0	0	clear	
Rio Grande City, Texas	29.55	750.6	29.80	756.9	71	21.7	82	s.	6	2.7		5 c	0	calm		0	0	fair	
Rochester, New York	29.44	747.8	30.14	765.5	29	— 1.7	77	n.	5	2.2			10 ks		nw.	0.05	1.3	cloudy	
Roseburg, Oregon	29.67	753.6	30.24	768.1	33	0.6	92	e.	2	0.9			10 n			0.01	0.3	light snow	
Sacramento, California	30.29	769.4	30.37	771.4	32.7	0.4	78	se.	6	2.7		0	0			0	0	clear	
St. Louis, Missouri	29.29	744.0	29.93	760.2	39.8	4.3	100	n.	8	3.6			10 n			4.44	112.8	light rain	
St. Paul, Minnesota	29.32	744.7	30.26	768.6	4.0	—15.6	72	nw.	3	1.3			10 s			0	0	cloudy	
St. Vincent, Minnesota	29.40	746.7	30.37	771.4	—34	—36.7	100	se.	1	0.4		0	0			0	0	clear	
Salt Lake City, Utah	25.76	654.3	30.32	770.1	8	—13.3	58	se.	1	0.4		0	0			0	0	clear	
San Antonio, Texas	29.09	738.9	29.81	757.2	68.5	20.3	100	s.	8	3.6			10 k		s.	0.04	1.0	cloudy	
San Diego, California	30.20	767.1	30.27	768.8	40.3	4.6	81	ne.	5	2.2		0	0			0.01	0.3	clear	
Sandusky, Ohio	29.41	747.0	30.13	765.3	35.2	1.8	79	ne.	13	5.8			10 s			0.37	9.4	cloudy	
Sandy Hook, New Jersey	30.01	762.2	30.05	763.3	38.0	3.3	82	nw.	9	4.0		10 k	0	nw.		0.48	12.2	cloudy	
San Francisco, California	30.29	769.4	30.36	771.1	40	4.4	82	sw.	5	2.2		1 cs	0	w.		0	0	clear	
Santa Fé, New Mexico	22.97	583.4	30.01	762.2	15	— 9.4	70	w.	7	3.1		0	0			inap.	inap.	clear	
Savannah, Georgia	30.16	766.1	30.25	768.3	61	16.1	87	s.	6	2.7		0	0			0	0	clear	
Shreveport, Louisiana	29.60	751.8	29.85	758.2	68	20.0	84	s.	9	4.0			10 s		s.	1.70	43.2	cloudy	
Silver City, New Mexico	24.17	613.9	30.02	762.5	24	— 4.4	67	w.	6	2.7		0	3 s		calm	0.08	2.0	clear	
Sitka, Alaska	29.69	754.1	29.76	755.9	35.1	1.7	74	sw.	12	5.4			10 ks		sw.	0.51	13.0	cloudy	
Smithville, North Carolina	30.21	767.3	30.25	768.3	56	13.3	100	w.	7	3.1		5 c	0			0	0	fair	
Spokane Falls, Wash. Ter.	28.17	715.5	30.30	769.6	15	— 9.4	83	calm	0	0			10 s			0	0	cloudy	
Springfield, Illinois	29.25	742.9	29.98	761.5	37.5	3.1	94	ne.	17	7.6			10 n		ne.	2.01	51.1	light rain	
Springfield, Massachusetts	29.88	758.9	30.02	762.5	29.0	— 1.7	80	s.	2	0.9		9 k	fg	w.		0.05	1.3	cloudy	
Springfield, Mo.	28.39	721.1	29.96	761.0	39.5	4.2	92	nw.	8	3.6			10 n			1.56	39.6	thnd'r str'm	
Stockton, Texas	26.92	683.8	30.04	763.0	43.0	6.1	60	nw.	20	8.9		0	1 s		nw.	0	0	clear	
Thatcher's Island, Mass.	29.91	759.7	29.97	761.2	31.5	— 0.3	88	w.	12	5.4		3 k	2 s	nw.	nw.	0.02	0.5	fair	
Toledo, Ohio	29.41	747.0	30.15	765.8	35	1.7	69	n.	15	6.7			10 s		ne.	0.29	7.4	cloudy	
Tucson, Arizona	27.70	703.6	30.18	766.6	35	1.7	89	se.	2	0.9		0	4 ks			0.18	4.6	fair	
Umatilla, Oregon	30.00	762.0	30.38	771.6	23.0	— 5.0	80	ne.	3	1.3			10 s			0	0	cloudy	
Uvalde, Texas	28.82	732.0	29.82	757.4	70	21.1	90	s.	4	1.8			10 ks		s.	inap.	inap.	cloudy	
Vicksburg, Mississippi	29.70	754.4	29.97	761.2	70	21.1	76	s.	10	4.5		0	8 ks		s.	inap.	inap.	cloudy	
Visalia, California	29.92	760.0	30.30	769.6	33	0.6	83	s.	2	0.9		0	0			0	0	clear	
Washington, D. C.	29.97	761.2	30.09	764.3	44	6.7	93	n.	1	0.4			10 n		n.	0.68	17.3	light rain	
West Los Animas, Colorado	25.80	655.3	29.94	760.5	11	—11.7	87	calm	0	0			10 s		calm	0.02	0.5	cloudy	
Wickenburg, Arizona					33.1	0.6	88	nw.			1	0	0			0.24*	6.1*	clear	
Williamsport, Pa.	29.47	748.5	30.10	764.5	37	2.8	89	nw.	3	1.3			10 s			0.19	4.8	cloudy	
Wilmington, N. Carolina	30.17	766.3	30.23	767.8	60	15.6	80	sw.	8	3.6		7 c	0	calm		0	0	fair	
Winnemucca, Nevada	25.77	654.5	30.29	769.4	—10	—23.3	57	ne.	6	2.7		0	0			0	0	clear	
Wood's Holl, Mass.																			
Yankton, Dakota	28.78	731.0	30.20	767.1	3	—16.1	72	ne.	9	4.0			10 n			inap.	inap.	light snow	
Yuma, Arizona	30.09	764.3	30.24	768.1	44.9	7.2	53	n.	4	1.8		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.01	559.0			53.0	11.7	82	n.	1	0.4		0	2 s			0.11	2.8		Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.08	764.0	30.09	764.3	77	25.0	72	e.				5 k	5 ks	e.	e.	0.08	2.0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.95	760.7	29.97	761.2	77	25.0	86	calm	0	0			10 ks		sw.	0.30	7.6	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.90	759.4	29.92	760.0	70	21.1	95	e.				3 k	0			0.118	3.0	clear	B. Bigar.
Havana, Cuba, W. I.	30.17	766.3	30.22	767.6	72	22.2	76	se.	3.6	1.6		0	8 ks		se.	inap.	inap.	cloudy	A. Van Caneghem.
Kingston, Jamaica, W. I.	30.09	764.3	30.10	764.5	70.1	21.2	79	n.	1	0.4		0	7 s		e.	0	0	cloudy	Robert Johnstone
Navassa, W. I.																			
Paramaribo, S. A.	30.04	763.0	30.05	763.3	75	23.9	95	e.			2		8 ps	e.		0.550	14.0	cloudy	F. M. Everett.
Puerto Berrio, U. S. Col'mba	29.50	749.3	29.97	761.2	80	26.7	80	n.			1	6 ck	2 k	calm	calm	0	0	cloudy	Dr. C. J. Hering.
Rivas, Nicaragua							94	ne			3	0	3 ks		ne.	0	0	fair	Miss Flora A. Nichols.
Santiago de Cuba, W. I.	30.10	764.5	30.13	765.3	74	23.3	67	ne.	6	2.7		1 c	3 s		e.	0	0	fair	Earl Flint.
St. Thomas, W. I.																			Robert Mason.
York Factory, B. A.	30.19	766.8	30.25	768.3	—21.0	—29.4		sw.	10	4.5		0	0			0	0	clear	G. O. Gyllich. J. Fortescue & W. Wood.

* Total rainfall for past 3 days.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, N. 36° 07′, W. 5° 21′	30.36	771.1	59	15.0	76	ene.			4–6		7	ene.						squally	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S Alert, N. 7° 15′, E. 75° 22′	29.85	758.2	82.5	28.1	82	n.			2–3		2							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.01	762.2	58	14.4	81	nne.			3		10							raining	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 12° 29′, E. 45° 45′	30.04	763.0	76	24.4	56	e.			4		0					3	e.	blue sky	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.80	756.9	76	24.4	74	wsw.			2–3		0							blue sky	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S 39° 21′, E. 37° 48′	29.93	760.2	62	16.7	66	ne.			1		1	e.				3	s.	blue sky	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′, W. 61° 31′	30.08	764.0	78	25.6		ese.			3		3	ene.						d. clouds	Capt. C Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.30	769.6	58	14.4	66	ssw.			1–2		8	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	29.62	752.3	70	21.1	84	s.			3–5		9					3	s.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 12° 18′, E. 44° 21′	29.82	757.4	85	29.4		w.			2		6					1	wsw.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt C. A. G. Bridge.
H. M. S. Fawn, Aden, Arabia	30.04	763.0	77.5	25.3	65	e.			2		4	e.						d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	29.89	759.2	47	8.3	77	calm			0		10							misty	Capt. R. F. Hoskyn.
H. M S. Gannet, S. 13° 20′, W. 76° 45′	29.96	761.0	65	18.3	91	calm			0		3					2	s.	misty	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.28	743.7	45	7.2	84	sw.			6		6							showery	Capt. L. F. Jones.
H. M. S. Inconstant, N. 4° 10′, E. 105° 30′	29.87	758.7	80	26.7	78	nne.			2		3	ne.				1	ne.	d. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′, E. 113° 24′	30.12	765.0	51	10.6	93	n.			1–2		10	n.						raining	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.93	760.2	62	16.7		ne.			1		5								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	30.03	762.7	69	20.6	79	calm			0		3	calm						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, Port Royal, Jamaica, W. I.	30.04	763.0	76	24.4	90	nw.			1		3							d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 29° 05′, E. 32° 03′	29.81	757 2	75.5	24.2	91	ese.			2		2					3	sse.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 46° 17′, W. 18° 10′	30.81	782.6	54	12.2	100	e.			4		10					3	ese.	overcast	Capt. F. R. Dicken.
H M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, Quita, Lower Guinea	29.86	758.4	83	28.3	91	se.			1		0							hazy	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.12	765.0	60	15.6		wnw.			2–4		4							squally	Capt. W. H. Edwards.
H. M S. Rocket, Esquimalt, Vancouver Id	30.07	763.8	32	0.0	89	calm			0		10							snowing	Lieut. V. B. Orlebar.
H. M. S. Sea Gull																			Capt. E. T. Church.
H. M. S. Thalia, N. 33° 50′, W. 16° 08′	30.34	770.6	62	16.7		ene.			2–3							1	nne.	d. clouds	
H. M. S Triumph, S. 13° 29′, W. 76° 54′	29.98	761.5	64	17.8	100	se.			2		2	se.				2	se.	foggy	
H. M. S. Tyne, N. 13° 30′, E. 112° 00′	29.92	760.0	79	26.1	95	calm			0		1	ne.				1	ne.	blue sky	Capt. A. H. Markham.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.07	763.8	75	23.9		calm			0		1							blue sky	Capt. J. E. Stokes.
H. M. S. Woodlark, N. 23° 20′, E. 59° 47′	30.12	765.0	73.5	23.1	39	e.			1		0							blue sky	Com. W. S. Brown.
																			Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Santiago, Cape Verd Ids	30.00	762.0	76.6	24.8	66	ne.			3		0					2	ne.	blue sky	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 11° 46′, W. 80° 46′	30.00	761.9	77.0	25.0	88	ene.			2		4							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.14	765.5	69	20.6	90	e.	9	4.0			2		se.	0	0			fair	
N. Yard, Portsmouth, N. H.	30.00	762.0	26	— 3.3		wnw.	10	4.5			8		nw.	0	0			fair	
Naval Hospital.																			
Yokohama, Japan	29.74	755.4	46.5	8.1	77	calm			0		10			0	0			misty	
Adams.																			
Callao, Peru	29.75	755.6	68	20.0	95	sse.			1		10			0	0	gr'd		cloudy	
Alaska.																			
Valparaiso, Chili	29.92	760.0	61	16.1	77	ene.			1		0			0	0	sm'h		clear	
Alert.																			
Batavia, Java*	29.75	755.6	81	27.2	87	wnw.			2		10		calm			sm'h		rainy	
Alliance.																			
Norfolk, Va	30.02	762.5	57	13.9	87	sw.			2		5			0	0			fair	
Ashuelot.																			
Tientsin, China	30.32	770.1	28	— 2.2	100	nw.			3		0							clear	
Brooklyn.																			
Sandy Point, Patagonia	29.70	754.4	51	10.6	86	nw.	6	2.7			10			0.20	5.1	sm'h		drizzling	
Colorado.																			
New York, N. Y	29.98	761.5	39	3.9	91	w.	2	0.9			10		w.	0.26	6.6			hazy	
Enterprise.																			
Norfolk, Va*	30.07	763.8	55	12.8	93	sw.			5		8		w.					cloudy	
Essex.																			
N. 24° 50′, W. 17° 52′	30.27	768.8	65	18.3	78	ene.			3		5		e.			sm'h		clear	
Franklin.																			
Norfolk, Va	30.13	765.3	57	13.9	94	wsw.	16.8	7.5			5		wsw.	0.04	1.0			fair	
Galena.																			
Villafranca, France	30.33	770.4	57	13.9	63	s.			1		2					sm'h		clear	
Independence.																			
N. Yard, Mare I'd, Cal	30.17	766.3	34	1.1	79	calm	0	0			5			0	0			fair	
Kearsarge.																			
New Orleans, La	30.03	762.7	66	18.9	95	se.			1		8							cloudy	
Lackawanna.																			
Valparaiso, Chili*	29.88	758.9	60	15.6	100	calm			0		2		n.					clear	
Lancaster.																			
Alexandria, Egypt	30.06	763.5	62	16.7	83	e.			4-5		5		e.					fair	
Marion.																			
S. 33° 55,′ E. 18° 25′	29.62	752.3	67	19.4	84	w.			3		2		calm			sm'h		clear	
Michigan.																			
Erie, Pa	30.03	762.7	33	0.6	70	nne.			3		10		n.					cloudy	
Minnesota.																			
Newport, R. I	29.97	761.2	37	2.8	100	w.	3	1.3			8		w.					cloudy	
Monocacy.																			
Yokohama, Japan	29.88	758.9	48	8.9	92	n.			1		10		calm					cloudy	
Nipsic.																			
Cadiz, Spain	30.29	769.4	62	16.7	50	se.			6		2		se.			sm'h		clear	
Onward.																			
Callao, Peru†	30.07	763.8	70	21.1	85	se.			2		2		n.			long	w.	clear	
Palos.																			
Hong Kong, China	30.09	764.3	57	13.9	94	ne.			1		10		ne.					overcast	
Passaic.																			
Washington, D. C	30.01	762.2	43	6.1	100	ne.			2		10		calm					cloudy	
Pensacola.																			
Lota, Chili	30.09	764.3	58	14.4	82	calm			0		2		s.	0	0	sm'h		clear	
Powhatan.																			
Samana Bay, Haiti, W.I.	30.17	766.3	71	21.7	95	ene.			1		8		ne.			sm'h	ne.	rainy	
Quinnebaug.																			
Alexandria, Egypt	30.07	763.8	65	18.3	68	e.			3		5		se.			sm'h		fair	
Ranger.																			
N. 19° 17′, W. 104° 50′*	29.95	760.7	70	21.1	90	e.			1		0			0	0	sm'h		clear	
Richmond.																			
N. 26°19′, E. 15 0° 15′*	29.88	758.9	72	22.2	95	sw.			3		2		sw.	0	0	sm'h	s.	fair	
Shenandoah.																			
S. 28° 03′, W. 29° 08′*	29.97	761.2	76	24.4	91	ne.			3		10		ne.			mod.	ne.	rainy	
St. Louis.																			
League Island, Pa	30.28	769.1	36	2.2	100	calm	0	0			8		nw.	0.37	9.4			foggy	
Swatara.																			
Yokohama, Japan*	29.69	754.1	50	10.0	79	nne.			2		10					sm'h		cloudy	
Tennessee.																			
Fort Monroe, Va	30.06	763.5	51	10.6	100	wsw.	15	6.7			5			0.48	12.2	light		fair	
Vandalia.																			
Aspinwall, Panama*†	30.07	763.8	78	25.6	78	n.			4		8		n.					fair	
Wabash.																			
Boston, Mass	29.96	761.0	29	—1.7		wnw.	3	1.3			8		nw.	0	0			misty	
Wachusetts.																			
Departure Bay, B. C	30.05	763.3	34	1.1		se.			1		10		se.					snowing	
Wyoming.																			
Port Royal, S. C	30.24	768.1	58	14.4	94	s.	4	1.8			2		calm	0	0			clear	
Yantic.																			
N. 16° 28′, W. 83° 35′*	30.05	763.3	77	25.0	86	e.			2		5					long	ne	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 43° 16′, W. 59° 40′*	29.85	758.2	28	—2.2		se.	1		9		s.	0	0	sm'h		cloudy	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen. N. 49° 02′, W. 18° 47′*	30.83	783.1	55	12.8		ssw.	4		8		sw.			sl't	sw.	cloudy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 43° 18′, W. 52° 21′*	30.21	767.3	26	—3.3		w.	4		10		w.	5 h'r	snow	short	w.	showery	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 48° 16, W. 32° 06′*†	30.14	765.5	54	12.2		sse.	6		9		sse.	0	0	r'gh	sse.	overcast	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 42° 49′, W. 56° 43′	29.95	760.7	28	—2.2	88	wsw.	3		2?		sw.			mod.	sw.	overcast?	Caufman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, Eng†	30.65	778 5	46	7.8	76	w.	3		8		w.	0	0			cloudy	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, N. 51° 00′ W. 13° 20′*†	31.02	787 9	50	10.0	86	sw.	3		8		ssw			sm'h	sw.	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,																	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 48° 50′, W. 40° 12′*†	30.14	765.5	47	8.3		ssw.	3		10		sw.			short	wsw.	fine	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Portau Prince, Hayti, W. I*	30.18	766.6	77	25.0		ne.	3		1		ne.	0	0			fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 16° 32′, W. 76° 29′*†	29.86	758.4	74	23.3			4										W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 15° 25′, W. 73° 45′						ne.	2		5		ne.			mod.	ne.	squally	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 26° —′, W. 74° —	30.17	766.3				e.	4		2		e.	0	0	cross	e.	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Boston, Mass†	29.99	761.7				nnw.					nnw.	0	0			fine	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 40° 25′, W. 33° 12′	30.04	763.0	63	17.2		nw.	3		1							blue sky	
Baroda, Capt. C. J. Russell, S. 21° 51′, W. 26° 04′	30.06	763.5	79.5	26.4	82	ne.	4		5							d. clouds	
Caldew, Capt. W. Peterson, S. 38° 06′, W. 35° 26′	30.04	763.0	67	19.4		nne.	4		4							d. clouds	
S. S. Cipero, Capt. W. N. Lalley, N. 17° 56′ W. 50° 44′	30.13	765.3	74.5	23.6	76	nne.	5		3					3	une.	d. clouds	
S. City of Agra, Capt. Thos. Young,																	
Coppename, Capt. James Buchan, N. 8° 33′, W. 55° 29′	30.00	762.0	78.5	25.8	82	nne.	4		4							blue sky	
Bk. Glaramara, Capt. R. Morton,																	
Glencairn, Capt. R. S. Tannock, N. 3° 59′, E. 95° 09′	29.85	758.2	82	27.8	95	calm	0		2							d. clouds	
S. S. Gordon Castle, Capt. W. Waring, N. 37° 13′, E. 10° 25′	30.17	766.3	59	15.0	70	nw.	4		4							d. clouds	
Bg. Hermine, Capt. S. G. Jones, S. 39° 18′, W. 38° 00′	29.95	760.7	66.3	19.1	78	nne.	3		5							blue sky	
Hope, Capt. James Campbell, N. 19° 20′, W. 28° 42′	30.08	764.0	70.4	21.3	90	sse.	4		3							misty	
S. S. Humboldt, Capt. A. W. Jeffery, N. 17° 30′, W. 56° 45′	30.16	766.1	74	23.3	68	ne.	6		7							squally	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 14° 00′, W. 8° 00′	30.01	762.2	76.5	24.7	81	ese.	4		6							showery	
May Hulse, Capt. H. Youlden, S. 48° 54′, W. 82° 26′	30.12	765.0	50	10.0	86	w.	5		10							overcast	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, Buenos Ayres, Argentine Rep.	29.76	755.9	73	22.8	76	s.	5		5							d. clouds	
Naiad, Capt. John Smith, N. 37° 47′, W. 36° 29′	29.96	761.0	62.1	16.7	?	se.	6		10							showery	
Pole Star, Capt. F. Norman,																	
Queen of Cambria, Capt. M. Parry, S. 3° 47′, E. 81° 18′	29.82	757.4	83	28.3	71	n.	3		8							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson,																	
S. Superb, Capt. Berridge																	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Hudson River, N. Y*†	30.02	762.5														clear	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman, N. 34° 00′, W. 77° 12′*†	30.27	768.8	69	20.6		sw.	5		1		sw.	rain	rain	mod.	s.	clear	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey,																	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,																	E. F. Stembridge, 3d off.
S. S. Gallia, Capt. W. H. P. Hains.																	J. H. Mills, 3d officer.

MERCHANT-MARINE SERIES.—Continued.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
GENERAL TRANS-ATLANTIC C O.																	
Louis de Beblan, Agent, New York.																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt. Périer d'Hauterive, N. 46° 06′, W. 45° 06′*†	30.08	764.0	42.8	6.0		w.	4	ck	1	wnw.		0	0		wnw.	covered	
S. S. St. Laurent, Capt. A. Sérvan,																	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, New York.																	
S. S. Gellert, Capt. W. Khlewein,																	
S. S. Silesia, Capt. A. Albers, N. 49° 22′, W. 16° 18′*†	31.02	787.9	50.0	10.0		ssw.	3-4		8		sw.	0	0	2	s.	fair	
S. S. Wieland, Capt. C. Hebich,																	Jorgensen, Wolkowotz
JOHNSTON LINE.																	
Patterson, Ramsay & Co., Agents, Baltimore.																	
S. S. Thanemore, Capt. John Inch,																	John Inch.
LAMPERT & HOLT'S. S. S. CO.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, S. 18°, W. 38°*†	30.10	764.5	81	27.2		n.	4		9		w.	6 h'r	6 h'r	sm'h		thud'r storm	J. Carroll.
LEYLAND LINE.																	
Thayer & Lincoln, Agents, Boston.																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE.																	
C. H. Mallory & Co., Agents, Nem York.																	
S. S. Colorado, Capt. M. B. Crowell, N. 34° 07′, W. 76° 41′*†	30.38	771.6	64	17.8		wsw.	5		2		wsw.	4 h'r	light	mod.	sw.		C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE.																	
Funch, Edye & Co., Agents, New York.																	
S. S. Freja, Capt. A. C. Struckmann, N. 49° 36′, W. 18° 50′*†	30.89	784.6	55	12.8	87	s.	4		10		ssw.	0	0	sm'h		overcast	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO.																	
Jas. E. Ward & Co., Agents, New York.																	
S. S. Niagara, Capt. J. B. Baker, N. 34° 00′, W. 77° 00′*†	30.36	771.1	64	17.8		sw.	3		3		sw.	3 h'r	light	sm'h		threatening	F. C. Miller, 2d offi.
S. S. Santiago, Capt. S. F. Phillips, N. 37° 15′, W. 74° 12′†	30.09	764.3	58	14.4		wsw.	4		3		w.	0	0	sm'h		hazy	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom N. 37° 05′, W. 74° 27 † [man	30.15	765.8	58	14.4		w.	3								con.	hazy	
S. S. City of Alexandria, Capt. L. F. Timmer- N. 27° 15′, W. 79° 48′*†	30.42	772.7	73	22.8		se.	6								e.	d. clouds	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Elbe, Capt. W. Willigerod [nolds																	
S. S. Lessing, Capt. B. Voss,																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke,																	
S. S. P. Caland, Capt. E Deddes, N. 40° 31′, W. 71° 54′	30.04	763.0	41.0	5.0		w.	4							3	w.	fine	
S. S. Schiedam, Capt. E. M. Chevalier,																	
S. S. Scythia, Capt. M. Murphy																	
NORTH GERMAN LLOYD.																	
A. Schumacher & Co., Agents, Baltimore, and Oetrich & Co., Agents, New York.																	
S. S. Gen. Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur																	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 32° 45′, W. 14° 24′*	30.34	770.6	81.5?	27.5?		n.	2		2		n.	0	0	sm'h	n.	clear	G. H. Lose, 3d offi.
S. S. Leipzig, Capt. F. Pfeiffer, N. 41° 04′ W. 53° 08′	30.10	764.5	35	1.7	70	wnw.	3		5?		nnw.	0	0	long	nnw.	cloudy?	Sander & Walter.
S. S. Main, Capt. Julius Barre, Bremerhaven, Germany*	30.52	775.2	53.6	12.0		w.	4		10		w.	0	0	str'g	w.	covered	
S. S. Mosel, Capt. F. Hesse, N. 41° 18′, W. 63° 05′	29.93	760.2	41.0	5.0		ese.	3		9		ese.	4 h'r and 3h'r	rain snow 3h'r	sm'h r'gh	sse. sse; wsw.	cloudy	J. Hesse.
S. S. Neckar, Capt. R. Bussius. N. 46° 30′, W. 41° 25′	30.01	762.2	41.0	5.0		sw.	5-6		10		sw.					overcast	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	Montz & Kohlenbeck.
S. S. Oder, Capt. Undeutsch,																	
S. S. Ohio, Capt. G. Meyer, N. 37° 45′, W. 76° 12′	30.10	764.5				nne.	3		1		nnw.	0	0			fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch N. 48° 52′, W. 19° 37′*	30.83	783.1	54.0	12.2	100	ssw.	4		4?		ssw.	0	0	mod.	nw.	cloudy?	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO.																	
Leland Stanford, President, San Francisco.																	
S. S. Belgic, Capt. H. Davison, Yokohama, Japan†	29.79	756.7	49	9.4	77	n.	1		8		nw.	0	0	sm'h		cloudy	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 37° 47′, W. 130° 05′*†	30.27	768.8	56	13.3	80	wnw.	3		10		w.			mod.	nw.	cloudy	
S. S. Oceanic, Capt. J. Metcalfe, N. 45° 19′, E. 177° 36′..*	29.84	757.9	43	6.1	75	wsw.	5		6		w.			6	wsw.	cloudy	
OCEAN S. S. CO.																	
George Young, Agent, New York.																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 34° 33′, W. 76° 01 *†	29.97	761.2				sw.	4		5?		wsw.			long	ne.	clear?	K. S. Nickerson.
S. Seminole, Capt. H. K. Hallett, N. 38° 20′, W. 74° 28′†	30.12	765.0	52	11.1	72	nw.	1		8		w.	0	0	long	sse	cloudy	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, N. 46° 48′, W. 124° 32′†*	30.09	764.3	44	6.7	75	nw.	4	.....	2	.....	nw.	.....	.....	light	w.	fair	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer Seattle, Wash. Ter*†	30.14	765.5	30	—1.1	100	ese.	2	.....	8	.....	e.	1 h'r	snow	.....	.....	snowing	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d offi.
S. S. Columbia, Capt. Fred. Bolles Columbia city, Oregon†	30.17	766.3	31	—0.6	79	s.	3	.....	10	.....	.....	4 h'r	snow	.....	.....	heavy snow	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 44° 55′, W. 124° 20′	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	sm'h	.....	light rain	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 34° 31′, W. 120° 39′†	30.25	768.3	46	7.8	60	ne.	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear	.....
S. S. Geo. W. Elder, Capt. H. G. Morse, Strait of Fuga†	30.13	765.3	38	3.3	.....	se.	6	.....	10	.....	se.	hv'y	snow	sm'h	.....	cloudy	.....
S. S. Idaho, Capt. H. M. Hayward, San Francisco, Cal†	30.25	768.3	40	4.4	100	se.	2	.....	5	.....	.....	.....	.....	.....	.....	hazy	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, San Francisco, Cal.†	30.46	773.7	40	4.4	73	se.	1	.....	10	.....	.....	0	0	.....	.....	cloudy	.....
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.30	769.6	40	4.4	73	se.	2	.....	3	.....	nw.	0	0	.....	.....	clear	.....
S. S. Victoria, Capt. W. E. Plummer, N. 45° 13′, W. 124° 47′†	30.07	763.8	43	6.1	83	e.	3	.....	10	.....	se.	.....	.....	mod.	w.	rainy	J. O. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulley, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 29° 04′, W. 139° 16′	30.39	771.9	59	15.0	76	ese.	3	.....	8	.....	se.	0	0	mod.	n.	cloudy	.....
S. S. City of New York, Capt. W. B. Cobb. N. 28° 30′, W. 147° 30′†	30.32	770.1	62	16.7	88	var.	3	.....	8	.....	.....	light	light	mod.	ne.	light rain	W. H. Hawes, 2d offi.
S. S. City of Rio de Janeiro, Capt. Cavarly. N. 31° 22′, W. 119° 10′†	30.30	769.6	49	9.4	64	ne.	2	.....	2	.....	ne.	0	0	mod	nw.	fine	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, Sydney, N. S. W.†	30.15	765.8	74	23.3	63	ene.	5	.....	5	.....	se.	.....	.....	sm'h	.....	drizzling	E. Le Saik.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	30.19	766.8	55	12.8	62	ne.	2	.....	8	.....	nne.	0	0	.....	.....	fine	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 15° 07′, W. 93° 16′†	29.96	761.0	82	27.8	74	s.	3	.....	8	.....	se.	0	0	small	s.	cloudy	.....
S. S. Grenada, Capt. M. Connolley, N. 15° 17′, W. 93° 10′†	29.96	761.0	81	27.2	95	nw.	3	.....	8?	.....	n.	0	0	light	wnw.	clear?	.....
S. S. South Carolina, Capt. W. J. Russell, Panama, Panama..†	30.05	763.3	77	25.0	95	nw.	3	.....	8	.....	nw.	0	0	light	ne.	cloudy	A. W. Hart, 2d offi.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.10	764.5	65	18.3	83	se.	1	.....	0	.....	.....	.....	.....	.....	.....	fine	.....
QUEBEC S. S. CO. *E. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M. Faircloth.. N. 38° 10′, W. 72° 35′†	30.10	764.5	54	12.2	.....	w.	4	.....	10	.....	.....	0	0	chop	sw.	.....	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, St Kitt's, W. I.	.....	.....	.....	.....	.....	ne.	4	.....	8	.....	.....	rain	rain	sm'h	.....	squally	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes, Antwerp, Belgium*†	30.87	784.1	48	8.9	.....	w.	3	.....	3	.....	w.	0	0	.....	.....	fair	.....
S. S. Nederland, Capt. J. Uberweg, N. 49° 57′, W. 7° 50†*	31.20	792.5	50	10.0	.....	wnw.	1	.....	8	.....	w.	0	0	mod	w.	cloudy	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, N. 49° 47′, W. 13° 09′*	30.99	787.1	49	9.4	77	ssw.	2	.....	10	.....	se.	0	0	sm'h	.....	cloudy	U. H. Grant, 2d offi.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon N. 41° 38′ W, 65° 10′*†	29.77	756.1	23	—5.0	.....	sse.	2	.....	10	.....	s.	9 h'r	snow	sm'h	.....	hazy	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, N. 43° 49′. W. 49° 56′*	29.92	760.0	26	—3.3	.....	sw.	5	.....	5	.....	ssw.	8 h'r	rain snow	mod.	sw.	fair	Olsen & Assfeld.
ROTTERDAM LINE. *Fundh, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 40° 14′, W. 53° 42′*	30.06	763.5	53.7	12.1	79	nw.	2	.....	8	.....	.....	4 h'r	snow	mod.	nw.	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, N. 40° 58′, W. 68° 06′†	30.01	762.2	37.4	3.0	.....	wnw.	2	.....	5?	.....	wnw.	3 h'r	rain snow	sm'h	wnw.	clear?	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters, N. 49° 50′, W. 28° 58′*†	30.54	775.7	54	12.2	.....	sse.	5	.....	1	.....	sse.	0	0	light	sse.	clear	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th offi.
S. S. Celtic, Capt. Benjamin Gleadell, N. 42° 41′, W. 48° 41′*†	29.93	760.2	33	0.6	79	wnw.	2	.....	2	.....	nw.	0	0	mod.	sw.	clear	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 43° 11′, W. 52° 39′*	30.13	765.3	29	—1.7	.....	var.	1	.....	10	.....	s.	5 h'r	snow	h'vy	wnw.	overcast	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, N. 30° 05′, W. 86° 38′†.....	30.27	768.8	69	20.6	84	se.	3	3 cs	0	s.	.....	0	0	mod.	sse.	clear.....	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 28° 34′, W. 48° 18′*†.....	30.11	764.8	61	16.1	.....	nnw.	6	.....	4	.....	n.	0	0	hv'y	nnw.	fair.....	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 18° 40′, W. 46° 25′*†.....	30.07	763.8	76	24.4	.....	n.	3	.....	2	.....	n.	light	light	long	nw.	fair.....	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 46° 25′ W. 18° 15′*†.....	30.80	782.3	55	12.8	73	ese.	4	.....	8	.....	ese.	0	0	sm'h	.....	cloudy.....	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewi Ponce, Porto Rico, W. 1*†.....	30.12	765.0	78	25.6	.....	ne.	2	.....	2	.....	ne.	0	0	.....	.....	clear.....	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, S. 2° 00′, W. 28° 16′*†.....	29.93	760.2	85	29.4	.....	se.	5	.....	1	.....	sse.	½ h'r	light	sm'h	se.	clear.....	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Mortensen.
Bk. Celestina, Capt. G. Carnigliia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 41° 12′, W. 49° 30′*†.....	30.02	762.5	.....	.....	.....	nnw.	1	.....	.....	.....	n.	0	0	mod.	n.	clear.....	G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. J. Pettingill.
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*.....	30.41	772.4	.....	.....	.....	w.	4	.....	8	.....	wnw.	sh's	sh's	.....	.....	hazy.....	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Andreson, Jr.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†.....	30.18	766.6	50	10.0	71	nne.	2	.....	10	.....	n.	0.61	15.5	.....	.....	cloudy.....	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 21° 07′, W. 40° 15′.....	.....	.....	76	24.4	.....	calm	0	.....	10	.....	.....	2 h'r	h'vy	sm'h	.....	squally.....	.....
Bk. Gamaliel, Capt. D. J. Anthony, N. 26° 08′, W. 70° 14′*†.....	30.40	772.1	.....	.....	.....	ne.	8	.....	3	.....	ne.	1 h'r	1 h'r	high	ene.	clear.....	.....
Bk. Geo. Booth, Capt. D. Williams S. 1° 40′, W. 30° 14′*†.....	29.75	755.6	86	30.0	.....	.....	.....	.....	.....	.....	.....	h'vy	h'vy	.....	.....	threatening.	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 30° 12′, W. 45° 11′*†.....	30.00	762.0	68	20.0	.....	nw.	3	.....	.....	.....	.....	h'vy	h'vy	mod.	sw.	cloudy.....	.....
Schr. Henry Denison, Capt. Jno. Fehring	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 39° 22′, E. 63° 47′*.....	29.54	750.3	.....	.....	.....	ssw.	6	.....	4	.....	s.	3 h'r	light	hv'y	nne.	squally.....	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	sw.	.....	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte, N. 31° 41′, W. 72° 19′†*.....	30.50	774.7	.....	.....	.....	se.	.....	.....	.....	.....	sw.	.....	.....	hv'y	sw.	cloudy.....	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen. Off Columbretes Rocks, Spain*†.....	30.55	776.0	.....	.....	.....	var.	1	.....	.....	.....	.....	0	0	long	e.	fair.....	Sorensen & Arvesen
Bk. Pawashick, Capt. Edwin Fry, N. 21° 58′, W. 33° 48′*†.....	30.34	770.6	72	22.2	90	sse.	6	.....	5	.....	s.	.....	.....	mod.	sse.	hazy.....	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†.....	30.30	769.6	55	12.8	53	ne.	3	.....	0	.....	.....	.....	.....	.....	.....	clear.....	G. S. d'Ancona.
Bk Pilgrim, Capt. J. Connolly S. 31° 05′, W. 24° 45′*†.....	30.00	762.0	.....	.....	.....	e.	.....	.....	5?	.....	e.	0	0	.....	.....	cloudy?.....	J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†.....	30.21	767.3	35	1.7	.....	wnw.	1	.....	6	.....	w.	0	0	.....	.....	cloudy.....	H. Mehaffey, 2d mate.
Bk. Stella, Capt. H. N. T. Sommer, S. 29° 46′, W. 43° 00′*.....	29.61	752.1	76.1	24.5	96	ne. to n.	4	.....	5?	.....	e.	.....	.....	.....	.....	d. clouds.....	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 23° 32′, W. 38° 48′*†.....	30.01	762.2	75	23.9	90	s.	6	.....	8	.....	s.	1 h'r	mod.	r'gh	s.	threatening.	J. Green.
Bg. Wauburn, Capt. I. W. Covert,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 48° 44′, W. 10° 23′*†.....	30.73	780.5	51	10.6	100	e.	2	.....	.....	.....	e.	.....	.....	sm'h	nw.	clear.....	H. T. Schmidt.
Bk. Winifried, Capt. N. P. Dutton. S. 17° 08′, W. 33° 35′*†.....	30.10	764.5	.....	.....	.....	nne.	.....	.....	.....	.....	ne.	.....	.....	mod	ne.	.....	N. P. Dutton.

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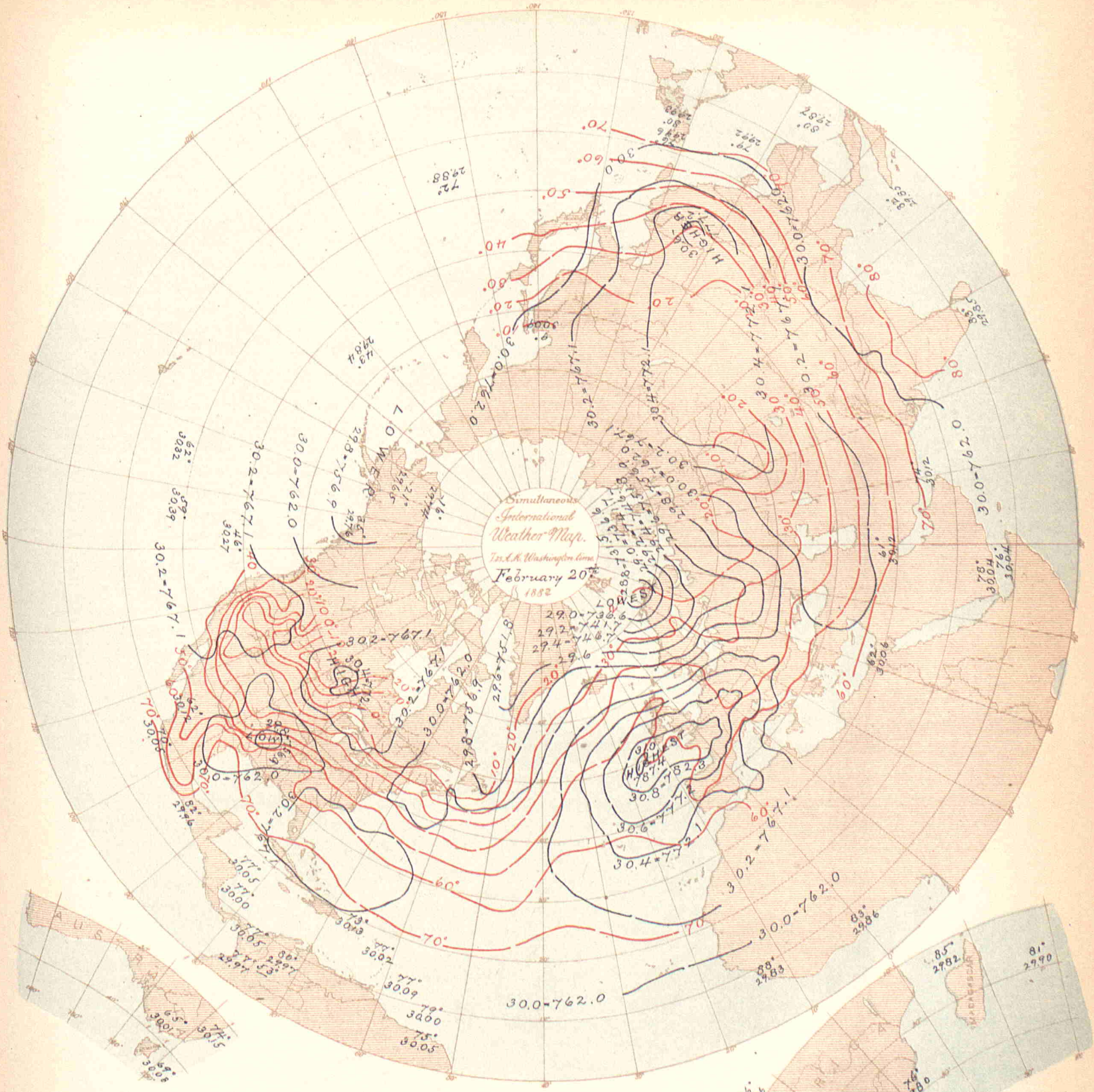
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 21, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.40	772.1	63.0	17.2	88	nw.			5		0			0	0	clear	Moiroud.
Algiers			30.47	773.8	56.1	13.4	84	e.			1		0			0.055	1.4	clear	Nicolas.
La Calle			30.34	770.5	58.6	14.8	62	wnw.			3		6			0.098	2.5	cloudy	Fonfrède.
Tunis			30.30	769.6															Jacques.
Sfax																			Gau.
Saida			30.41	772.5	50.7	10.4	44	n.			1		3			0	0	pretty fair	Dumas.
Tebessa			30.35	770.9	45.0	7.2	52	nw.			2		9			inap.	inap.	covered	Derché.
Geriville					44.6	7.0	55	nne			2		4			0	0	cloudy	Lonchamp.
Laghouat			30.45	773.5	53.6	12.0	54	n.			2		0			0	0	clear	Herbin.
Biskra			30.40	772.1	64.4	18.0	34	n.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.75	755.6	29.84	757.9	75.3	24.1	51	ne.	11	4.9			4			0	0	dense haze	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.76	755.8	30.33	770.4	39.2	4.0	59	s.			3		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.14	740.1	29.93	760.1	38.5	3.6	73	w.	25.5	11.4			10			0.126	3.2		Dr. Wierzbiski.
Eperies	29.10	739.1	30.01	762.3	36.7	2.6	50	s.			3		10 s			0	0		Julius Mikolik.
Gratz	28.97	735.7	30.24	768.1	47.5	8.6	48	wnw.			3		4			0	0		Andreas Rospini.
Hermannstadt	28.70	728.9	30.20	767.1	32.9	0.5	76	nw.			3		0			0.008	0.2		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.99	736.3	30.40	772.2	33.8	1.0	81	w.			3		10			0.083	2.1	rain & snow	The Staff.
Lemberg	28.77	730.7	29.78	756.5	36.1	2.3	66	nw.			4		10			0.398	10.1		Dr. T. Stanecki.
Pola	30.18	766.6	30.30	769.5	47.5	8.6	63	nw.			3		0			0	0		I. R. Hydrographic Office
Szathmar	29.62	752.4	30.09	764.3	36.7	2.6	62	sw.			3		4			0.047	1.2		Joseph Midlinszky, S. J
Szegedin	29.90	759.5	30.19	766.9	38.8	3.8	77	n.			3		8			0	0		Karl Stancel.
Trieste	30.26	768.5	30.36	771.1	45.7	7.6	55	calm			0		2			0	0		Rieder.
Vienna	29.46	748.3	30.21	767.2	39.4	4.1	66	w.			5		5			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.50	774.7	30.60	777.2	50.5	10.3	74	nw.	18	8.0			6			0	0	d. clouds	W. Boswell.
Armagh, Observatory	30.54	775.7	30.78	781.8	50.1	10.1	93	nw.	6	2.7			10					gloomy	S. Call.
Bidston, Liverpool Obs'y			30.65	778.5	47.0	8.3	92	wnw.	17	7.6			7					d. clouds	John Hartnup.
Bolton, Sharples	30.09	764.3	30.64	778.2	49.7	9.8	83	nnw.	7	3.1			5					d. clouds	Thomas Mackereth [A.S.
Bradford, Yorkshire	30.19	766.8	30.58	776.7	49.3	9.6	78	sw.			2		6			0	0	d. clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	77.5	25.3	75	ne.			3		6					gloomy	Corpl. J. Surgenor, A. H. C.
Cardington			30.62	777.7	52.0	11.1	79	nw.			0.4		10					overcast	John McLaren.
Chatham, School M. E.	30.49	774.4	30.63	778.0	49.9	9.9	87	nw.			1		10					gloomy	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	30.51	774.9	30.75	781.0	49.4	9.7	89	nnw.			4		10					overcast	The Staff.
Fort Napier, Natal	27.44	697.0	29.96	753.4	95.2	35.1	36	calm			0		0					blue sky	Pvt. E. K. Annis, A. H. C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	88.0	31.1	72	ne.			1		2					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.74	780.8				ne.			2		6			0	0	blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.30	769.6	30.35	770.9	61.0	16.1	82	e.			6		8					gloomy	Cpl. O. Baldwin.
Glasgow, Observatory	30.44	773.2	30.65	778.5	52.3	11.3	77	w.			2		5					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.45	773.4	30.63	778.0	50.5	10.3	84	n.			1		10					overcast	The Staff.
Guernsey	30.40	772.1	30.71	780.0	48.0	8.9	98	nnw.			1		10					overcast	A. Collenette, F. M. S.
Kew, Observatory	30.60	777.2	30.64	778.2	51.0	10.6	76	nw.	11	4.9			10					misty	The Staff.
Leicester, Museum	30.37	771.4	30.64	778.2	52.0	11.1	75	nw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	29.97	761.2	30.04	763.0	52.0	11.1	59	nw.			3		2					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.21	767.3	30.25	768.3	70.5	21.4	95	se.			1		7					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College																			John Mac Email.
Oxford, Radcliffe Obs'y	30.41	772.4	30.64	778.2	50.5	10.3	82	nw.			3		10					squally	The Staff.
Plymouth	30.65	778.5	30.72	780.3	51.0	10.6	86	n.			2		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			30.53	775.4	46	7.8	97	wnw.	20	8.9			5					showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.96	761.0	30.03	762.7	40.4	4.7	81	ne.			2		10			blank	blank	gloomy	W. H. Lyne.
Sheffield	30.35	770.9	30.63	778.0	53.3	11.8	76	n.			1		9			0	0	overcast	W. F. Cooper.
Silloth Rectory	30.62	777.7	30.65	778.5	55.1	12.8	69	nw.			1		3			0	0	d. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.66	778.7	52.0	11.1	81	wsw.	7	3.1			5					d. clouds	I. New.
Straifield Turgiss	30.42	772.7	30.65	778.5	50.3	10.2	85	nw.			2		9					d. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.64	778.2	30.69	779.5	53	11.7	79	nw.			6		10					gloomy	W. Newcombe.
Valencia, Observatory	30.84	783.3	30.86	783.8	50.1	10.1	90	nnw.	17	7.6			4					d. clouds	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.82	757.4	29.85	758.2	69.0	20.6	83	wsw.	11.7	5.2		0	1 s			0.100	2.5	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.81	757.2	29.85	758.2	78.4	25.8	50	w.	21	9.4		0	4			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.					— 0.5	—18.1		calm	0	0		0	0			0	0	clear	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.23	767.8	30.28	769.1	1	—17.2	100	nw.	1	0.4		0	0			0.20	5.1	clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.29	769.4	30.36	771.1	—14	—25.6	100	calm	0	0		0	0			0.04	1.0	clear	G. A. Blair.
Cornwall, Ontario	29.65	753.1	29.86	758.4	15.8	— 9.0	93	e.			6		10 n			inap.	inap.	snowing	James Smith, M. A.
Dalhousie, N. B.	30.15	765.8	30.34	770.6	— 0.5	—18.1		w.			1	0	0			0	0	clear	H. A. Johnson.
Father Point, Quebec*	30.17	766.3	30.20	767.1	6	—14.4	91	ne.	10	4.5		2 c	2 s	nw.	calm	0	0	fair	J. McWilliams.
Fort Garry, Manitoba*	29.32	744.7	30.27	768.8	— 8	—22.2	100	se.	8	3.6		0	hz			0	0	hazy	James Stewart.
Fredericton, N. B.	30.27	768.8	30.34	770.6	— 7.9	—22.2	100	n.	1	0.4		0	0			0	0	clear	Prof. Harrison.
Granton, Ontario	30.22	767.6	30.34	770.6	30.0	— 1.1	100	s.	5	2.2			10 n			0.20	5.1	snowing	James Grant.
Halifax, N. S*	30.09	764.3	30.23	767.8	15	— 9.4	91	ne.	8	3.6			10 n			0.311	7.9	cloudy	A. Allison.
Hamilton, Ontario	28.96	735.6	29.38	746.2	32.2	0.1	89	e.			5		10 ks			0.86	21.8	rain & snow	Geo. Dickson, B. A.
Kingston, Ontario*	29.37	746.0	29.72	754.9	19	— 7.2	96	ne.	16	7.2			10 n			0.20	5.1	heavy snow	A. P. Knight, M. A.
Little Glace Bay, N. S.	30.21	767.3	30.25	768.3	12.0	—11.1	72	nw.			2	5ck	0	nw.		0	0	fair	C. H. Rigby.
Montreal, Quebec*	29.78	756.4	30.00	762.0	15	— 9.4	80	e.	20	8.9			10 s			inap.	inap.	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	28.81	731.8	29.54	750.3	19	— 7.2	84	e.	16	7.2			10 n		e.	0.03	0.8	cloudy	Rev. R. Mosley.
Peterboro, Ontario	28.81	731.8	29.60	751.8	20.4	— 6.4	70	e.			3		10 n			0.20	5.1	snowing	J. Dixon, B. A.
Port Dover, Ontario	28.69	728.7	29.39	746.5	32.0	0.0	100	ne.	7	3.1			10 n		ne.	0.76	19.3	light rain	H. Morgan.
Port Stanley, Ontario	28.63	727.2	29.28	743.7	33	0.6	88	ne.	24	10.7			10 n		e.	0.78	19.8	rain & sleet.	M. Payne.
Quebec, Quebec*	29.88	758.9	30.23	767.8	10	—12.2	80	e.			5	2k	2 s	se.	se.	0.02	0.5	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.32	744.7	29.82	757.4	15	— 9.4	83	e.	16	7.2			1c n			0	0	threatening.	W. H. McIntyre.
Saugeen, Ontario*	28.58	725.9	29.32	744.7	24	— 4.4	88	e.	28	12.5			10 s			0.01	0.3	sleeting	
St. Andrews, N. B.	30.20	767.1	30.26	768.6	13	—10.6	66	ne.	3	1.3		hz	5 k			0	0	fair	
St. John, N. B.	30.11	764.8	30.29	769.4	9.0	—12.8	78	ne.	8	3.6			9 ks			0.180	4.6	cloudy	G. Murdock, C. E.
St. Pierre, N. F.																			N. F. Land, Com't.
Stratford, Ontario	27.98	710.7	29.29	744.0	28.5	— 1.9	94	se.	24	10.7			10 s			0.074	1.9	raining	C. I. Macgregor, M. A.
Sydney, C. B*	30.18	766.6	30.25	768.3	6	—14.4	87	n.	6	2.7		0	0			0	0	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.07	738.4	29.47	748.5	30	— 1.1	96	e.	35	15.6			1c n		e.	0.37	9.4	light rain	Magnetic Observatory.
Windsor, N. S.	30.12	765.0	30.22	767.6	14.0	—10.0	100	e.	6	2.7			10 n			0.40	10.2	snowing	Prof. W. R. Butler.
Woodstock, Ontario	28.31	719.1	29.35	745.5	32.5	0.3	69	nw.	10	4.5		2 c	8 s	e.		0.10	2.5	cloudy	Prof. Wolverton
Yarmouth, N. S*	30.10	764.5	30.17	766.3	16	— 8.9	80	e.	6	2.7			10 s		e.	0.07	1.8	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.98	761.5	30.26	768.6	10	—12.2		w.	0	0		fg	fg			0	0	fair	John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow																			N. Titoushkin.
Sung-shu-chwangf	24.93	633.2			18.0	— 7.8	59	calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	30.34	770.7	30.37	771.3	32.7	0.4	85	nnw.	2.7	1.2			0			0	0	clear	M. Marc Dechevrens,
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.87	758.8	29.92	760.0	44.4	6.9	69	nnw.	29	13			0						Oversergent Fischer.
Fanöe	30.18	766.5	30.20	767.0	43.3	6.3	74	nw.			7		3						Overloerer Lauridsen.
Godthaab, Greenland	29.56	750.8	29.60	751.9	27.1	— 2.7		s.			5		8						S. Kleinschmidt.
Stykkisholm, Iceland	29.77	756.2	29.82	757.3	42.4	5.8		s.			7		10					raining	A. O. Thorlacius.
Thorshavn	30.35	770.9	30.39	771.8	45.7	7.6	98	wsw.	16	7			1c					rain and fog.	Overloerer Bergh.
Vestervig	30.06	763.6	30.15	765.9	40.3	4.6	67	nw.			7		1						Loerer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	30.00	761.9	30.68	779.2	44.6	7	83	nnw.			1		kn		e.	0	0		M. Labroue, Director.
Alençon, Normal School	30.13	765.2	30.68	779.2	46.8	8.2	94	nw.			3		n	se.	se.	0	0		M. Nicot, Director.
Arras, Engineer School	30.36	771.1	30.62	777.8	47.7	8.7	94	?			2		10 n			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.31	769.8	30.39	771.8	48.2	9.	48	n.			8		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.03	762.8	30.62	777.8	40.8	4.9	93	s.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	30.34	770.6	30.62	777.7	47.1	8.4	89	nnw.			1		10			0	0	covered	M. Frère Eugène Marié
Besançon, Normal School			30.74	780.9	42.8	6	97	ne.			1	c	0	se.		0	0		M. Gobin, Director.
Bordeaux, Observatory	30.43	773 0	30.71	780.0	41.0	5.0	71	n.			1		10			0	0	covered	M. Rayet, Director.
Bourges, Normal School	30.07	763.8	30.65	778.4	45.3	7.4	62	n.			2		k		n.	0	0		M. Postel, Director.
Brest, Naval Observatory	30.50	774.6	30.74	780.8	51.4	10.8	77	n.			1		8		n.	0	0		M. de Kennaree, Dir.
Caen, Normal School	30.58	776.8	30.66	778.8	48.2	9	94	ne.			1		1c			0.059	1.5	raining	M. Berson, Director.
Châlons-sur-Marne, N. Sch'l	30.19	766.7	30.52	775.1	44.6	7.0	94	wsw.			1		10			0.039	1.0	covered	M. Jadot, Director.
Charleville, Normal School.	30.06	763.6	30.60	777.2	44.2	6.8	91	s.			1		10			0.20	5.	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.20	741.7	30.63	777.9	40.3	4.6	65	n.			2		10			0	0	covered	M. Alluard, Director.
Cluny, Normal School	29.56	750.9	30.69	779.5	41.2	5.1	94	sw.			1		10		sw.	0	0	covered	M. de Villemontée, Dir.
Commercy, Normal School.	29.70	754.3	30.61	777.4	39.4	4.1	90	w.			1		10 n	w.	w.	0.004	0.1	covered	Dr. Coulet, Director.
Gap, Normal School	27.90	708.7	30.54	775.8	38.3	3.5	70					c	0			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.17	740.9	30.32	770.2	48.9	9.4	33	nw.			3		2		nw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.75	755.7	30.56	776.1	41.4	5.2	56	e.			1		2 ck	0		0	0	slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	29.00	736.7	30.66	778.7	38.8	3.8	54	e.			1			n	ne.	0	0		M. Rivoire, Director.
Lamballe, Normal School	30.42	772.7	30.70	779.8	48.9	9.4	86	ne.			1		8		n.	0	0	hazy	M. Ollitrault, Director.
Lescar, Normal School	30.10	764.5	30.68	779.2	54.0	12.2	63	e.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.65	778.6	30.76	781.2	53.6	12.0	69	ne.			1		10			0.039	1.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.50	749.4	30.61	777.6	40.5	4.7	62	n.			2		10		n.	0	0	covered	M. André, Director.
Mans, Normal School	30.41	772.5	30.74	780.7	44.6	7	91	nw.			1		10			0	0	covered	M. Piboen, Director.
Marseille, Observatory	30.04	763.1	30.32	770.1	52.0	11.1	29	nw.			1		2		ene.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.12	638.1	29.97	761.1	41.0	5.0	10	wnw.	16.8	7.5			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.34	770.5	30.47	773.9	55.8	13.2	43	sw.			2		5			0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	29.91	759.6	30.72	780.4	40.3	4.6	90	nw.			1		10			0.008	0.2	misty	M. Hasse, Director
Nantes, Observatory	30.57	776.5	30.73	780.6	50.5	10.3	76	nw.			0-2		10		n.	0.008	0.2	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.33	770.4	30.45	773.3	53.4	11.9	28	n.	22.4	10.0			3			0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.47	545.3			24.8	— 4.0		ne.			1		1		ne.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.54	750.2	30.65	778.4	41.9	5.5	63	n.			4		0			0	0	clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.50	647.6			23.2	—4.9	100	ne.			4		10			0.012	0.3	foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.71	779.9	30.74	780.7	47.1	8.4	81	wnw.			1		10			0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.52	775.2	30.74	780.8	46.9	8.3	78	nne.			1		5		nne.	0	0	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.28	718.3	30.53	775.4	38.1	3.4	83	nw.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.61	777.5	30.66	778.7	46.0	7.8	82	w.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.54	775.8	30.70	779.8	47.8	8.8	95	n.			1		8		n.	0	0	very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.45	773.3	30.61	777.5	46.0	7.8	92	wnw.			1		10			0.004	0.1	covered	M. Renou, Director.
Toulouse, Observatory	29.95	760.6	30.68	779 3	45.7	7.6	57	wnw.			3		2		nw.	0	0	slightly cl'dy	M. Baillard, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.10	764.5	30.59	777.0	45.0	7.2	97	n.			1					0.016	0.4		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.33	770.4	30.62	777.8	45.5	7.5	100	nw.			1		10			inap.	inap.	light rain	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Clouds. Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.50	749.2	30.36	771.1	38.7	3.7	88	nw.			3		10 ks			0.063	1.6	light fog	Prof. Dr. Hoh.
Berlin	29.85	758.2	30.03	762.7	44.2	6.8	71	n.			6		10			0.067	1.7		Prof. Dr. Arndt.
Breslau	29.41	747.0	29.94	760.4	41.0	5.0	86	w.			8		10			0	0		Royal University Obs'y.
Carlsruhe	30.08	764.0	30.54	775.8	37.8	3.2	89	sw.			5		10	sw.		0.043	1.1	raining	Albert Senz.
Cassel	29.59	751.5	30.30	769.5	44.2	6.8	81	wnw.			5	0	6 n		w.	0	0		Dr. H. Möhl.
Frankfort on the Main	30.04	763.1	30.43	772.8	43.2	6.2	84	sw.			1		10			0.012	0.3		Physical Society.
Friedrichshafen	29.08	738.6	30.59	777.0	36.7	2.6	80	w.			3		10	w.		0	0		Wilhelm, Chief Tel.
Hamburg	30.09	764.3	30.19	766.7	44.2	6.8	87	nw.			7		10			0.106	2.7		E. Preller.
Kiel	30.11	764.8	30.13	765.2	45.5	7.5	68	nw.			9		1			0.063	1.6		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.77	756.1	30.20	767.1	45.3	7.4	80	w.			3		9	w.		0.094	2.4	rainy	H. Leppig, Asst.
Magdeburg	29.96	761.0	30.16	766.0	44.4	6.9	90	nw.			6	0	5 ks		wnw.	0.020	0.5		Dr. Assmann.
Memel	29.51	749.5	29.55	750.6	33.8	1.0	72	nnw.			5	0	8 ks					snow-squalls	Issermann.
Munich	28.58	726.0	30.47	774.0	33.6	0.9	80	nw.			5		10			0.016	0.4		Central Station.
Neufahrwasser	29.72	754.8	29.73	755.2	35.4	1.9	86	nw.			5		10	nw.		0.087	2.2		A. Lothes.
Neustadt, Palatinate	29.94	760.4	30.47	774.0	40.3	4.6	79	wsw.			5		10	nw.		0	0		Dicknether.
Stuttgart	29.52	749.8	30.46	773.6	37.8	3.2	89	w.			1		10			0.075	1.9		Prof. Dr. Schoder.
Wustrow	30.00	761.9	30.02	762.6	42.4	5.8	79	nnw.			6	0	3s			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.61	752.0	30.01	762.3	47.3	8.5		ne.			6.0		10			0.012	0.3	sprinkling	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.96	761.0	30.01	762.3	72.3	22.4	42	wsw.	19	8.5			0			0	0	blue sky	
Deesa	29.41	747.0	29.89	759.1	79.8	26.6	16	w.	10.7	4.8			0			0	0	blue sky	
Bombay	29.82	757.3	29.85	758.3	80.7	27.1	56	wnw.	9	4.0			0			0	0	blue sky	
Poona, Yarrowda.	27.96	710.2	29.77	756.3	89.2	31.8	12	wsw.	15	6.7			0			0	0	blue sky	
Belgaum	27.29	693.2	29.78	756.5	85.0	29.4	31	sw.	9	4.0			0			0	0	blue sky	
Lahore	29.22	742.1	29.99	761.7	64.6	18.1	30	w.	0.8	0.4			0			0	0	blue sky	
Roorkee	29.06	738.1	29.99	761.8	63.6	17.6	43	nw.	2.3	1.0			0			0	0		
Agra	29.43	747.5	30.01	762.2	71.3	21.8	19	n.	3.4	1.5			0			0	0		
Nagpur	28.85	732.8	29.89	759.1	83.0	28.3	22	calm	4.2	1.9			0			0	0	blue sky	
Jubbulpore	28.61	726.6	29.97	761.3	78.0	25.6	41	ne.	3.5	1.6			0			0	0	blue sky	
Lucknow	29.63	752.6	30.02	762.0	62.3	16.8	32	w.	5.6	2.5			0			0	0	blue sky	
Allahabad	29.68	753.8	30.00	761.9	70.8	21.6	29	nw.	2.0	0.9			0			0	0	blue sky	
Patna	29.80	756.9	29.99	761.7	72.1	22.3	35	nw.	4.2	1.9			0			0	0	blue sky	
Hazaribagh	27.93	709.4	29.98	761.4	71.8	22.1	25	n.	7.6	3.4			0			0	0	blue sky	
Cuttack	29.83	757.7	29.91	759.8	81.8	27.7	49	calm	0.6	0.3			4			0	0	d. clouds	
Calcutta, Alipore	29.92	760.0	29.94	760.6	78.5	25.8	52	w.	1.0	0.4			0			0	0	blue sky	
Dhubri	29.83	757.6	29.95	760.7	73.0	22.8	47	calm	1.9	0.8			0			0	0	blue sky	
Chittagong	29.85	758.3	29.94	760.6	74.6	23.7	43	calm	2.0	0.9			0			0	0	blue sky	
Sibsagar	29.65	753.2	30.00	762.0	65.7	18.7	75	n.	2.0	0.9			5	e.	e.	0	0	d. clouds	
Jeypore	28.52	724.5	30.00	761.9	70.7	21.5	21	n.	5.0	2.2			0			0	0	blue sky	
Zanzibar, Africa	29.80	756.9			85.1	29.5	63	n.	11.5	5.1			2			0	0	d. clouds	
Trichinopoly	29.61	752.1			87.1	30.6	30	ese.	2	0.9			10			0	0	overcast	
Bellary	28.35	720.1			92.3	33.5	13	sw.	2.5	1.1		4 c	3	sw.		0	0	d. clouds	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.92	760 0	30.34	770.6	45.1	7.3	46	calm	0	0			4			0	0		Prof. Giovanni Clodig'
Milan	29.83	757.7	30.36	771.2	44.6	7.0	47	se.	2.5	1.1			1	e.		0	0		Prof. Schiaparelli.
Padua	30.24	768.2	30.36	771.1	45.3	7.4	58	nnw.	1.8	0.8			8	n.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.41	747.1	30.34	770.6	41.9	5.5	50	s.	1.3	0.6			3			0	0		Prof. P. F. Denza.
Genoa	30.15	765.7	30.34	770.7	51.8	11.0	52	sw.	0.7	0.3			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.38	720.9	30.33	770.4	42.8	6.0	40	nw.			4		7	ene.		0	0		Prof. D. C. Bruno.
Pesaro	30.27	768.8	30.32	770.1	43.5	6.4	70	n.	15.0	6.7			2			0	0		Prof. Luigi Guidi.
Florence	30.06	763.4	30.31	769.9	51.1	10.6	25	ne.			2		4			0	0		Prof. Costantino Pitter.
Leghorn	30.17	766.3	30.26	768.5	49.6	9.8	37	e.	2.5	1.1			3			0	0		Prof. P. Monte.
Rome	30.01	762.2	30.19	766.7	50.5	10.3	25	n.	18.6	8.3			0			0	0		Prof. P. S. Ferrari.
Lecce	29.73	755.1	29.99	761.7	51.6	10.9	73	e.	17.4	7.8			8	ne.		0.059	1.5		Prof. C. de Giorgi.
Cosenza	29.17	740.8	30.07	763.8	39.6	4.2	67	wnw.	2.5	1.1			10	nw.		0.087	2.2		Prof. D. Conti.
Cagliari	30.06	763.5	30.26	768.5	55.0	12.8	30	nw.			4		1	ne.		0	0		Prof. A. Pacinotti.
Palermo	30.57	776.4	30.27	768.8	53.2	11.8	41	n.	9.8	4.4			2	n.		0.020	0.5		Prof. G. Ciacciatore.
Syracuse	29.98	761.5	30.03	762.7	48.7	9.3	55	nne.	20.6	9.2			8	nne.		0.276	7.0		Prof. Vincenzo Gulliano.
SUB-SERIES.																			
Naples, S. R	29.60	751.9	30.15	765.7	44.1	6.7	46	ne.	8.7	3.9			8	nne.		0	0		Prof. T. Brioschi.
Stelvio	22.27	565.7			21.6	— 5.8	72	ne.			2		10			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.32	566.6			27.1	— 2.7	53	e.			2		0			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.53	750.0	29.57	751.1	34.5	1.3	91	w.	4.3	1.9		0	8 s			0.051	1.3	cloudy	
Hakodate	29.54	750.3	29.55	750.6	34.0	1.1	95	n.	3.0	1.3			10			0.482	12.2	overcast	
Hiroshima, I. M. Obs'y.....†	29.86	758.4	29.87	758.7	34.6	1.4	78	ne.	8.8	3.9			10 s			0	0	overcast	K. Sasaki.
Kanazawa	30.17	766.3	30.28	769.1	35.3	1.8	76	sw.	9.4	4.2		ck	10 s			0.385	9.8	covered	S. Endo.
Kioto	29.59	751.6	29.78	756.4	33.9	1.1	90	nw.	2.2	1.0		0	2 s			0.004	0.1	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.78	756.4	29.99	761.7	37 9	3.3	63	nnw.	6.2	2.8		0	9 s			0.020	0.5	cloudy	S. Takehayashi.
Niigata	29.57	751.1	29.61	752.1	34.6	1.4	91	sw.	6.8	3.0		6 ck	0	s.		0.205	5.2	cloudy	
Nobiru	29.51	749.5	29.52	749.8	37.6	3.1	69	nnw.	16.2	7.2			9 s			0.055	1.4	cloudy	H. Midzushima.
Supporo					31.8	— 0.1	82	s.	1.8	0.8			10			0.033	0.8	covered	
Tokei Obs'y, Yeddo	29.53	750.0	29.60	751.8	37.1	2.8	93	nne.	3.0	1.3		0	7 s			c 033	0.8	fair	The Staff.
Wakayama	29.76	755.9	29.81	757.2	38.7	3.7	64	n.	11.2	5.0		ck	9 n		n.	inap.	inap.	cloudy	Y. Kuwamues.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.43	620.6	30.19	766.8	51.8	11.0	76	nnw.			1	1 c	0	sw.		0	0	clear	Prof. M. Leal.
Mazatlan	29.74	755.3	30.00	762.0	59.5	15.3	85	nw.	11.0	4.9		2 cs	0	sw.		0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.3	30.25	768.4	50.4	10.2	66	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.31	617.6	30.52	775.3	54.3	12.4	77	sse.			3	1 c	2 k	s.	s.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	23.99	609.2	30.10	764.4	48.7	9.3	67									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.46	595.8	30.33	770.3	47.3	8.5	82	calm	0	0		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.27	616.5	30.28	769.2	57.3	14.1	67	e.			1	1	4	w.	e.	0	0	½ cloudy	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.62	574.7	30.34	770.7	50.9	10.5	59	e.	8.4	3.7		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.72	754.9	29.90	759.4	81.8	27.7	58	ese.	15.0	6.7		0	2 k		sse.	0	0	clear	Oliver & Figor.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.57	776.5	30.57	776.5	47.8	8.8		nnw.			4					0.028	0.7		
Groningen	30.36	771.2	30.42	772.6	44.2	6.8		nw.			5					0.020	0.5		
Helder	30.48	774.3	30.48	774.3	43.2	6.2		nnw.			4					0	0		
Hellevoetsluis	30.53	775.4	30.53	775.4	48.0	8.9	87	nw.			3					0.075	1.9		
Utrecht	30.47	773.8	30.51	775.0	46.2	7.9	86	nw.			3		8			0.091	2.3	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.28	769.0	30.34	770.6	31.6	— 0.2	56	n.	31	14			7			0.114	2.9		
Brono	29.92	760.0	29.96	761.0	19.4	— 7.0	73	nnw.	36	16			8			0.071	1.8	snowing	
Christiania	29.83	757.7	29.98	761.6	34.7	1.5	38	nnw.	20	9			0			0	0		
Gjæsvær	29.02	737.1	29.04	737.7	17.1	— 8.3		n.			8		10						
Lodingen	29.65	753.2	29.70	754.4	15.6	— 9.1	78	nnw.			6		10			0.055	1.4	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					59.0	15.0	72	se.	28.0	12.5			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.42	747.3	30.45	773.3	55.4	13.0	45	ene.	11.9	5.3			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.19	766.9	30.28	769.1	62.4	16.9	59	ssw.	3.8	1.7			9			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	30.08	764.0	30.45	773.4	55.4	13.0	49	ne.	18.6	8.3			2			0	0		The Staff.
Ponta Delgada, Azores	30.26	768.6	30.33	770.4	60.1	15.6	56	ese.	12.5	5.6			3			0	0		
Saint Paul de Loando	29.68	753.9	29.88	758.9	85.6	29.8	78	w.	1.3	0.6			5	s.		0	0		
Serra da Estrella	25.58	649.8	30.52	775.3	34.5	1.4	69	se.	28.0	12.5			0			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.03	737.4	30.24	768.0	0.1	—17.7		sse.	7	3		9 cs	0			0	0		Major K. Lasarew.
Archangel	28.64	727.4	28.66	727.9	15.1	— 9.4	91	s.	9	4			10			0	0		Capt. Sselliwerstow.
Astrakhan	30.04	763.1	29.96	761.0	36.0	2.2	74	sw.	11	5		10 cp	0			blank	blank		Capt. Wisganow.
Barnaul	29.88	758.9	30.43	772.8	12.7	—10.7	82	calm	0	0			3			0	0		Meteorological Obs'y.
Dorpat	28.98	736.1	29.23	742.5	23.7	— 4.6	88	nnw.	4	2			10 n			0.079	2.0	snowing	Observatory.
Ekaterinburg	28.56	725.5	29.56	750.8	27.3	— 2.6	56	ssw.	18	8			10			0	0		Meteorological Obs'y.
Kasan	28.94	735.0	29.21	742.0	27.5	— 2.5	82	ssw.	18	8			10			0.028	0.7		Observatory.
Kertch	29.93	760.2	29.95	760.7	36.5	2.5	74	wnw.	4	2		0	4k			0	0		Lagorio & Sastyrez.
Kieff	28.88	733.6	29.54	750.2	33.3	0.7	83	sw.	20	9			10ks;n			0.079	2.0		Observatory.
Lugan	29.54	750.2	29.75	755.6	32.4	0.2	71	wsw.	22	10			8			0	0		Meteorological Obs'y.
Moscow	28.62	726.9	29.11	739.4	27.0	— 2.8	79	ssw.	7.8	3.5			10 s			0.063	1.6		Meteorological Obs'y.
Nikolaiev	29.91	759.8	29.98	761.6	37.2	2.9	57	w.	9	4		0	0			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.94	760.5	30.03	762.7	5.0	—15.0	84	calm	0	0			10			0	0		Lieut. Iwanow.
Pekin, China	30.28	769.1	30.42	772.7	32.9	0.5	44	nw.	27	12		0	0			0	0		Physical Observatory.
St. Petersburg	29.10	739.2	29.12	739.6	19.9	— 6.7	57	nw.	16	7		3 ck	0			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.56	725.3	30.17	766.2	45.7	7.6	59	calm	0	0			10			0	0		Teich, A. M.
Tiflis	28.60	726.3	30.06	763.6	38.7	3.7	37	e.	2	1			10 s			0	0		Physical Observatory.
Vladivostok	29.90	759.5	29.97	761.2	18.9	— 7.3	85	n.	7	3		0	8 k			0	0		
Warsaw	29.19	741.5	29.63	752.5	37.2	2.9	96	sw.	31	14			10 n					raining	Astronomical Obs'y.
Wilna	28.91	734.4	29.34	745.3	32.7	0.4	90	nw.	4	2			10			0.020	0.5	heavy cl'ds.	Berg, Assistant.
Yeniseisk	30.18	766.6	30.49	774.5	22.3	— 5.4	80	w.	2	1			9			0.004	0.1		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.66	778.7	49	9.4	93	wnw.			4		10			0.1	3.	hazy	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.29	769.4	30.39	772.0	54.7	12.6	48	w.	4.5	2.0			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.68	779.2	30.74	780.7	49.6	9.8	57	ne.	0.9	0.4			10			0	0	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.55	699.7	30.67	778.9	40.1	4.5	62	ne.	13.9	6.2		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.25	717.5	30.56	776.1	49.8	9.9	43	e.	5.4	2.4		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.40	772.2	30.56	776.1	56.7	13.7	62	ene.	1.3	0.6		0	3			0	0	clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.60	751.9	30.53	775.4	53.8	12.1	44	e.	9.8	4.4		0	0			0	0	clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.07	763.7	30.13	765.4	68.3	20.2	87	calm	0	0		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.84	758.0	29.90	759.4	79.5	26.4	79	ese.	8.4	3 8		1 c	8 kn		ene.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.26	768.5	30.36	771.1	58.8	14.9	59	e.	23.9	10.7		0	1		se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.09	764.2	30.18	766.5	69.8	21.0	83	calm	0	0		3 k	2 kn	se.	se.	0	0		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.86	758.4	29.99	761.7	75.2	24.0	78	nnw.	6.0	2.7			10 ks		ne.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.10	739.1	29.14	740.1	22.3	— 5.4	96	nw.			6		5			0	0		
Umea	29.44	747.8	29.49	749.1	16.2	— 8.8	100	n.			9		10			0	0		
Hernosand	29.59	751.5	29.64	752.8	17.8	— 7.9	45	nw.			8		3			0	0		
Stockholm	29.53	750.0	29.71	754.5	21.2	— 6.0	44	n.			8		2			0	0		
Wisby	29.61	752.0	29.67	753.5	30.6	— 0.8	88	nne.			8		3			0.047	1.2		
Sub-Series.																			
Upsala	29.61	752.0	29.69	754.2	20.7	— 6.3	54	nnw.	24.8	11.1			9		nw.	0	0		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.08	738.7	30.56	776.1	39.9	4.4	59	n.			3					0	0	clear	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.07	763.8	39.9	4.4	76	ene.	18	8.0			10		n.	0.146	3.7		The Observatory.
Valona			30.08	763.9	50.5	10.3		nw.			1		10			0	0	covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.79	756 6	70.2	21.2	54	ne.			1	8 c	0	sw.		0.05	1.3		Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	29.84	757.9	29.93	760.2	35	1.7	79	s.	1	0.4			10 n			0.40	10.2	sleeting	
Alpena, Michigan	28.68	728.5	29.39	746.5	25	— 3.9	88	e.	28	12.5			10 n			0.20	5.1	sleeting	
Atlanta, Georgia	28.71	729.2	29.93	760.2	49.5	9.7	86	sw.	13	5.8			10 k		sw.	0.30	7.6	cloudy	
Atlantic City, New Jersey	29.76	755.9	29.77	756.1	43	6.1	100	e.	6	2.7			10s;fg			0.25	6.3	cloudy	
Augusta, Georgia	29.66	753.4	29.86	758.4	66.4	19.1	73	s.	7	3.1			10s;sk		s.	0	0	cloudy	
Baltimore, Maryland	29.66	753.4	29.71	754.6	45	7.2	93	ne.	5	2.2			10n;fog			0.27	6.9	light rain	
Barnegat, New Jersey	29.80	756.9	29.82	757.4	41.0	5.0	100	e.	21	9.4			10 n			0.40	10.2	light rain	
Bismarck, Dakota	28.21	716.5	30.19	766.8	—23	—30.6	100	calm	0	0		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.58	700.5	30.54	775.7	11	—11.7	91	calm	0	0			10 s		calm	0.04	1.0	cloudy	
Boston, Massachusetts	29.90	759.4	30.00	763.5	29.0	— 1.7	94	ne.	18	8.0			10 n		ne.	0.11	2.8	heavy snow.	
Brownsville, Texas	30.18	766.6	30.23	767.8	64	17.8	48	n.	8	3.6		10 cs	0			inap.	inap.	cloudy	
Buffalo, New York	28.65	727.7	29.45	748.0	35	1.7	100	n.	4	1.8			10 n		se.	0.56	14.2	light rain	
Burlington, Vermont	29.65	753.1	29.96	761.0	24.5	— 4.2	78	s.	1	0.4			10 n		s.	inap.	inap.	light snow.	
Cairo, Illinois	29.52	749.8	29.94	760.5	32.0	0.0	70	w.	32	14.3			10 ks		w.	1.61	40.9	threatening.	
Campo, California	27.60	701.0	30.24	768.1	18.5	— 7.5	87	e.	1	0.4		0	0			0	0	clear	
Camp Thomas, Arizona	27.42	696.5	30.26	768.6	25.5	— 3.6	90	se.			1	0	0			inap.	inap.	clear	
Cape Henry, Virginia	29.77	756.1	29.79	756.7	64	17.8	73	s.	19	8.5		4 ck	4 s			0	0	cloudy	
Cape May, New Jersey	29.68	753.9	29.71	754.6	46	7.8	93	se.	7	3.1			10 s		se.	0.08	2.0	cloudy	
Castroville, Texas	29.45	748.0	30.29	769.4	46	7.8	40	nw.	10	4.5		0	0			0	0	clear	
Cedar Keys, Florida	30.05	763.3	30.07	763.8	69	20.6	90	s.	7	3.1		0	3 s			0	0	clear	
Champaign, Illinois	28.72	729.5	29.59	751.6	22.4	— 5.3	78	sw.	23	10.3			10 s		sw.	0.99	25.1	cloudy	
Charleston, S. Carolina	29.91	759.7	29.97	761.2	65	18.3	90	sw.	16	7.2			10 s		sw.	0	0	threatening.	
Charlotte, N. Carolina	28.85	732.8	29.74	755.4	62.0	16.7	84	s.	21	9.4			10 s		s.	0.03	0.8	cloudy	
Chattanooga, Tennessee	28.99	736.3	29.85	758.2	52.0	11.1	66	sw.	18	8.0		2 k	0	w.		0.61	15.5	clear	
Cheyenne, Wyoming	23.99	609.3	30.24	768.1	19.4	— 7.0	48	nw.	6	2.7		0	0			0	0	clear	
Chicago, Illinois	28.62	726.9	29.37	746.0	31.7	— 0.2	89	w.	21	9.4			10 n			0.47	11.9	light snow.	
Chincoteague, Virginia	29.72	754.9	29.74	755.4	50	10.0	93	sw.	16	7.2		3 c	5 s	w.	w.	0	0	cloudy	
Cincinnati, Ohio	28.85	732.8	29.54	750.3	46.1	7.8	68	w.	16	7.2			10 s		w.	1.78	45.2	cloudy	
Cleveland, Ohio	28.50	723.9	29.30	744.2	50.5	10.3	93	s.	12	5.4		0	4 k		w.	1.00	25.4	fair	
Coleman City, Texas	28.44	722.4	30.32	770.1	31	— 0.6	70	n.	4	1.8		0	0			0.02	0.5	clear	
Columbus, Ohio	28.55	725.2	29.45	748.0	44	6.7	83	w.	40	17.9			10 n		w.	1.43	36.3	light rain	
Concho, Texas	28.30	718.8	30.32	770.1	32	0.0	81	calm	0	0		0	0			0	0	clear	
Davenport, Iowa	28.85	732.8	29.55	750.6	27	— 2.8	77	nw.	10	4.5			10 n		nw.	0.19	4.8	light snow.	
Dayton, Washington T'y	28.66	728.0	30.48	774.2	21.7	— 5.7	74	sw.	2	0.9			10 s			0.20	5.1	threatening.	
Deadwood, Dakota	25.31	642.9	30.23	767.8	22	— 5.6	70	s.	4	1.8		0	0			0	0	clear	
Decatur, Texas					33	0.6	68	nw.	4	1.8		0	0			0.02	0.5	clear	
Delaware Breakwater, Del.	29.70	754.4	29.72	754.9	46	7.8	100	s.	2	0.9			9 s;fg		sw.	0.11	2.8	cloudy	
Denison, Texas	29.45	748.0	30.29	769.4	29.0	— 1.7	77	n.	9	4.0		0	0			0.68	17.3	clear	
Denver, Colorado	24.72	627.9	30.34	770.6	25.0	— 3.9	67	se.	5	2.2		0	0			0	0	clear	
Des Moines, Iowa	28.86	733.0	29.83	757.7	11	—11.7	80	n.	16	7.2			10 n		n.	0.50	12.7	light snow	
Detroit, Michigan	28.56	725.4	29.31	744.5	41.0	5.0	100	sw.	11	4.9			10 n		w.	0.57	14.5	heavy rain	
Dodge City, Kansas	27.49	698.2	30.23	767.8	13	—10.6	83	nw.	13	5.8		0	0			0.06	1.5	clear	
Dubuque, Iowa	28.71	729.2	29.47	748.5	20.6	— 6.3	76	nw.	10	4.5			10 n		calm	0.28	7.1	light snow.	
Duluth, Minnesota	29.06	738.1	29.82	757.4	9	—12.8	76	nw.	18	8.0			10 s		nw.	0.56	14.2	cloudy	
Eagle Pass, Texas	29.50	749.3	30.34	770.6	41.1	5.1	73	ne.	2	0.9		0	0			0	0	clear	
Eagle Rock, Idaho	25.49	647.4	30.39	771.9	— 4	—20.0	71	n.	8	3.6		0	0			0	0	clear	
Eastport, Maine	30.18	766.6	30.25	768.3	14	—10.0	80	ne.	20	8.9		4 c	3 s	e.	se.	inap.	inap.	fair	
El Paso, Texas	26.44	671.6	30.32	770.1	23	— 5.0	73	nw.	3	1.3		0	0			0	0	clear	
Erie, Pennsylvania	28.60	726.4	29.37	746.0	49	9.4	93	s.	18	8.0			10 n			1.18	30.0	light rain	
Escanaba, Michigan	28.79	731.3	29.51	749.5	14	—10.0	100	ne.	25	11.2			10 n		ne.	0.09	2.3	light snow.	
Fort Apache, Arizona	25.19	639.8	30.29	769.4	18	— 7.8	61	ne.	0	2.7		0	0			0	0	clear	
Fort Assinnaboine, Montana	27.28	692.9	30.32	770.1	23	— 5.0	51	w.	12	5.4			10 s			0	0	cloudy	
Fort Bennett, Dakota	28.46	722.9	30.19	766.8	—13	—25.0	50	calm	0	0		0	0			0.06	1.5	clear	
Fort Benton, Montana	27.38	695.4	30.38	771.6	22	— 5.6	73	sw.	12	5.4			10 s		sw.	0	0	cloudy	
Fort Buford, Dakota	28.00	711.2	30.18	766.6	—12	—24.4	54	w.	1	0.4		0	0			0	0	clear	
Fort Custer, Montana	26.92	683.8	30.28	769.1	23	— 5.0	73	sw.	13	5.8		0	0			0	0	clear	
Fort Davis, Texas	25.27	641.8	30.23	767.8	30	— 1.1	61	calm	0	0		0	0			0	0	clear	
Fort Elliott, Texas	27.47	697.7	30.37	771.4	20	— 6.7	19	sw.	8	3.6		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.67	753.6	30.27	768.8	23.0	— 5.0	88	n.	12	5.4		0	0			0.91	23.1	clear	
Fort Grant, Arizona	25.29	642.4	30.15	765.8	26	— 3.3	39	calm	0	0		0	0			0	0	clear	
Fort Griffin, Texas	28.98	736.1	30.35	770.9	31	— 0.6	78	calm	0	0		0	0			0	0	clear	
Fort Keogh, Montana	27.53	699.2	30.21	767.3	18	— 7.8	70	sw.	12	5.4		0	0			0	0	clear	
Fort Macon, North Carolina	29.91	759.7	29.92	760.0	59	15.0	93	sw.	12	5.4		9 c	hz.	sw.	calm	0.01	0.3	cloudy	
Fort McKavett, Texas	27.98	710.7	30.36	771.1	34.2	1.2	55	n.	2	0.9		0	0			0	0	clear	
Fort Missoula, Montana	26.96	684.8	30.39	771.9	13	—10.6	83	sw.	1	0.4		0	0			0.02	0.5	clear	
Fort St. Michaels, Alaska	30.00	762.0	30.04	763.0	—27	—32.8	100	sw	3	1.3		0	0			0	0	clear	
Fort Shaw, Montana	26.51	673.3	30.36	771.1	15	— 9.4	67	w.	7	3.1		0	0			0	0	clear	
Fort Sill, Indian Territory	28.98	736.1	30.29	769.4	27	— 2.8	80	n.	6	2.7		0	0			inap.	inap.	clear	
Fort Stevenson, Dakota	28.18	715.8	30.20	767.1	—28	—33.3	100	ne.	1	0.4		0	0			0	0	clear	
Fort Verde, Arizona					22.9	— 5.1	64	n.			1	0	0			0	0	clear	
Fort Washakie, Wyoming	24.48	621.8			8.5	—13.1	78	w.	5	2.2		0	8 s			0	0	fair	
Fredericksburg, Texas	28.48	723.4	30.28	769.1	40	4.4	73	n.	2	0.9		0	0			0	0	clear	
Galveston, Texas	30.16	766.1	30.20	767.1	56	13.3	57	n.	24	10.7		3 cs	0	n.		0.10	2.5	clear	
Grand Haven, Michigan	28.53	724.6	29.24	742.7	31.0	— 0.6	94	e.	8	3.6			10 n			0.38	9.7	light snow.	
Hatteras, North Carolina	29.88	758.9	29.90	759.4	65	18.3	93	sw.	28	12.5			10 s		sw.	0.09	2.3	cloudy	
Helena, Montana	25.94	658.9	30.34	770.6	14	—10.0	83	w.	2	0.9			10 s			inap.	inap.	cloudy	
Henrietta, Texas	29.36	745.7	30.41	772.4	29	— 1.7	77	calm	0	0		0	0			0.03	0.8	clear	
Huron, Dakota	28.64	727.4	30.16	766.1	— 1.8	—18.8	62	nw.	15	6.7		0	7 s		nw.	0.08	2.0	fair	
Indianapolis, Indiana	28.70	729.0	29.55	750.6	31	— 0.6	88	sw.	20	8.9			10 n		sw.	2.09	53.1	light snow.	
Indianola, Texas	30.21	767.3	30.24	768.1	57.4	14.1	46	n.	25	11.2		2 ck	0	sw.		0.02	0.5	clear	
Jacksboro, Texas	29.10	739.1	30.34	770.6	31	— 0.6	78	nw.	4	1.8		0	0			0.34	8.6	clear	
Jacksonville, Florida	29.99	761.7	30.04	763.0	68	20.0	78	s.	20	8.9		0	0			0	0	clear	
Keokuk, Iowa	28.98	736.1	29.68	753.9	19.0	— 7.2	84	w.	12	5.4			10 s		w.	0.93	23.6	cloudy	
Key West, Florida	30.12	765.0	30.15	765.8	73.0	22.8	84	se.	6	2.7		0	0			0	0	clear	
Kittyhawk, North Carolina	29.85	758.2	29.87	758.7	63	17.2	90	sw.	24	10.7			10 s		w.	0	0	cloudy	
Knoxville, Tennessee	28.71	729.2	29.79	756.7	53	11.7	77	w.	20	8.9			10 s		sw.	0.30	7.6	cloudy	
La Crosse, Wisconsin	28.73	729.7	29.57	751.1	17	— 8.3	83	n.	20	8.9			10 n			0.56	14.2	light snow.	
La Mesilla, New Mexico	26.25	666.7	30.26	768.6	24.5	— 4.2	52	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.11	739.4	30.06	763.5	12	—11.1	80	nw.	16	7.2		0	4 s		nw.	0.22	5.6	fair	
Lewiston, Idaho	29.63	752.6	30.50	774.7	29	— 1.7	67	e.	1	0.4			10 s		calm	0	0	cloudy	
Little Rock, Arkansas	29.79	756.7	30.12	765.0	37	2.8	51	w.	14	6.3		0	0			0.21	5.3	clear	
Los Angeles, California	29.95	760.7	30.35	770.9	40.0	4.4	73	nw.	5	2.2		0	0			0	0	clear	
Louisville, Kentucky	28.99	736.3	29.58	751.3	43	6.1	68	sw.	32	14.3			9 ks		sw.	2.05	52.1	threatening.	
Lynchburg, Virginia	28.98	736.1	29.70	754.4	61.5	16.4	84	s.	13	5.8			10 s		sw.	0.02	0.5	threatening.	
Mackinac City, Michigan																			
Madison, Wisconsin	28.33	719.6	29.42	747.3	19	— 7.2	84	nw.	16	7.2			10 n		calm	0.33	8.4	light snow.	
Marquette, Michigan	28.83	732.3	29.61	752.1	19	— 7.2	91	ne.	24	10.7			10 n		calm	0.43	10.9	heavy snow	
Mason, Texas	28.60	726.4	30.33	770.4	37	2.8	73	n.	1	0.4		0	0			0.07	1.8	clear	
Memphis, Tennessee	29.69	754.1	30.04	763.0	36	2.2	100	nw.	9	4.0		0	1 s		nw.	0.53	13.5	clear	
Milwaukee, Wisconsin	28.49	723.6	29.29	744.0	29	— 1.7	88	n.	11	4.9			10 n			0.54	13.7	light snow.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.05	763.3	30.09	764.3	55	12.8	74	w.	1	0.4			10 s		w	0.10	2.5	cloudy	
Montgomery, Alabama	29.77	756.1	30.01	762.2	52.5	11.4	86	sw.	6	2.7		0	8 ks		w.	0.35	8.9	clearing	
Moorhead, Minnesota	29.04	737.6	30.14	765.5	— 2	—18.9	65	n.	16	7.2			10 s		n.	0	0	cloudy	
Morgantown, W. Virginia	28.47	723.1	29.54	750.3	60.5	15.8	77	sw.	2	0.9			10 n		sw.	0.96	24.4	light rain	
Mt. Washington, N. H	23.54	597.9	30.16	766.1	18.0	— 7.8	91	w.	12	5.4			10n;fg		w.	inap.	inap.	light snow	
Nashville, Tennessee	29.23	742.4	29.79	756.7	44.5	6.9	59	sw.	12	5.4		0	1 k		sw.	0.92	23.4	clear	
New Haven, Connecticut	29.83	757.7	29.95	760.7	32	0.0	96	ne.	12	5.4			10 n		ne.	0.27	6.9	light rain	
New London, Connecticut	29.96	761.0	30.00	762.0	32	0.0	100	ne.	1	0.4			10 n		ne.	0.17	4.3	light rain	
New Orleans, Louisiana	30.04	763.0	30.10	764.5	61.0	16.1	87	nw.	15	6.7		0	8 s		nw.	0.02	0.5	cloudy	
Newport, Rhode Island	29.96	761.0	30.01	762.2	33.2	0.7	84	ne.	6	2.7			10 n		ne.	0.29	7.4	light snow	
New River, N. Carolina					58	14.4	94	sw.			4	3 ck	5 ks	w.	sw.	0	0	cloudy	
New Shoreham, Rhode I'd.	29.95	760.7	29.98	761.5	35.2	1.8	100	e.	16	7.2			10 n		e.	0.07	1.8	light rain	
New York, New York	29.70	754.4	29.89	759.2	36	2.2	100	e.	21	9.4			10 n		e.	0.47	11.9	light rain	
Norfolk, Virginia	29.73	755.1	29.76	755.9	61	16.1	84	sw.	12	5.4		8ck;cs	0	sw.		0	0	cloudy	
North Platte, Nebraska	27.10	688.3	30.20	767.1	3.6	—15.8	78	nw.	12	5.4		0	0			0.04	1.0	clear	
Olympia, Washington T'y	30.38	771.6	30.42	772.7	34.5	1.4	93	n.	1	0.4		0	5 s		calm	0.02	0.5	fair	
Omaha, Nebraska	28.75	730.2	30.02	762.5	6.5	—14.2	81	nw.	22	9.8		0	8 s			0.15	3.8	cloudy	
Ooglaamie, Pt. Barrow, Alas.	29.95	760.7	29.97	761.2	—35.2	—37.3	78	nne.	6	2.7		0	0			0	0	clear	
Oswego, New York	29.27	743.4	29.62	752.3	34.0	1.1	83	se.	10	4.5			10 n		se.	0.65	16.5	light rain	
Palestine, Texas	29.69	754.1	30.27	768.8	38	3.3	45	nw.	4	1.8		0	0			0	0	clear	
Pensacola, Florida	30.05	763.3	30.08	764.0	56.2	13.4	69	nw.	5	2.2			10 s		sw.	0.10	2.5	cloudy	
Philadelphia, Pa	29.69	754.1	29.80	756.9	42	5.6	92	ne.	12	5.4			10 n		ne.	0.29	7.4	light rain	
Pike's Peak, Colorado	17.53	445.3	30.25	768.3	5	—15.0	47	nw.	12	5.4		0	0			0.05	1.3	clear	
Pioche, Nevada	24.18	614.2	30.34	770.6	17	— 8.3	58	s.	1	0.4		3 k	0	calm		0	0	clear	
Pittsburg, Pennsylvania	28.62	726.9	29.48	748.8	57.0	13.9	86	s.	8	3.6			10n;fg		sw.	0.63	16.0	light rain	
Port Eads, Louisiana	30.14	765.5	30.15	765.8	60.5	15.8	52	n.	21	9.4			10 n		n.	0.01	0.3	light rain	
Port Huron, Michigan	28.48	723.4	29.21	741.9	33.6	0.9	100	se.	7	3.1			10 n		calm	0.34	8.6	sleeting	
Portland, Maine	30.11	764.8	30.16	766.1	23.0	— 5.0	73	ne.	14	6.3			10 s			0	0	cloudy	
Portland, Oregon	30.36	771.1	30.43	772.9	33.0	0.6	88	calm	0	0			10 s		n.	0.34	8.6	cloudy	
Portsmouth, N. Carolina					63	17.2	93	sw.	24	10.7			10 ks		sw.	0.03	0.8	cloudy	
Prescott, Arizona	24.86	631.4	30.22	767.6	10	—12.2	66	ne.	3	1.3		0	0			0	0	clear	
Provincetown, Mass	30.04	763.0	30.07	763.8	32	0.0	100	e.	12	5.4			10 n			0.06	1.5	light snow	
Punta Rassa, Florida	30.12	765.0	30.12	765.0	65	18.3	90	se.	6	2.7		1 c	5 ks	calm	s.	0	0	fair	
Red Bluff, California	30.04	763.0	30.42	772.7	35.1	1.7	89	n.	5	2.2		0	5 s		w.	0	0	fair	
Rio Grande City, Texas	30.00	762.0	30.25	768.3	64	17.8	12	ne.	8	3.6		10 cs	0	calm		0	0	cloudy	
Rochester, New York	28.84	732.5	29.56	750.8	32	0.0	100	calm	0	0			10 n		e.	0.33	8.4	light rain	
Roseburg, Oregon	29.85	758.2	30.41	772.4	37.2	2.9	91	calm	0	0			fg			0.30	7.6	dense fog	
Sacramento, California	30.35	770.9	30.43	772.9	37.0	2.8	82	nw.	7	3.1		0	0			0	0	clear	
St. Louis, Missouri	29.19	741.4	29.83	757.7	20.0	— 6.7	76	w.	27	12.1		0	5 s		w.	1.42	36.1	fair	
St. Paul, Minnesota	28.79	731.3	29.73	755.1	16.0	— 8.9	80	nw.	15	6.7			10 n		nw.	1.24	31.5	heavy snow	
St. Vincent, Minnesota	29.21	741.9	30.18	766.6	—14	—25.6	100	n.	9	4.0			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.89	657.6	30.45	773.4	17	— 8.3	44	calm	0	0		0	0			0	0	clear	
San Antonio, Texas	29.56	750.8	30.28	769.1	43.7	6.5	60	ne.	9	4.0		1 cs	0			0	0	clear	
San Diego, California	30.20	767.1	30.27	768.8	39.7	4.3	68	ne.	5	2.2		0	0			0	0	clear	
Sandusky, Ohio	28.62	726.9	29.34	745.2	40	4.4	89	sw.	6	2.7			10 n			1.65	41.9	light rain	
Sandy Hook, New Jersey	29.83	757.7	29.87	758.7	39.0	3.9	89	e.	28	12.5			10 n		e.	0.62	15.7	light rain	
San Francisco, California	30.33	770.4	30.40	772.1	43	6.1	60	ne.	6	2.7		0	0			0	0	clear	
Santa Fé, New Mexico	23.25	590.5	30.29	769.4	15	— 9.4	48	n.	6	2.7		0	0			0	0	clear	
Savannah, Georgia	29.88	758.9	29.97	761.2	66	18.9	78	s.	15	6.7		3 cs	3 ks	sw.	s.	0	0	fair	
Shreveport, Louisiana	29.98	761.5	30.24	768.1	38	3.3	61	nw.	9	4.0		0	0			0.19	4.8	clear	
Silver City, New Mexico	24.32	617.7	30.17	766.3	20	— 6.7	64	sw.	3	1.3		0	0			0	0	clear	
Sitka, Alaska	28.99	736.3	29.06	738.1	38.6	3.7	80	se.	36	16.1			10 n		se.	2.68	68.1	light rain	
Smithville, North Carolina	29.89	759.2	29.93	760.2	61	16.1	93	sw.	17	7.6		3 c	4 s		sw.	0	0	fair	
Spokane Falls, Wash. Ter.	28.37	720.6	30.50	774.7	17	— 8.3	91	w.	2	0.9			10 n			0.12	3.0	light snow	
Springfield, Illinois	29.04	737.6	29.77	756.1	22	— 5.6	87	w.	28	12.5			10 n		w.	2.54	64.5	light snow	
Springfield, Massachusetts	29.89	759.2	30.03	762.7	28.6	— 1.9	88	ne.	6	2.7			10 n			0.41	10.4	sleeting	
Springfield, Mo	28.55	725.2	30.12	765.0	15	— 9.4	75	w.	21	9.4		0	0			1.21	30.7	clear	
Stockton, Texas	27.18	690.4	30.31	769.9	26.0	— 3.3	76	sw.	4	1.8		0	0			0	0	clear	
Thatcher's Island, Mass	29.98	761.5	30.04	763.0	31.0	— 0.6	100	e.	22	9.8			10 n			0.10	2.5	heavy snow	
Toledo, Ohio	28.62	726.9	29.36	745.7	37	2.8	89	sw.	15	6.7			10s;fg		w.	0.70	17.8	cloudy	
Tucson, Arizona	27.71	703.8	30.19	766.8	32	0.0	88	calm	0	0		0	0			0	0	clear	
Umatilla, Oregon	30.20	767.1	30.58	776.7	25.0	— 3.9	88	se.	2	0.9			10 s			0.05	1.3	cloudy	
Uvalde, Texas	29.27	743.4	30.27	768.8	42	5.6	57	calm	0	0		0	0			0	0	clear	
Vicksburg, Mississippi	29.88	758.9	30.15	765.8	50	10.0	59	w.	17	7.6		3 cs	0	w.		0.89	22.6	clear	
Visalia, California	29.96	761.0	30.34	770.6	36.7	2.6	93	se.	3	1.3		0	4 s			0	0	fair	
Washington, D. C	29.56	750.8	29.68	753.9	43	6.1	100	ne.	5	2.2			10 n			0.24	6.1	light rain	
West Los Animas, Colorado	26.10	662.9	30.23	767.8	6	—14.4	87	w.	2	0.9		0	0			inap.	inap.	clear	
Wickenburg, Arizona					27.5	— 2.5	92	nw.			1	8 c	0	n.		0	0	cloudy	
Williamsport, Pa	29.05	737.9	29.68	753.9	40	4.4	89	e.	8	3.6			10 n		e.	0.93	23.6	light rain	
Wilmington, N. Carolina	29.85	758.2	29.91	759.7	65	18.3	84	sw.	22	9.8			10 s		w.	0	0	cloudy	
Winnemucca, Nevada	25.86	656.8	30.38	771.6	17	— 8.3	83	ne.	8	3.6			10 n		calm	0.04	1.0	light snow	
Wood's Holl, Mass																			
Yankton, Dakota	28.74	730.0	30.16	766.1	0	—17.8	68	nw.	19	8.5		0	2 ks			0.08	2.0	clear	
Yuma, Arizona	30.11	764.8	30.26	768.6	40.0	4.4	40	n.	5	2.2		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.01	559.0			53.0	11.7	82	e.	4	1.8		4 cs; k	2 s	ne.		0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.02	762.5	30.03	762.7	76	24.4	81	e.				5 k	5 ks	e.	e.	0	0	cloudy	J. A. Racker.
Buenaventura, U. S. C.	29.97	761.2	29.99	761.7	76	24.4	90	n.	4	1.8			10 ks		n.	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I.	30.07	763.8	30.09	764.3	72	22.2	90	ne.				10 k	0			0.039	1.0	cloudy	B. Bigar.
Havana, Cuba, W. I.	30.15	765.8	30.20	767.1	73	22.8	82	se.	1.2	0.5		0	1 ks		calm	0	0	clear	A. Van Ganeghem.
Kingston, Jamaica, W. I.	30.09	764.3	30.10	764.5	71.5	21.9	76	n.	1	0.4		0	1 s		e.	0.10	2.5		Robert Johnstone.
Navassa, W. I.																			
Paramaribo, S. A.	30.07	763.8	30.07	763.8	77	25.0	91	e.			2	6 k	8 ps	e.		0.110	2.8	cloudy	F. M. Everett.
Puerto Berrio, U. S. Col'mba	29.47	748.5	29.92	760.0	88	31.1	55	calm			0	0	8 s		calm	0	0	cloudy	Dr. C. J. Hering.
Rivas, Nicaragua							94	ne.			5	0	0		ne.	0	0	clear	Miss Flora A. Nichols.
Santiago de Cuba, W. I.	30.10	764.5	30.13	765.3	72	22.2	75	calm	0	0		0	9 s		se.	0.46	11.7	cloudy	Earl Flint.
St. Thomas, W. I.																			Robert Mason.
York Factory, B. A.	30.18	766.6	30.23	767.8	—23.0	—30.6		s.	8	3.6		1 c	0	s.		0	0	fair	G. O. Gylljeh. J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Gibraltar, Mediterranean	30.42	772.7	59	15.0	76	ene.			3-6		7	nne.						squally	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S. Alert, N. 7° 26′, E. 72° 35′	29.84	757.9	80	26.7	80	n.			3		3							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.11	764.8	52	11.1	66	wnw.			3		5	wnw.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 12° 43′, E. 43° 24′	30.01	762.2	77	25.0	69	sse.			4-5		0					2	sse.	misty	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.83	757.7	71	21.7	73	w.			2		3	w.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S. 40° 32′, E. 39° 40′	30.08	764.0	63.5	17.5	91	ne.			5		7	nnw.				3	ne.	d. clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′, W. 61° 31′	30.09	764.3	78	25.6		ese.			3		4	ne.						d. clouds	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.17	766.3	64.5	18.1	80	ssw.			2-3		4	ssw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	30.10	764.5	64	17.8	88	ssw.			3-4		6					3	ssw.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 12° 18′, E. 44° 21′	29.83	757.7	82	27.8		wnw.			3-4		6	nw.				1	wnw.	raining	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt. C. A. G. Bridge.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	29.77	756.1	42	5.6	75	nw.			1-3		6	nw.						misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 13° 35′, W. 77° 40′	29.92	760.0	74	23.3	81	sse.			4-5		1					1 2	se. s.	blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.51	749.5	47	8.3	85	w.			3		10							showery	Capt. L. F. Jones.
H. M. S. Inconstant, N. 3° 00′, E. 105° 00′	29.81	757.2	80	26.7	82	n.			2-3		2	n.				1	nne.	d. clouds	
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′, E. 113° 24′	30.24	768.1	51	10.6	78	n.			2-4		9	n.				1	n.	squally	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey, Coquimbo, Chili	29.97	761.2	64	17.8		n.			1		8								Capt. J. T. R. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.74	755.4	73	22.8	81	e.			2		2	calm						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, Port Royal, Jamaica, W. I.	30.05	763.3	78	25.6	77	e.			2		1	e.						blue sky	Capt. E. Drummond.
H. M. S. Orontes, D'Urban, Natal, S. Africa	29.77	756.1	79.5	26.4	92	e.			2		0					4	cf'd	blue sky	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 48° 04′, W. 16° 56′	30.95	786.1	51.5	10.8	96	e.			2		10					2	ese.	overcast	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Quita, Lower Guinea	29.88	758.9	82	27.8	91	sse.			2		0							hazy	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.13	765.3	63	17.2		nw.			2		0							blue sky	Capt. W. H Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id.	30.39	771.9	35	1.7	90	calm			0		8							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 5° 05′, E. 39° 07′	29.23	742.4	83	28.3	100	nne.			2-3		2	ne.				3	nne.	d. clouds	Capt. M. Byles.
H. M. S. Thalia																			
H. M. S. Triumph, S. 13° 54′, W. 77° 27′	29.95	760.7	73	22.8	85	se.			5		1	se.				3	se.	blue sky	Capt. A. H. Markham.
H. M. S. Tyne, N. 10° 00′, E. 109° 50′	29.90	759.4	81	27.2	95	n.			5-6		8	n.				5	n.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica W. I.	30.07	763.8	76	24.4		e.			2		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, N. 22° 50′, E. 62° 00′	30.04	763.0	72.5	22.5	59	s.			1-2		3	se.						d. clouds	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon																			
Quanza. Santiago, Cape Verd Ids	30.07	763.8	76.1	24.5	70	ne.			3		0					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 13° 20′, W. 81° 20′	29.98	761.5	77.5	25.3	92	ene.			3		4							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.06	763.5	57	13.9	81	nw.	3	1.3	.....	.....	10	.....	sw.	0.12	3.0	.....	.....	cloudy	
N. Yard, Portsmouth, N. H.	30.08	764.0	28	— 2.2	.....	ne.	19	8.5	.....	.....	10	.....	ne.	.....	.....	.....	.....	snowing	
Naval Hospital.																			
Yokohama, Japan	29.44	747.8	39.5	4.2	82	calm	.....	.....	0	.....	10	.....	nw.	sli't	sli't	.....	.....	covered	
Adams.																			
Callao, Peru	29.69	754.1	67	19.4	95	sse.	.....	.....	2	.....	10	.....	.....	0	0	gr'd	.....	cloudy	
Alaska.																			
Valparaiso, Chili	29.89	759.2	61	16.1	88	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert.																			
Batavia, Java*	29.69	754.1	81	27.2	83	sw.	.....	.....	1	.....	10	.....	calm	.....	.....	sm'h	.....	overcast	
Alliance.																			
Norfolk, Va	29.71	754.6	62	16.7	83	sw.	.....	.....	2	.....	8	.....	.....	light	light	.....	.....	cloudy	
Ashuelot.																			
Tientsin, China	29.35	745.5	34	1.1	90	nw.	.....	.....	5	.....	1	.....	calm	.....	.....	.....	.....	clear	
Brooklyn.																			
Sandy Point, Patagonia	29.61	752.1	55	12.8	74	wsw.	12	5.4	.....	.....	8	.....	sw.	0	0	sm'h	.....	fair	
Colorado.																			
New York, N. Y	29.87	758.7	36	2.2	100	ene.	7	3.1	.....	.....	10	.....	e.	0.45	11.4	.....	.....	raining	
Enterprise.																			
Norfolk, Va*	29.74	755.4	61	16.1	94	ssw.	.....	.....	3	.....	5?	.....	calm	.....	.....	.....	.....	clear?	
Essex.																			
N. 23° 12′, W. 18° 55′	30.22	767.6	68	20.0	70	ene.	.....	.....	3	.....	2	.....	e.	.....	.....	sm'h	.....	clear	
Franklin.																			
Norfolk, Va	29.81	757.2	62	16.7	88	s.	18	8.0	.....	.....	8	.....	e.	0	0	.....	.....	cloudy	
Galena.																			
Villafranca, France	30.28	769.1	60	15.6	65	se.	.....	.....	1	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Independence.																			
N. Yard, Mare I'd, Ca'	30.24	768.1	39	3.9	82	ene.	4.8	2.1	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Kearsarge.																			
New Orleans, La	30.12	765.0	65	18.3	89	nw.	.....	.....	3	.....	2?	.....	.....	.....	.....	.....	.....	cloudy?	
Lackawanna.																			
Valparaiso, Chili*	29.91	759.7	62	16.7	100	ne.	.....	.....	1	.....	2	.....	ne.	.....	.....	.....	.....	clear	
Lancaster.																			
Alexandria, Egypt	29.88	758.9	67	19.4	100	w.	.....	.....	3	.....	8	.....	e.	.....	.....	sm'h	.....	fair	
Marion.																			
S. 33° 55,′ E. 18° 25′	29.71	754.6	73	22.8	63	wsw.	.....	.....	3	.....	2	.....	wsw.	0	0	sm'h	.....	clear	
Michigan.																			
Erie, Pa	29.66	753.4	35.	1.7	70	sw.	.....	.....	4	.....	10	.....	e.	0	0	.....	.....	cloudy	
Minnesota.																			
Newport, R. I	30.00	762.0	31	— 0.6	.....	ne.	5	2.2	.....	.....	10	.....	ene.	.....	.....	.....	.....	fog & sleet	
Monocacy.																			
Yokohama, Japan	29.60	751.8	41	5.0	91	nnw.	.....	.....	2	.....	10	.....	calm	.....	.....	.....	.....	cloudy	
Nipsic.																			
Cadiz, Spain	30.37	771.4	60	15.6	65	ese.	.....	.....	6	.....	2	.....	.....	.....	.....	mod.	.....	clear	
Onward.																			
Callao, Peru†	30.06	763.5	65	18.3	100	sse.	.....	.....	1	.....	10	.....	nnw.	.....	.....	long	w.	foggy	
Palos.																			
Hong Kong, China	30.21	767.3	54	12.2	?	ne.	.....	.....	1	.....	10	.....	n; e.	.....	.....	.....	.....	overcast	
Passaic.																			
Washington, D. C	29.72	754.9	42	5.6	83	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	rainy	
Pensacola.																			
S. 34° 57′, W. 72° 48′	29.96	761.0	58	14.4	76	s.	.....	.....	2	.....	0	.....	.....	0	0	long	ssw.	clear	
Powhatan.																			
Samana Bay, Haiti, W.I.	30.21	767.3	72	22.2	90	e.	.....	.....	2	.....	5	.....	e.	.....	.....	sm'h	.....	fair	
Quinnebaug.																			
Alexandria, Egypt	29.89	759.2	66	18.9	74	wsw.	.....	.....	4	.....	2	.....	calm	.....	.....	sm'h	.....	clear	
Ranger.																			
N. 19° 17′, W. 104° 50′	29.85	758.2	69	20.6	90	calm	.....	.....	0	.....	2	.....	calm	0	0	sm'h	.....	clear	
Richmond.																			
N. 27°48′, E. 148° 20 ′*	29.68	753.9	70	21.1	95	sw.	.....	.....	5	.....	10	.....	sw.	0.03	0.8	sm'h	n.	cloudy	
Shenandoah.																			
S. 28° 51′, W. 27° 09′*	30.11	764.8	74	23.3	90	n.	.....	.....	4	.....	10	.....	n.	.....	.....	mod.	n.	cloudy	
St. Louis.																			
League Island, Pa	29.97	761.2	41	5.0	91	e.	11	4.9	.....	.....	10	.....	.....	0.27	6.9	.....	.....	raining	
Swatara.																			
Yokohama, Japan*	29.43	747.5	44	6.7	76	n.	.....	.....	2	.....	10	.....	.....	.....	.....	sm'h	.....	cloudy	
Tennessee.																			
Fort Monroe, Va	29.75	755.6	58	14.4	94	sw.	21	9.4	.....	.....	8	.....	.....	0	0	mod.	.....	squally	
Vandalia.																			
N. 10° 48′, W. 79° 07′*†	30.06	763.5	79	26.1	82	ne.	.....	.....	4	.....	8	.....	ne.	.....	.....	mod.	ne.	fair	
Wabash.																			
Boston, Mass	30.09	764.3	32	0.0	79	ene.	8	3.6	.....	.....	10	.....	e.	.....	.....	.....	.....	snowing	
Wachusetts.																			
Duncan Bay, B. C	30.25	768.3	33	0.6	.....	sse.	.....	.....	1	.....	10	.....	s.	.....	.....	.....	.....	cloudy	
Wyoming.																			
Port Royal, S. C	29.94	760.5	65	18.3	89	s.	24	10.7	.....	.....	8	.....	sw.	0	0	.....	.....	cloudy	
Yantic.																			
N. 16° 25′, W. 85° 40′*	29.98	761.5	76	24.4	91	sse.	.....	.....	3–4	.....	2	.....	sse.	.....	.....	sm'h	se.	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE. *A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.*																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 43° 38′, W. 54° 00′*	29.63	752.6	33	0.6		nne.	5		9		ne.	16 h'r	snow	mod.	ne.	cloudy	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, N. 49° 00′, W. 26° 01′*	30.64	778.2	53	11.7		sse.	5		5?		sw.			slight	sw.	overcast?	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 42° 56′, W. 57° 53′*	30.10	764.5	30	—1.1		n.	5		5		n.	8 h'r	snow	light	cross	fine	
AMERICAN S. S. CO. *Peter Wright & Sons, Agents, Philadelphia.*																	
S. S. British Crown, Capt. E. H. Freeth, N. 46° 03′, W. 37° 18′*†	29.84	757.9	57	13.9		se.	7		10		se.	0	0	r'gh	sse.	overcast	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 42° 06′, W. 63° 25′	30.06	763.5	29	—1.7	89	wnw.	4		8		nw.			mod.	nw.	fine	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, England†	30.63	778.0	49	9.4	85	sw.	3		5?		sw.	light	light			cloudy?	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, N. 52° 21′, W. 6° 00′*†	30.90	784.8	48	8.9	77	w.	4		7		sw.			sm'h	sw.		Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,																	W. H. Townshend.
ANCHOR LINE. *Henderson Brothers, Agents, New York.*																	
S. S. Devonia, Capt. H. Young, N. 51° 20′, W. 32° 20′*†	30.22	767.6	54	12.2		se.	4		10?		nw.			h'vy	sse.	fair?	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Daw, 3d officer.
ATLAS LINE. *Pim, Forwood & Co., Agents, New York.*																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Port au Prince, Hayti, W. I*	30.18	766.6	79	26.1		ne.	3		0			0	0			fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Kingston, Jamaica, W.I*†	29.96	761.0	74	23.3													W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Kingston, Jamaica, W. I.						ene.	2		5		ene.			mod.	ene.	squally	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 31° —′, W. 74° —′	30.13	765.3				s.	6		6		s.	sh'rs	sh'rs	mod.	se.	cloudy	J. Frasher, 3d officer.
BOSTON & HALIFAX. *F. W. Nickerson, Agent, Boston.*																	
S. S. Carroll, Capt. S. E. Wright, Boston, Mass			37	2.8		se.						snow	snow			light snow	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 39° 26′, W. 34° 39′	29.49	749.0	65	18.3		nne.	5		10							drizzling	
Baroda, Capt. C. J. Russell, S. 24° 15′, W. 24° 34′	30.13	765.3	79.2	26.2	82	ne.	4		7							d. clouds	
Bk. Caldew, Capt. W. Peterson S. 37° 21′, W. 34° 06′	29.53	750.0	70.5	21.4		nw.	5		10							overcast	
S. S. Cipero, Capt. W. N. Lailey N. 20° 02′, W. 49° 07	30.23	767.8	70.4	21.3	61	nne.	5		8					3	nne.	d. clouds	
S. City of Agra, Capt. Thos. Young																	
Coppename, Capt. James Buchan N. 10° 45′, W. 56° 58′	30.04	763.0	78	25.6	82	ne.	6		6							blue sky	
Bk. Glaramara, Capt. R. Morton,																	
Glencairn, Capt. R. S. Tannock,																	
S. S. Gordon Castle, Capt. W. Waring, N. 35° 33′, E. 15° 49′	30.05	763.3	53	11.7	48	nw.	4		4							d. clouds	
Hermine, Capt. S. G. Jones, S. 39° 28′, W. 36° 05′	29.37	746.0	67.5	19.7	98	nnw.	7		8							squally	
Hope, Capt. James Campbell N. 17° 07′, W. 29° 13′	30.14	765.5	72.5	22.5	90	e.	3		1							misty	
S. S. Humboldt, Capt. A. W. Jeffery, N. 20° 10′, W. 59° 16′	30.32	770.1	71	21.7	62	ene.	6		5							d. clouds	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 12° 05′, W. 10° 06′	29.99	761.7	78.3	25.7	77	se.	3		4							d. clouds	
May Hulse, Capt. H. Youlden, R. N. R., S. 46° 35′, W. 81° 52′	30.03	762.7	50.4	10.2	93	nw.	4		10							overcast	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, Montevideo, Uruguay, S. A.	30.08	764.0	65.8	18.8	84	s.	6		3							d. clouds	
Nalad, Capt. J. Smith, N. 39° 05′, W. 34° 50′	29.91	759.7	58.7	14.8	97	se.	7		10							overcast	
Pole Star, Capt. F. Norman,																	
Queen of Cambria, Capt. M. Parry. S. 3° 51′, E. 82° 57′	29.80	756.9	86.2	30.1	68	calm	0		3							d. clouds	
S. S. Strathleven, Capt. G. W. Pearson																	
S. Superb, Capt. Berridge																	D. W. Barker.
BRISTOL CITY LINE. *Arkell & Co., Agents, New York.*																	
S. S. Brooklyn City, Capt. S. Windham, Hudson River, N.Y*†	30.14	765.5				ese.	5		10			12 h'r	12 h'r			raining	Wm. Fitt.
CROMWELL LINE. *Clark & Seaman, Agents, New York.*																	
S. S. Hudson, Capt. H. R. Freeman, N. 30° 30′, W. 80° 30′*†	30.03	762.7	70	21.1		s.	5		2		s.	0	0	st'g	s.	fine	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey,																	T. P. C. Halsey.
CUNARD LINE. *Vernon H. Brown & Co., Agents, New York.*																	
S. S. Bothnia, Capt. W. McMickan,																	E. F. Stembridge, 3d offi.
S. S. Gallia, Capt. W. H. P. Hains,																	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt. Périer d'Hauterive, N. 47° 29′, W. 37° 06′*†.	29.92	760.0	53.6	12.0		s.	6		k		ssw.	rain	rain	very h'vy	ssw.	light rain	
S. S. St. Laurent, Capt. A. Sérvan,																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein,																	
S. S. Silesia, Capt. A. Albers. N. 48° 32′, W. 23° 34′*†.	30.83	783.1	53.4	11.9		sse.	5–6		10		ssw.	0	0	4	s.	overcast	
S. S. Wieland, Capt. C. Hebich,																	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch Chesapeake Bay.	29.74	755.4				s.	5		10		s.	shr's	sh'rs			cloudy	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt. Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 14° —′, W. 38° —′*†.	30.20	767.1	82	27.8		n.	2		8?		nne.	1 h'r	1 h'r	sm'h		clear.?	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 31° 21′, W. 80° 07′*†.	30.10	764.5	63	17.2		sw.	6		0			½ h'r	½ h'r	high	sw.	hazy	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 49° 05′, W. 24° 22′*†.	30.78	781.8	55	12.8	80	sse.	5		10		sse.	0	0	mod.	se.	overcast	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, N. 30° 52′, W. 80° 17′*†	30.15	765.8	68	20.0		ssw.	5		3		sw.	2 h'r	light	mod.	sw.	fine	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, [man																	
S. S. City of Alexandria, Capt. L. F. Timmer- Havana, Cuba†*. [nolds	30.34	770.6	78	25.6		calm	0									misty	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Elbe, Capt. W. Willigerod																	
S. S. Lessing, Capt. B. Voss																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke																	
S. S. P. Caland, Capt. E. Deddes,																	
S. S. Schiedam, Capt. E. M. Chevalier,																	
S. S. Scythia, Capt. M. Murphy																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur																	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 28° 28′, W. 16° 12′*.	30.28	769.1	66.9	19.4		e.	3		3		se.	0	0	sm'h	se.		G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer, N. 42° 33′, W. 47° 46′.	29.84	757.9	45	7.2	67	se.	6		10		sse.	2 h'r and	rain snow	mod.	se.	raining	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 51° 20′, E. 1° 50′*.	30.61	777.5	49.1	9.5		nnw.	2–3		10		nw.	0	0	light	n.	covered	
S. S. Mosel, Capt. F. Hesse, N. 41° 39′, W. 56° 58′.	29.98	761.5	37.6	3.1		nne.	6		6		nne.	2 ½	hour	mod.	n.	cloudy	J. Hesse.
S. S. Neckar, Capt. R. Bussius, N. 44° 10′, W. 47° 13′.	29.94	760.5	42.6	5.9		ese.	4		8		se.	1 h'r	snow	mod.		overcast	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	
S. S. Oder, Capt. O. Undeutsch,																	Montz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, Baltimore, Md.	29.68	753.8				e.	3		10		ne.	18 h'r	18 h'r			raining	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch, N. 48° 12′, W. 26° 25′*.	30.68	779.3	55.0	12.8	80	sse.	6		9		sse.	½ h'r	½ h'r	r'gh	sse.	cloudy	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 34° 00′, E. 137° 58′†.	29.52	749.8	47	8.3	85	nw.	6		5		nw.	0	0	mod.	nw.	fair	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 37° 44′, W. 135° 11′†*.	30.40	772.1	57	13.9	62	w.	1		hz					mod.	nw.	hazy	
S. S. Oceanic, Capt. J. Metcalfe, N. 45° 45′, W. 176° 16′*.	30.17	766.3	41	5.0	91	var.	1		9					1		overcast	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 39° 40′, W. 74° 00*†′.	29.80	756.9				ne.	5		5						ne.	foggy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett N. 41° 00′, W. 72° 55′†.	29.97	761.2	38	3.3	80	ese.	4		10		e.	12 h'r	12h'r	r'gh	se.	raining	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.45	773.4	38	3.3	80	e.	1	.....	8	.....	e.	.....	.....	.....	.....	fair	E W. Holmes.
S. S. Willamette, Capt. L. Meyer, Seattle, Wash. Ter*†	30.44	773.2	35	1.7	80	calm	0	.....	6	.....	e.	0	0	.....	.....	foggy	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles, N. 43° 05′, W. 124° 40′†	30.35	770.9	44	6.7	80	e.	2	.....	10	.....	sse.	4 h'r	rain snow	mod.	sse.	misty	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Columbia River, Oregon†	30.38	771.6	34	1.1	90	calm	0	.....	0	.....	.....	.....	.....	.....	.....	fine	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 37° 06′, W. 122° 24′†	30.33	770.4	46	7.8	69	ne.	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear	.....
S. S. G. W. Elder, Capt. H. G. Morse, N. 45° 21′, W. 124° 34′†	30.36	771.1	37	2.8	.....	se.	3	.....	4	.....	sw.	0	0	light	w.	clear	.....
S. S. Idaho, Capt. H. M. Hayward, N. 39° 20′, W. 124° 00′†	30.27	768.8	40	4.4	100	e.	1	.....	5	.....	se.	.....	.....	.....	sw.	cloudy	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 35° 09′, W. 120° 34′†	30.20	767.1	48	8.9	77	nw.	2	.....	1	.....	nw.	.....	.....	sm'h	nw.	clear	Harisson & McCallum:
S. S. Senator, Capt. Thos. Wallace, San Francisco, Calf	30.54	775.7	42	5.6	65	e.	1	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. State of California, Capt. G. Debney, San Francisco, Calf	30.37	771.4	40	4.4	63	ese.	4	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. Victoria, Capt. W. E. Plummer, N. 48° 38′, W. 122° 22′†	30.34	770.5	37	2.8	80	e.	2	.....	10	.....	se.	.....	.....	.....	.....	rainy	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 26° 57′, W. 143° 59′	30.36	771.1	62	16.7	77	ese.	3	.....	5	.....	e.	0	0	sm'h	.....	fine	.....
S. S. City of New York, Capt. W. B. Cobb, N. 30° 20′, W. 143° 40′†	30.39	771.9	60	15.6	82	var.	2	.....	10	.....	.....	0	0	h'vy	nw.	cloudy	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 27° 54′, W. 116° 05′†	30.38	771.6	57	13.9	69	ne.	3	.....	2	.....	ne.	0	0	mod.	nw.	fine	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, Sydney, N. S. W†	30.14	765.5	78	25.6	53	ne.	4	.....	2	.....	e.	0	0	sm'h	.....	clear	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, Hong Kong, China†	30.26	768.6	55	12.8	50	nne.	7	.....	0	.....	.....	0	0	.....	.....	clear	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, San Jose, Guatemala†	29.95	760.7	78	25.6	?	n.	3	.....	9	.....	s.	0.06	1.5	small	sse.	cloudy	.....
S. S. Grenada, Capt. M. Connolley, N. 15° 48′, W. 95° 45′†	29.91	759.7	81	27.2	?	calm	0	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. South Carolina, Capt. W. J. Russell, Panama, Panama†	30.05	763.3	75	23.9	81	var.	3	.....	2	.....	ne.	0	0	sm'h	.....	.....	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	30.04	763.0	72	22.2	80	calm	0	.....	0	.....	.....	.....	.....	.....	.....	fine	.....
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth N. 34° 49′, W. 70° 18′†	30.18	766.6	67	19.4	.....	wsw.	7	.....	2	.....	wsw.	0	0	g'tl	sw.	hazy	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, Antigua, W. I.	.....	.....	.....	.....	.....	ene.	5	.....	8	.....	.....	0	0	sm'h	.....	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes Antwerp, Belgium*†	30.65	778.5	49	9.4	.....	nw.	2	.....	6	.....	nw.	10 h'r	light	.....	.....	fair	.....
S. S. Nederland, Capt. J. Ueberweg, N. 50° 39′, W. 14° 41′*†	31.15	791.2	51	10.6	.....	nnw.	1	.....	10	.....	.....	0	0	long	.....	overcast	Albrecht & Bull.
S. S. Rhyniand, Capt. W. G. Randle, Lizard Point, Eng*	30.84	783.3	49	9.4	77	nnw.	4	.....	10	.....	n.	0	0	light	nnw.	hazy	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon, N. 43° 02′, W. 60° 20′*†	29.96	761.0	28	—2.2	.....	nne.	4	.....	8	.....	e.	2 h'r	light snow	sm'h	ne.	cloudy	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels. N. 42° 33′, W. 56° 00′*	29.79	756.7	34	1.1	.....	nw.	5	.....	10	.....	wnw.	9 h'r	rain snow	mod.	nnw.	cloudy	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis. N. 41° 49′, W. 48° 38′*	29.69	754.1	55.1	12.8	93	ssw.	6	.....	10	.....	.....	8 h'r	8 h'r	mod.	nw.	rainy	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Lamb, N. 40° 27′, W. 73° 59′†	30.05	763.3	37.4	3.0	.....	ene.	2	.....	10	.....	.....	4 h'r	4 h'r	r'gh	ene.	covered	J. T. Eberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 48° 32′, W. 35° 20′*†	30.23	767.8	56	13.3	.....	sse.	6	.....	10	.....	sse.	0	0	hv'y	sse.	hazy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell N. 45° 07′, W. 42° 07′†*	29.92	760.0	42	5.6	83	ne.	5	.....	10	.....	e.	0	0	sm'h	.....	cloudy	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 42° 31′, W. 58° 00′*	30.10	764.5	31	—0.6	.....	n.	3	.....	4	.....	n.	0	0	mod	ne.	clear	Shaw & Smith.

MERCHANT-MARINE SERIES.—Continued.

VESSELS AND MASTERS.	Barometer reduced to sea-level. Inch.	Barometer reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Sea Swell. Character.	Sea Swell. Direction.	Weather.	Observers.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, N. 29° 37′, W. 86° 00′†	30.17	766.3	62	16.7	88	nw.	4		10 s		nw.	0.22	5.6	cross	se, ssw.	overcast	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 26° 44′, W. 44° 48′*†	30.20	767.1	64	17.8		nnw.	4		2		n.	0	0	r'gh	nnw.	fair	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 18° 15′, W. 49° 40′.*†	30.20	767.1	74	23.3		ne.	6		3		n.	0	0	cross	nw, nne.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 45° 48′, W. 22° 52′*†	30.70	779.8	57	13.9	81	ese.	4		8		sse.	0	0	sm'h		overcast	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. N. 19° 20′, W. 68° 07′*†	30.23	767.8	78	25.6		ene.	4		2		ne.	1 h'r	1 h'r	very h'vy	n	clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, S. 5° — W. 30° —*†	29.94	760.5	85	29.4		ese.	6		1		sse.	0	0	sm'h	se.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia																	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 41° 23′, W. 52° 10′*†	29.42	747.3				wnw.	7				nw.	8 h'r	8 h'r	high	wsw.	rainy	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill.																	A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	30.21	707.3				nw.	6		0			rain	rain			foggy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.																	J. C. Andersen, Jr.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U. S. N., Washington, D. C†	29.81	757.2	45	7.2	84	ene.	1		10		calm	0.20	5.1			raining	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison,																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaauw, N. 20° 18′, W. 42° 12′			71	21.7		nnw.	6		2		nnw.	0	0	long	nw.	fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 27° 50′, W. 72° 24′*†	30.40	772.1				ese.	3		0			0	0	long	e.	clear	
Bk. Geo. Booth, Capt. D. Williams, S. 3° 59′, W. 31° 35′*†	29.85	758.2	84	28.9		sse.	3					0	0			fine	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 28° 26′, W. 42° 23′*†	29.98	761.5	64	17.8		nnw.	3				nnw.	hv'y	h'vy	mod.	n.	squally	
Schr Henry Denison, Capt. Jno. Fehring,																	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt, S. 38° 28′, E. 67° 01′*	30.12	765.0				sse.	3		3		sse	0	0	long	var.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith, N. 32° 45′, W. 74° 47′*†	30.10	764.5				ssw.	6		8		ssw.	0	0	con.	ssw.	threatening.	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte. N. 30° 35′ W. 71° 28′*†	30.20	767.1				sw.					sw.			h'vy	sw.	cloudy	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen, N. 40° 37′. E. 1° 27′*†	30.60	777.2				nw.	3					0	0	mod.	ne.	fair	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 21° 34′ W. 35° 48′*†	30.34	770.6	71	21.7	95	nnw.	3		8		nne.			h'vy	n;w.	raining	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.20	767.1	51	10.6	64	calm	0		0							clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 33° 00′, W. 23° 00′*†	30.10	764.5				ne.			5?		ne.	0	0			cloudy?	J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	29.92	760.0	69	20.6		sse.	3		10		se.	0	0			threatening.	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 31° 10′, W. 43° 35′*	29.67	753.6	73.4	23.0	97	sw.	6		5		sw.			r'gh	w.	d. clouds	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 23° 39′, W. 39° 24′*†	30.06	763.5	70	21.1	84	w.	7		5		w.	4 h'r	h'vy	r'gh	wnw.	clearing	J. Green.
Bg. Wauburn, Capt. I. W. Covert,																	
S. Wm. Woodbury Capt. H. T. Schmidt, N. 48° 45′, W. 9° 25′*†	30.66	778.7	54	12.2	93	e.	2				e.			sm'h	nw.	clear	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, S. 18° 51′, W. 34° 42′*†	30.10	764.5				nne.					nne.			mod.	ne.		N. P. Dutton.

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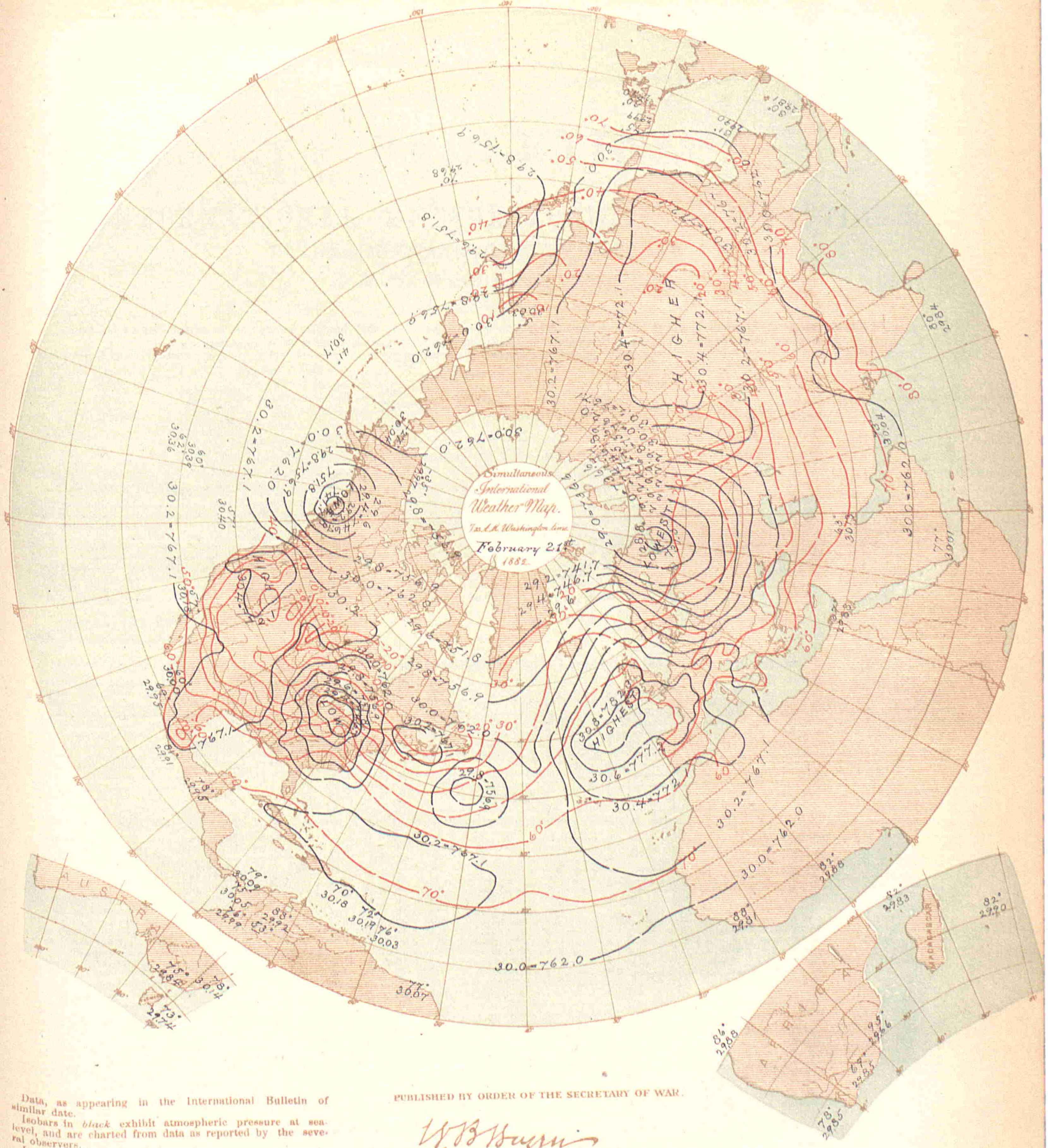
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Chief Signal Officer, U. S. A.

Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 22, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.43	772.9	61.2	16.2	77	w.			3		0			0	0	clear	Moiroud.
Algiers			30.47	773.9	55.4	13.0	86	n.			1		0			0	0	clear	Nicolas.
La Calle			30.40	772.2	55.8	13.2	75	nnw.			2		4			0.039	1.0	cloudy	Foufrède.
Tunis			30.37	771.4															Jacques.
Sfax																			Gau.
Saida			30.39	772.0	56.1	13.4	66	ne.			1		1			0	0	very fair	Dumas.
Tebessa			30.42	772.7	44.6	7.0	66	calm			0		1			0	0	very cloudy.	Derché.
Geriville					45.7	7.6	51	nne.			1		0			0	0	clear	Lonchamp.
Laghouat			30.49	774.5	55.4	13.0	47	nw.			1		0			0	0	clear	Herbin.
Biskra			30.47	773.8	63.7	17.6	35	n.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	63.2	17.3	67	ssw.	20	8.9			10			0	0	overcast	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.83	757.7	30.40	772.2	43.2	6.2	56	se.			3		3			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.53	750.1	30.35	770.8	28.8	— 1.8	80	nnw.	22.4	10.0			9			0.020	0.5		Dr. Wierzbiski.
Eperies	29.33	744.9	30.26	768.6	30.2	— 1.0	56	nw.			5	3 cs	0	se.		0.039	1.0		Julius Mikolik.
Gratz	29.02	737.2	30.30	769.6	48.7	9.3	21	nw.			4		0			0	0		Andreas Rospini.
Hermannstadt	28.69	728.7	30.22	767.6	25.5	— 3.6	76	n.			0		5			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.11	739.4	30.52	775.1	38.8	3.8	67	nw.			3		5			0	0	fair	The Staff.
Lemberg	29.10	739.1	30.15	765.8	25.9	— 3.4	75	nw.			3		7			0.120	3.2		Dr. T. Stanecki.
Pola	30.21	767.2	30.32	770.2	47.8	8.8	77	e.			5		0			0	0		I. R. Hydrographic Office
Szathmar	29.74	755.5	30.21	767.4	29.8	— 1.2	63	nw.			3		8			0	0		Joseph Midliuszky, S. J
Szegedin	30.02	762.4	30.31	769.9	35.2	1.8	78	n.			2		5			0	0		Karl Stancel.
Trieste	30.24	768.2	30.35	770.8	48.2	9.0	58	calm			0		2			0	0		Rieder.
Vienna	29.67	753.7	30.42	772.7	41.7	5.4	32	nw.			5		1			0.063	1.6		I. R. Central Met. Obs'y
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.24	768.1	30.34	770.6	51.0	10.6	53	w.	23	10.3			3			0	0	squally	W. Boswell.
Armagh, Observatory	30.40	772.1	30.04	778.2	45.9	7.7	88	wnw.	7	3.1			10					drizzling	S. Call.
Bidston, Liverpool Obs'y			30.61	777.5	46.7	8.2	79	w.	22	9.8			10					overcast	John Hartnup.
Bolton, Sharples	30.02	762.5	30.57	776.5	45.7	7.6	76	w.	18	8.0			9					d. clouds	Thomas Mackereth {A.S.
Bradford, Yorkshire	30.10	764.5	30.50	774.7	47.0	8.7	71	w.			2		4			0	0	d clouds	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	81.0	27.2	58	ne.			4		2					d. clouds	Corpl. J. Surgenor, A.H.C.
Cardington			30.56	776.2	50.0	10.0	93	nw.			0.4		10					overcast	John McLaren.
Chatham, School M. E.	30.50	774.7	30.64	778.2	51.7	10.9	78	sw.			2		8					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	30.45	773.4	30.68	779.3	48.9	9.4	89	ese.			1		5					foggy	The Staff.
Fort Napier, Natal	27.47	697.7	29.68	753.9	97.0	36.1	22	ne.			2		0					blue sky	Pvt. E. K. Anniss, A. H.C.
Free Town, Sierra Leone	29.59	751.6	29.83	757.7	87.0	30.6	69	nw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.57	776.5				n.			2		10			0.02	0.5	overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.37	771.4	30.43	772.9	61.6	16.4	82	e.			5		6					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	30.28	769.1	30.49	774.4	48.1	8.9	71	w.			4		8 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.45	773.4	30.63	778.0	50.7	10.4	76	w.			1		0					misty	The Staff.
Guernsey	30.36	771.1	30.67	779.0	52.0	11.1	79	nne.			1		8			blank	blank	d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.60	777.2	30.64	778.2	48.1	8.9	87	w.	8	3.6								misty	The Staff.
Leicester, Museum	30.32	770.1	30.59	777.0	47.4	8.6	89	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.05	763.3	30.13	765.3	55.4	13.0	60	n.			2		2					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.18	766.6	30.22	767.6	72.0	22.2	100	sw.			1		4					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.11	764.8	30.65	778.5	45.1	7.3	99	w.			1		10					drizzling	John Mac Email.
Oxford, Radcliffe Obs'y	30.40	772.1	30.63	778.0	43.9	6.6	94	sw.			1		7					d. clouds	The Staff.
Plymouth	30.59	777.0	30.66	778.7	49.2	9.6	86	nw.			1		2					d. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.15	765.8	47	8.3	85	w.	50	22.3			10					drizzling	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.69	754.1	29.76	755.9	34.4	1.3	95	nnw.			1		10					snowing	W. H. Lyne.
Sheffield	30.24	768.1	30.54	775.7	50.8	10.4	75	wsw.			2		2			0	0	d. clouds	W. F. Cooper.
Silloth Rectory	30.51	774.9	30.54	775.7	44.9	7.2	94	wsw.			3		10					drizzling	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.59	777.0	47.1	8.4	69	wnw.	19	8.5			10					overcast	I. New.
Stratfield Turgiss	30.41	772.4	30.63	778.0	49.4	9.7	89	w.			0-1		3					d. clouds	Rev. C. H. Griffiths, F.M S.
Truro, Royal Institution	30.57	776.5	30.62	777.7	57	13.9	81	w.			4		0					d. clouds	W. Newcombe.
Valencia, Observatory	30.66	778.7	30.69	779.5	48.4	9.1	85	nne.	2	0.9			10					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.72	754.9	29.75	755.6	69.0	20.6	83	wsw.	10.2	4.6		0	1 s			0	0	light haze	John Duthie.
Cape Town, C. G. H. Obs'y	29.86	758.4	29.89	759.2	74.5	23.6	70	nw.	9	4.0		9	10			0.080	2.0		The Staff, for D. Gill.
Worcester*†																			O. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.					14.6	— 9.7		ne.	9	4.0			10 n			inap.	inap.	snowing	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.67	753.6	29.72	754.9	16	— 8.9	100	ne.	20	8.9			10 n			0.03	0.8	light snow	H. J. Cundall, C. E.
Chatham, N. B.*	29.80	756.9	29.87	758.7	11	—11.7	91	n.	16	7.2			10 n		n.	0.01	0.3	light snow	G. A. Blair.
Cornwall, Ontario	29.46	748.3	29.67	753.6	17.0	— 8.3		e.			1		10 n			0.500	12.7	cloudy	James Smith, M. A.
Dalhousie, N. B.	29.75	755.6	29.93	760.2	9.0	—12.8		e.			1		10 s			0	0	cloudy	H. A. Johnson.
Father Point, Quebec*	29.96	761.0	29.98	761.5	11	—11.7	91	ene.	50	22.4			10 k		ne.	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.41	747.0	30.38	771.6	—20	—28.9	100	nw.	3	1.3		0	0			0	0	clear	James Stewart.
Fredericton, N. B.	29.63	752.6	29.70	754.4	10.1	—12.2	98	w.	27	12.1			10 n			0.400	10.2		Prof. Harrison.
Granton, Ontario	28 67	728.2	29.84	757.9	18.4	— 7.6	94	w.	5	2.2			10 n			0.05	1.3	snowing	James Grant.
Halifax, N. S.*	29.33	745.0	29.47	748.5	24	— 4.4	100	ne.	28	12.5			10 n			0.380	9.7	heavy snow	A. Allison.
Hamilton, Ontario	29.28	743.7	29.69	754.1	23.9	— 4.5	74	w.			2		10 ks			0.30	7.6	cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.34	745.2	29.70	754.4	20	— 6.7	91	ne.	4	1.8		2 cs	8 s	e.	s.	0.67	17.0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.								e.			7		10 n			0	0	cloudy	C. H. Rigby.
Montreal, Quebec*	29.50	749.3	29.73	755.1	16	— 8.9	91	ne.	18	8.0			10 n			1.27	32.3	light snow	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	28.93	734.8	29.66	753.4	20	— 6.7	84	se.	10	4.5		2 k	5 ks	se.	se.	0.75	19.1	fair	Rev. R. Mosley.
Peterboro, Ontario	28.90	734.0	29.69	754.1	21.7	— 5.7	86	calm			0	0	7 ks			0.35	8.9	fair	J. Dixon, B. A.
Port Dover, Ontario	29.04	737.6	29.77	756.1	22	— 5.6	99	sw.	8	3.6			10 n		sw.	0.09	2.3	threatening.	H. Morgan.
Port Stanley, Ontario	29.10	739.1	29.79	756.7	22	— 5.6	92	w.	20	8.9			10 n		w.	0.27	6.9	cloudy	M. Payne.
Quebec, Quebec*	29.47	748 5	29.82	757.4	14	—10.0	100	e.			8		10 n		e.	0.95	24.1	heavy snow	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.20	741.7	29.69	754.1	18	— 7.8	84	se.	4	1.8			10 n			0.70	17.8	light snow	W. H. McIntyre.
Saugeen, Ontario*	28.91	734.3	29.65	753.1	24	— 4.4	88	w.	37	16.5			10 s			0.45	11.4	heavy snow	
St. Andrews, N .B.	29.42	747.3	29.47	748.5	13	—10.6	94	ne.	31	13.9			10 n			0.40	10.2	heavy snow	
St. John, N. B.	29.31	744.5	29.49	749.0	12.0	—11.1	100	e.	26	11.6			10 n			0.230	5.8	snowing	G. Murdock, C. E.
St. Pierre, N. F.																			N. F. Land, Com't.
Stratford, Ontario	28.42	721.9	29.77	756.1	18.0	— 7.8	95	sw.	12	5.4			10 s			0.346	8.8	snowing	C. I. Macgregor, M. A.
Sydney, C. B*	29.76	755.9	29.83	757.7	21	— 6.1	87	e.	18	8.0			10 n			0	0	cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.32	744.7	29.72	754.9	25	— 3.9	84	w.	12	5.4			10 ks		w.	0.29	7.4	cloudy	Magnetic Observatory.
Windsor, N. S.	29.37	746.0	29.47	748.5	19.0	— 7.2	100	n.	28	12.5			10 n			inap.	inap.	snowing	Prof. W. R. Butler.
Woodstock, Ontario	28.62	726.9	29.74	755.4	20.6	— 6.3	59	sw.	18	8.0		3 c	6 ks			0.49	12.4	cloudy	Prof. Wolverton
Yarmouth, N. S*	29.08	738.6	29.15	740.4	28	— 2.2	80	e.	40	17.9			10 s		e.	0.95	24.1	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.90	759.4	30.17	766.3	20	— 6.7		ne.	1	0.4			10			0	0	fair	John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.43	772.9	30.72	780.3	38.8	3.8	64	calm			0		0			0	0		N. Titoushkin.
Sung-shu-chwang†	24.92	630.0			22.1	—5.5	90	calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	30.42	772.7	30.45	773.4	33.1	0.6	100	nw.	2.9	1.3			0			0	0	clear	M. Marc Dechevrens,
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.97	761.3	30.02	762.5	40.5	4.7	96	wnw.	29	13			10					raining	Oversergent Fischer.
Fanöe	30.19	766.8	30.21	767.3	42.3	5.7	100	wnw.			6		10						Overloerer Lauridsen.
Godthaab, Greenland	30.06	763.4	30.10	764.5	20.3	— 6.5	92	calm			0		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.63	752.7	29.68	753.8	34.5	1.4		w.			8		10					snowing	A. O. Thorlacius.
Thorshavn	29.81	757.1	29.84	758.0	45.3	7.4	65	w.	25	11			10					raining	Overloerer Bergh.
Vestervig	29.96	760.9	30.05	763.2	44.8	7.1	88	w.			6		9						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.82	757.4	30.48	774.3	50.7	10.4	70	ene.			1		n		ne.	0	0		M. Labroue, Director.
Alençon, Normal School	30.10	764.4	30.65	778.4	46.8	8.2	97	ne.			2		k		sw.	0	0		M. Nicot, Director.
Arras, Engineer School	30.36	771.1	30.63	778.0	43.7	6.5	94	nw.			1	ck	0			0	0		M. Klein, Commandant.
Avignon, Normal School	30.42	772.7	30.50	774.7	53.6	12	54	n.			3		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	30.04	763.0	30.62	777.7	45.5	7.5	66	e.			1		3			0.004	0.1	slightly cl'dy	M. Saillard, Director.
Beauvais, Normal School	30.41	772.5	30.69	779.5	47.5	8.6	65	ne.			1		5		ne.	0	0	cloudy	M. Frère Eugène Marl
Besançon, Normal School			30.75?	781.1?	45.5	7.5	97	ene.			1		10 n		se.	0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	30.24	768.1	30.51	775.0	51.3	10.7	60	nne.			2		8		e.	0.004	0.1	very cloudy.	M. Rayet, Director.
Bourges, Normal School	30.01	762.2	30.58	776.6	49.6	9.8	58	n.			4		0			0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.43	772.9	30.67	779.1	50.0	10.0	76	ne.			1		10		ne.	0	0		M. de Kennaree, Dir.
Caen, Normal School	30.60	777.1	30.67	779.0	50.7	10.4	74	nw.			1		5		se.	0	0	cloudy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.27	768.8	30.60	777.3	47.5	8.6	78	ne.			1		0			0.008	0.2	clear	M. Jadot, Director.
Charleville, Normal School.	30.15	765.7	30.68	779.3	46.4	8.0	64	s.			1		0			0.04	1.	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.14	740.1	30.55	775.9	43.7	6.5	75	n.			2		8		n.	0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.69	754.1	30.57	776.5	45.0	7.2	86	n.			4		10			0	0	covered	M. de Villemontée, Dir.
Commercy, Normal School.	29.75	755.6	30.66	778.7	45.5	7.5	58	ne.			1	1	1	ne.	ne.	0	0	clear	Dr. Coulet, Director.
Gap, Normal School	27.78	705.6	30.38	771.6	47.1	8.4	55					c	0			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.18	741.2	30.36	771.1	56.7	13.7	55	nw.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.70	754.3	30.49	774.4	47.8	8.8	85	se.			1	0	0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.85	732.8	30.50	774.8	42.1	5.6	88	e.			2		1		e.	0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.37	771.5	30.65	778.6	51.4	10.8	65	e.			1		5		e.	0.020	0.5	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.93	760.2	30.51	774.9	52.2	11.2	73	e.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.58	776.7	30.68	779.3	51.8	11.0	75	ene.			2		8		se.	0	0	¾ covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.43	747.6	30.54	775.6	44.1	6.7	71	nnw.			2		8		nnw.	0	0	covered	M. André, Director.
Mans, Normal School	30.28	769.0	30.60	777.2	47.5	8.6	92	ne.			3		5		e.	0	0	cloudy	M. Piboen, Director.
Marseille, Observatory	30.06	763.6	30.34	770.5	57.6	14.2	38	wsw.			1		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.08	636.9	29.92	759.9	42.4	5.8	40	ese.	7.4	3.3			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.25	768.3	30.38	771.7	57.9	14.4	53	nw.			1		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.79	756.7	30.60	777.1	50.4	10.2	60	ene.			1	0	0			0	0	clear	M. Hasse, Director
Nantes, Observatory	30.50	774.7	30.66	778.8	48.6	9.2	70	ne.			1-2		10 n		ne.	0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.30	769.5	30.41	772.3	59.0	15.0	36	nw.	9.4	4.2			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.42	544.0			32.9	0.5		se.			1		1		w.	0.008	0.2	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.34	745.2	30.44	773.2	49.6	9.8	72	n.			3		2 k	n.	n.	0	0	slightly cl'dy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.42	645.7			28.2	—2.1	100	ene.			6		10			0.098	2.5	foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.54	775.8	30.58	776.6	50.4	10.2	84	ne.			1		8		ene.	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.39	772.0	30.61	777.5	49.3	9.6	69	e.			1		5		e.	0	0	cloudy	M. Mouillot, Director.
Rodez, Normal School	28.21	716.6	30.43	773.0	40.6	4.8	67	nw.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.69	779.5	30.74	780.7	45.7	7.6	83	e.			1		0			0	0	clear	M. Platrier, Director.
Saint Lô, Normal School	30.52	775.3	30.68	779.3	51.1	10.6	72	ne.			1		5		ne.	0.256	6.5	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.49	774.4	30.65	778.6	47.7	8.7	64	ene.			1		2		nne.	0	0	¼ covered	M. Renou, Director.
Toulouse, Observatory	29.89	759.1	30.54	775.7	52.2	11.2	63	wnw.			1		2		w.	0	0	slightly cl'dy.	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	30.15	765.7	30.64	778.2	44.6	7.0	71	ne.			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.38	771.6	30.67	779.0	45.7	7.6	73	ne.			1		9		nne.	0.012	0.3	misty	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.65	753.1	30.52	775.1	41.9	5.5	55	nw.			2	0	4 k		wnw.	0.039	1.0		Prof. Dr. Hoh.
Berlin	30.16	766.1	30.35	770.8	37.4	3.0	78	sw.			4		10			0	0		Prof. Dr. Arndt.
Breslau	29.85	758.1	30.39	771.8	33.1	0.6	51	nw.			5		10			0.126	3.2		Royal University Obs'y.
Carlsruhe	30.15	765.9	30.62	777.7	43.2	6.2	60	w.			1		0			0	0		Albert Senz.
Cassel	29.76	755.9	30.47	774.0	44.4	6.9	70	w.			1	0	5 k		w.	0	0		Dr. H. Möhl.
Frankfort on the Main	30.19	766.9	30.58	776.7	44.4	6.9	56	w.			1		0			0	0		Physical Society.
Friedrichshafen	29.09	738.8	30.58	776.8	42.1	5.6	76	sw.			1		5		n.	0	0		Wilhelm, Chief Tel.
Hamburg	30.30	769.5	30.39	771.9	40.5	4.7	96	w.			4		10			0.004	0.1	foggy	E. Preller.
Kiel	30.26	768.6	30.28	769.0	41.5	5.4	90	w.			5		10			0.035	0.9		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.07	763.7	30.51	774.9	39.6	4.2	65	sw.			3		10		w.	0	0		H. Leppig, Asst.
Magdeburg	30.25	768.4	30.45	773.5	38.5	3.6	80	w.			4		10 ks		w.	0	0		Dr. Assmann.
Memel	29.89	759.1	29.93	760.3	28.2	— 2.1	100	nw.			6		10					foggy	Isserlmann.
Munich	28.70	728.9	30.60	777.1	39.0	3.9	64	nw.			2		7		sw.	0.012	0.3		Central Station.
Neufahrwasser	30.06	763.6	30.08	764.0	29.3	— 1.5	74	sw.			2		10			0.024	0.6		A. Lothes.
Neustadt, Palatinate	30.10	764.4	30.63	778.1	43.2	6.2	65	calm			0		1		ne.	0	0		Dicknether.
Stuttgart	29.61	752.1	30.54	775.8	43.2	6.2	56	n.			1		2		w.	0	0		Prof. Dr. Schoder.
Wustrow	30.14	765.6	30.17	766.2	37.9	3.3	100	sw.			6		10			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.44	747.8	29.84	758.0	50.2	10.1		ne.			2.0		8 k			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.92	759.9	29.97	761.2	73.4	23.0	63	wsw.	29	13.0			0			0	0	misty	
Deesa	29.38	746.1	29.85	758.2	80.3	26.8	13	w.	8.2	3.7			0			0	0	blue sky	
Bombay	29.87	758.6	29.90	759.6	76.7	24.8	53	nw.	13	5.8			0			0	0	blue sky	
Poona, Yarrowda.	27.98	710.7	29.82	757.4	83.4	28.6	22	sw.	15	6.7			0			0	0	blue sky	
Belgaum	27.34	694.3	29.86	758.5	78.6	25.9	46	sw.	7	3.1			0			0	0	blue sky	
Lahore	29.20	741.6	29.97	761.2	64.8	18.2	28	w.	0.8	0.4			0			0	0	blue sky	
Roorkee	29.04	737.5	29.96	761.0	67.6	19.8	38	sw.	1.2	0.5			3			0	0		
Agra	29.36	745.7	29.94	760.3	71.8	22.1	29	ne.	3.2	1.4			8		n.	0	0		
Nagpur	28.75	730.3	29.78	756.4	86.7	30.4	38	ssw.	6.6	3.0			8		sw.	0.02	0.5	d. clouds	
Jubbulpore	28.56	725.4	29.93	760.1	76.2	24.6	38	calm	4.8	2.2			9		s.	0	0	overcast	
Lucknow	29.56	750.7	29.94	760.4	77.2	25.1	18	calm	1.0	0.4			0			0	0	blue sky	
Allahabad	29.60	751.9	29.92	760.0	73.2	22.9	34	calm	0.9	0.4			8		w.	0	0	d. clouds	
Patna	29.78	756.5	29.97	761.3	71.9	22.2	32	nw.	2.4	1.1			2		nw.	0	0		
Hazaribagh	27.92	709.2	29.94	760.6	77.8	25.4	21	sw.	5.0	2.2			0			0	0	clue sky	
Cuttack	29.84	758.0	29.92	760.0	82.9	28.3	45	sse.	0.6	0.3			4			0	0	d. clouds	
Calcutta, Alipore	29.92	760.1	29.95	760.6	77.3	25.2	46	sse.	3.0	1.3			0			0	0	blue sky	
Dhubri	29.85	758.2	29.98	761.4	70.9	21.6	43	calm	1.3	0.6			0			0	0	blue sky	
Chittagong	29.86	758.4	29.95	760.8	74.7	23.7	41	wnw.	1.0	0.4			0			0	0	blue sky	
Sibsagar	29.66	753.4	30.01	762.3	65.9	18.9	73	ne.	3.4	1.5			0			0	0	blue sky	
Jeypore	28.44	722.4	29.91	759.8	70.0	21.1	24	e.	8.3	3.7			2		e.	0	0	d. clouds	
Zanzibar, Africa	29.81	757.2			83.1	28.4	75	n.	9.2	4.1		c;cs	4 fk		ne.	0	0	d. clouds	
Trichinopoly	29.62	752.3			88.3	31.3	32	ese.	2	0.9			2			0	0	d. clouds	
Bellary	28.37	720.6			90.5	32.5	16	se.	6.4	2.9			3			0	0	d. clouds	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.91	759.7	30.33	770.3	52.3	11.3	34	w.	0.7	0.3			0			0	0		Prof. Giovanni Clodig'
Milan	29.77	756.1	30.30	769.6	55.8	13.2	29	se	0.7	0.3			2			0	0		Prof. Schiaparelli.
Padua	30.21	767.4	30.33	770.3	50.2	10.1	44	e.	6.3	2.8			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.35	745.6	30.28	769.1	51.1	10.6	47	e.	3.1	1.4			0			0	0		Prof. P. F. Denza.
Genoa	30.11	764.8	30.31	769.8	54.5	12.5	60	sw.	1.8	0.8			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.33	719.5	30.28	769.0	57.2	14.0	26	se.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.29	769.4	30.34	770.7	45.9	7.7	65	ne.	1.5	3.3			0			0	0		Prof. Luigi Guidi.
Florence	30.05	763.3	30.31	769.8	49.3	9.6	48	nw			2		0			0	0		Prof. Costantino Pitter.
Leghorn	30.16	766.1	30.25	768.3	54.1	12.3	66	n.	0.7	0.3			0			0	0		Prof. P. Monte.
Rome	30.06	763.4	30.23	767.9	60.6	15.9	18	n.	11.9	5.3			0			0	0		Prof. P. S. Ferrari.
Lecce	29.83	757.6	30.09	764.2	50.4	10.2	37	n.	39.1	17.5			3		n.	0	0		Prof. C. de Giorgi.
Cosenza	29.20	741.7	30.11	764.7	50.4	10.2	72	wnw.	11.9	5.3			4		w.	0	0		Prof. D. Conti.
Cagliari	30.07	763.8	30.27	768.8	57.7	14.3	38	wnw.			2		0			0	0		Prof. A. Pacinotti.
Palermo	30.01	762.2	30.27	768.6	52.5	11.4	51	n.	10.5	4.7			4		n.	0.102	2.6		Prof. G. Ciacciatore.
Syracuse	30.05	763.2	30.10	764.4	56.5	13.6	58	nw.	40.0	17.9			3		nne.	0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.68	753.8	30.21	767.4	55.4	13.0	37	nne.	1.3	0.6			1		nnw.		0		Prof. T. Brioschi.
Stelvio	22.35	567.8			28.4	— 2.0	17	ne.			2		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.43	569.8			34.9	1.6	41	n.			2		4			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	29.68	753.9	29.71	754.6	32.4	0.2	81	e.	3.8	1.7			10 s			0.008	0.2	cloudy	
Hakodate	29.71	754.6	29.72	754.9	30.0	— 1.1	58	n.	13.2	5.9			2		n.	0.725	18.4	clear	
Hiroshima, I. M. Obs'y	29.94	760.5	29.96	761.0	33.9	1.1	94	nne.	1.9	0.8		ck;cs	9s			0.136	3.4	cloudy	K. Sasaki.
Kanazawa	30.17	766.3	30.28	769.1	33.0	0.6	94	s.	7.6	3.4			10 n			0.720	18.3	snowing	S. Endo.
Kioto	29.73	755.1	29.92	759.9	32.1	0.1	82	nw.	1.8	0.8		ck	4 s			inap.	inap.	fair	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	29.85	758.2	30.07	763.8	34.1	1.2	83	n.	5.5	2.5			10 n			0.070	1.8	snowing	S. Takehayashi.
Niigata	29.73	755.1	29.76	755.9	37.7	3.2	83	nnw.	14.3	6.4		ck	10 n			0.260	6.6	light rain	
Nobiru	29.68	753.9	29.69	754.1	32.0	0.0	84	nnw.	2.4	1.1		o	1 s			0	0	fair	H. Midzushina.
Sapporo					21.9	— 5.6	87	ne.	1.8	0.8			10			0	0	covered	
Tokei Obs'y, Yeddo	29.69	754.1	29.76	755.9	38.9	3.8	59	nnw.	6.8	3.0		3 c;cs	0			0	0	fair	The Staff.
Wakayama	29.88	758.9	29.93	760.2	34.1	1.2	87	e.	1.9	0.8		o	0			0.007	0.2	clear	Y. Kuwamues.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.44	621.1	30.25	768.2	51.4	10.8	79	nne.			1	0	1 k			0	0	clear	Prof. M. Leal.
Mazatlan	29.72	754.9	29.98	761.6	59.0	15.0	82	nw.	1.6	0.8		0	1 s			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.14	587.7	30.29	769.3	48.7	9.3	79	calm	0	0		0	0			0	0	fine	The Staff.
Morelia	24.33	618.0	30.54	775.8	54.5	12.5	81	sw.			5	1c	1 k	s.	s.	0	0		M. Tena, M. D.
Pabellon, Aguascalientes	23.99	609.4	30.10	764.6	48.0	8.9	69									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.43	595.1	30.33	770.3	45.0	7.2	88	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.27	616.6	30.42	772.6	51.2	10.7	80	e.			1		10			0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.55	572.7	30.23	767.9	51.3	10.7	68	nw.	2.5	1.1		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.70	754.4	29.89	759.2	80.1	26.7	80	ene.	11.5	5.1		4 cs;c	5 n;ks		e.	0.32	8.1	cloudy	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.64	778.2	30.64	778.2	44.4	6.9		wsw.			3					0.043	1.1		
Groningen	30.43	773.0	30.49	774.4	42.1	5.6		sw.			4					0	0		
Helder	30.52	775.3	30.52	775.3	42.1	5.6		sw.			4					0.012	0.3		
Hellevoetsluis	30.62	777.8	30.62	777.8	41.9	5.5	91	wsw.			4					0.024	0.6		
Utrecht	30.56	776.1	30.60	777.3	42.3	5.7	88	wsw.			3		8			0.004	0.1	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.79	756.7	29.85	758.3	46.0	7.8	86	wsw.	27	12			10			0.165	4.2	raining	
Brono	28.93	734.9	28.97	735.9	38.3	3.5	63	wnw.	36	16			8			0.031	0.8		
Christiania	29.33	744.9	29.47	748.6	46.9	8.3	52	sw.	9	4			8			0	0		
Gjæsvær	28.74	729.9	28.76	730.5	11.5	—11.4		ese.			7		10						
Lodingen	28.50	723.9	28.55	725.1	28.0	— 2.2	100	calm			0		10			0.406	10.3	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					57.7	14.3	84	se.	19.9	8.9			7			0.177	4.5		Dr. J. A. Sampaio.
Campo Major	29.36	745.7	30.37	771.4	59.0	15.0	39	e.	9.4	4.2			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.12	765.1	30.21	767.4	61.3	16.3	67	ne.	0.7	0.3			10			0.016	0.4		Capt. D. A. de Cunha.
Lisbon, Observatory	30.01	762.2	30.37	771.5	58.1	14.5	55	ese.	11.9	5.3			1			0	0		The Staff.
Ponta Delgada, Azores	29.85	758.1	29.92	759.9	59.0	15.0	78	ese.	32.9	14.7			10			0.024	0.6		
Saint Paul de Loando	29.67	753.7	29.87	758.7	83.3	28.5	78	wsw.	1.8	0.8			3	sse.		blank	blank		
Serra da Estrella	25.54	648.7	30.43	772.9	38.3	3.5	46	sse.	34.2	15.3			0			0	0		
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.85	732.8	30.02	762.6	7.7	—13.5		s	7	3		9 ck	0			0	0		Major K. Lasarew.
Archangel	29.09	738.9	29.11	739.4	3.6	—15.8	76	w.	4	2			8 ks			0	0		Capt. Sseliwerstow.
Astrakhan	29.76	755.8	29.67	753.7	40.6	4.8	53	calm	0	0		0	4 s			0	0		Capt. Wisganow.
Barnaul	29.75	755.6	30.29	769.4	13.8	—10.1	77	calm	0	0			1			0	0		Meteorological Obs'y.
Dorpat	29.39	746.6	29.65	753.1	19.4	— 7.0	65	wsw.	9	4			10 n			0.098	2.5		Observatory.
Ekaterinburg	28.53	724.6	29.52	749.8	27.1	— 2.7	67	s.	18	8			10			0	0		Meteorological Obs'y.
Kasan	28.71	729.3	28.98	736.2	27.9	— 2.3	84	ssw.	27	12			10			0.016	0.4		Observatory.
Kertch	29.57	751.0	29.59	751.5	32.2	0.1	92	nnw	4	2			10 n			blank	blank		Lagorio & Sastyrez.
Kieff	29.19	741.4	29.87	758.6	20.5	— 6.4	50	wnw.	16	7		c	3 ks			0.039	1.0		Observatory.
Lugan	29.36	745.8	29.58	751.2	24.1	— 4.4	73	nnw.	13	6			10			0.004	0.1		Meteorological Obs'y.
Moscow	28.71	729.2	29.21	742.0	16.0	— 8.9	69	nw.	7.8	3.5		0	2 ks			0.024	0.6		Meteorological Obs'y.
Nikolajev	29.76	755.9	29.83	757.7	25.7	— 3.5	69	wnw.	45	20		0	4 n			0.055	1.4		Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.92	759.9	30.00	762.1	4.3	—15.4	78	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.28	769.0	30.42	772.6	33.3	0.7	34	calm	0	0		0	0			0	0		Physical Observatory.
St. Petersburg	29.46	748.2	29.47	748.6	14.9	— 9.5	61	wnw.	16	7			10 n			0.031	0.8		Central Physical Obs'y.
Tashkend, Laboratory	28.42	721.9	30.04	763.1	40.8	4.9	65	nw.	4	2			0			0	0		Teich, A. M.
Tiflis	28.26	717.9	29.69	754.2	44.4	6.9	39	n.	9	4			10 s			0	0		Physical Observatory.
Vladivostok	30.01	762.3	30.08	764.0	12.4	—10.9	76	n.	4	2		0	2 s			0	0		
Warsaw	29.77	756.1	30.22	767.6	26.1	— 3.3	56	wnw.	22	10			10 ks						Astronomical Obs'y.
Wilna	29.52	749.8	29.97	761.1	24.8	— 4.0	51	wnw.	4	2			10			0.055	1.4		Berg, Assistant.
Yeniseisk	30.18	766.6	30.49	774.5	17.2	— 8.2	82	calm	0	0			1			0	0		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			30.41	772.4	48	8.9	92	w.			4		10			0	0	overcast	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.28	769.1	30.39	771.8	55.4	13.	53	sw.	1.3	0.6			0			0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.49	774.4	30.55	775.9	50.5	10.3	70	e.	0.7	0.3		3	4	e.		0	0	cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.41	696.2	30.51	774.9	42.8	6.0	47	ne.	11.9	5.3		0	0			0	0	clear	Domingo Martin.
Madrid, Royal Obs'y	28.15	715.0	30.43	772.8	53.6	12.0	39	sw.	2.7	1.2		0	0			0	0	clear	The Staff.
Murcia, Met. Obs'y	30.31	769.8	30.46	773.7	58.1	14.5	55	nnw.	0.4	0.2		0	0			0	0	clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.44	747.8	30.35	770.9	58.1	14.5	43	ne.	1.3	0.6		0	0			0	0	clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.07	763.9	30.14	765.6	69.7	20.9	89	calm	0	0		1 cs	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.92	760.0	29.98	761.5	78.0	25.6	79	n.	0	0		4 ck	5 kn		ene.	0.079	2.0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.26	768.6	30.36	771.1	62.1	16.7	54	e.	20.6	9.2		0	0			0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.10	764.4	30.19	766.7	69.8	21.0	88	calm	0	0		2 s	4 k	s.	s.	0	0		E. Gadea, Chief Eng'r.
Tuguegarao, Philippine Id's	29.92	760.0	30.06	763.5	71.2	21.8	75	nnw.	10.7	4.8			9 ks		n.	0	0	covered.	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	28.90	734.0	28.94	735.3	12.6	—10.8	93	s.			4		10			0.138	3.5		
Umea	28.91	734.3	28.96	735.6	23.4	— 4.8	100	sw.			4		10			0	0		
Hernosand	29.07	738.4	29.12	739.7	27.5	— 2.5	68	calm			0		5			0.039	1.0		
Stockholm	29.29	743.9	29.47	748.4	31.1	— 0.5	73	wsw.			6		10			0	0		
Wisby	29.64	752.8	29.70	754.3	31.6	— 0.2	81	wsw.			6		10			0	0		
Sub Series.																			
Upsala	29.34	745.1	29.42	747.3	29.7	— 1.3	76	sw.	12.8	5.7			10			0.094	2.4		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	29.03	737.3	30.48	774.3	45.0	7.2	63	nne.			4					0	0	clear	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.77	756.2	34.9	1.6	80	w.	7.8	3.5			10		n.	0.116	3.0		The Observatory.
Valona			30.00	762.1	53.2	11.8		n.			2		2			0	0	slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.76	756.0	63.5	17.5	73	sw			4	0	7 ks		sw.	0.50	12.7		Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer, Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	29.60	751.8	29.69	754.1	32	0.0	68	n.	1	0.4			10 s			0.82	20.8	cloudy	
Alpena, Michigan	29.07	738.4	29.78	756.4	12	—11.1	80	w.	14	6.3		2 c	3 s	w.	w.	0.57	14.5	fair	
Atlanta, Georgia	28.97	736.1	30.19	766.8	34.5	1.4	62	nw.	13	5.8		0	0			0	0	clear	
Atlantic City, New Jersey	29.82	757.4	29.84	757.9	31.3	— 0.4	68	w.	10	4.5		1 c	0	w.		0.52	13.2	clear	
Augusta, Georgia	29.95	760.7	30.15	765.8	43.4	6.3	51	w.	7	3.1		0	0			0.19	4.8	clear	
Baltimore, Maryland	29.87	758.7	29.92	760.0	34	1.1	71	nw.	17	7.6		2 cs	4 s	nw.	nw.	0.51	13.0	fair	
Barnegat, New Jersey	29.79	756.7	29.81	757.2	32.8	0.4	65	w.	20	8.9		0	5 k		w.	0.76	19.3	fair	
Bismarck, Dakota	28.35	720.1	30.33	770.4	— 8	—22.2	100	calm	0	0			10 s		calm	0	0	cloudy	
Block Island, Rhode Island																			
Boise City, Idaho	27.43	696.7	30.39	771.9	10	—12.2	91	se.	1	0.4			10 s		calm	0.01	0.3	cloudy	
Boston, Massachusetts	29.44	747.8	29.60	751.8	21.0	— 6.1	76	nw.	16	7.2		10 c	hz.	nw.		0.19	4.8	cloudy	
Brownsville, Texas	30.17	766.3	30.22	767.6	61	16.1	78	calm	0	0		10 cs	0			0	0	cloudy	
Buffalo, New York	28.96	735.6	29.76	755.9	25.3	— 3.7	74	sw.	22	9.8			10 s		sw.	0.30	7.6	cloudy	
Burlington, Vermont	29.34	745.2	29.65	753.1	23.0	— 5.0	88	n.	1	0.4			10 n		n.	0.62	15.7	heavy snow	
Cairo, Illinois	29.92	760.0	30.34	770.6	29.0	— 1.7	82	w.	10	4.5		0	0			0	0	clear	
Campo, California	27.52	699.0	30.16	766.1	28.2	— 2.1	47	ne.	3	1.3		0	0			0	0	clear	
Camp Thomas, Arizona	27.35	694.7	30.18	766.6	27	— 2.8	96	se.			1	0	0			0	0	clear	
Cape Henry, Virginia	29.92	760.0	29.94	760.5	41	5.0	42	nw.	22	9.8		0	0			0	0	clear	
Cape May, New Jersey	29.83	757.7	29.86	758.4	35	1.7	64	nw.	36	16.1		0	0			0.13	3.3	clear	
Castroville, Texas	29.46	748.3	30.30	769.6	40	4.4	65	calm	0	0		0	0			0	0	clear	
Cedar Keys, Florida	30.17	766.3	30.19	766.8	52	11.1	47	n.	8	3.6		0	0			0.07	1.8	clear	
Champaign, Illinois	29.26	743.2	30.13	765.3	15.8	— 9.0	67	w.	8	3.6		0	0			inap.	inap.	clear	
Charleston, S. Carolina	30.03	762.7	30.09	764.3	47.5	8.6	48	w.	8	3.6		0	0			0	0	clear	
Charlotte, N. Carolina	29.13	739.9	30.02	762.5	37.0	2.8	72	sw.	4	1.8		0	fg.			0	0	clear	
Chattanooga, Tennessee	29.39	746.5	30.25	768.3	34.0	1.1	60	nw.	7	3.1		0	0			0	0	clear	
Cheyenne, Wyoming	24.07	611.4	30.32	770.1	15.8	— 9.0	48	w.	6	2.7		0	0			0.03	0.8	clear	
Chicago, Illinois	29.31	744.5	30.06	763.5	10.5	—11.9	72	w.	14	6.3		0	1 s			0.04	1.0	clear	
Chincoteague, Virginia	29.88	758.9	29.90	759.4	35	1.7	64	nw.	22	9.8		0	0			0	0	clear	
Cincinnati, Ohio	29.44	747.8	30.13	765.3	28.8	— 1.8	77	w.	12	5.4		0	7 k		w.	0.01	0.3	fair	
Cleveland, Ohio	29.14	740.1	29.93	760.2	21.6	— 5.8	96	w.	22	9.8			10 n			0.10	2.5	light snow	
Coleman City, Texas	28.43	722.1	30.31	769.9	32	0.0	81	se.	1	0.4		0	0			0	0	clear	
Columbus, Ohio	29.14	740.1	30.04	763.0	25	— 3.9	73	w.	23	10.3			10 ks		w.	0.03	0.8	cloudy	
Concho, Texas	28.29	718.6	30.31	769.9	34	1.1	82	calm	0	0		0	0			0	0	clear	
Davenport, Iowa	29.51	749.5	30.21	767.3	13	—10.6	61	w.	8	3.6		hz.	4 s	calm	w.	0.02	0.5	fair	
Dayton, Washington T'y	28.37	720.6	30.18	766.6	19	— 7.2	80	calm	0	0		0	0			0	0	clear	
Deadwood, Dakota	25.42	645.7	30.34	770.6	17	— 8.3	64	sw.	6	2.7		0	0			0	0	clear	
Decatur, Texas					38	3.3	61	se.	8	3.6		0	0			0	0	clear	
Delaware Breakwater, Del.	29.85	758.2	29.87	758.7	35	1.7	69	nw.	24	10.7		4 k	0	nw.		0.07	1.8	fair	
Denison, Texas	29.52	749.8	30.36	771.1	30.2	— 1.0	78	n.	4	1.8		0	0			0	0	clear	
Denver, Colorado	24.84	630.9	30.36	771.1	25.3	— 3.7	75	ne.	8	3.6			10 s		calm	0	0	cloudy	
Des Moines, Iowa	29.33	745.0	30.30	769.6	4	—15.6	72	nw.	6	2.7		0	0			inap.	inap.	clear	
Detroit, Michigan	29.16	740.7	29.91	759.7	23.0	— 5.0	88	w.	24	10.7			10 n		calm	0.36	9.1	heavy snow	
Dodge City, Kansas	27.59	700.8	30.33	770.4	27	— 2.8	77	calm	0	0		0	0			0	0	clear	
Dubuque, Iowa	29.36	745.7	30.12	765.0	6	—14.4	52	w.	5	2.2		0	0			0.04	1.0	clear	
Duluth, Minnesota	29.34	745.2	30.10	764.5	4	—15.6	72	nw.	9	4.0			10 s		calm	0.09	2.3	cloudy	
Eagle Pass, Texas	29.47	748.5	30.31	769.9	40.0	4.4	65	se.	2	0.9		0	0			0	0	clear	
Eagle Rock, Idaho	25.50	647.7	30.40	772.1	— 7	—21.7	69	n.	9	4.0			10 s		nw.	0	0	cloudy	
Eastport, Maine	29.38	746.2	29.45	748.0	15.5	— 9.2	100	ne.	40	17.9			10 n		ne.	0.47	11.9	light snow	
El Paso, Texas	26.35	669.3	30.23	767.8	29	— 1.7	88	nw.	3	1.3		0	0			0	0	clear	
Erie, Pennsylvania	29.06	738.1	29.83	757.7	23	— 5.0	100	w.	26	11.6			10 n			0.27	6.9	heavy snow	
Escanaba, Michigan	29.16	740.7	29.88	758.9	16	— 8.9	91	w.	11	4.9			10 n		nw.	1.02	25.9	light snow	
Fort Apache, Arizona	25.12	638.0	30.22	767.6	18	— 7.8	48	ne.	5	2.2		0	0			0	0	clear	
Fort Assinnaboine, Montana	27.19	690.6	30.23	767.8	19	— 7.2	58	sw.	16	7.2		0	2 s		sw.	0	0	clear	
Fort Bennett, Dakota	28.61	726.7	30.34	770.6	6	—14.4	76	calm	0	0			10 s			0.03	0.8	cloudy	
Fort Benton, Montana	27.23	691.6	30.23	767.8	4	—15.6	76	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	28.19	716.0	30.37	771.4	3	—16.1	50	w.	4	1.8		0	0			0	0	clear	
Fort Custer, Montana	26.96	684.8	30.32	770.1	7	—13.9	100	se.	3	1.3		0	0			0	0	clear	
Fort Davis, Texas	25.19	639.8	30.15	765.8	40	4.4	86	calm	0	0		0	0			0	0	clear	
Fort Elliott, Texas	27.36	694.9	30.26	768.6	22	— 5.6	48	calm	0	0		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.80	756.9	30.40	772.1	24.0	— 4.4	88	calm	0	0		0	0			0	0	clear	
Fort Grant, Arizona	25.29	642.4	30.15	765.8	35	1.7	61	n.	3	1.3		0	0			0	0	clear	
Fort Griffin, Texas	28.97	735.8	30.34	770.6	32	0.0	88	e.	4	1.8		0	0			0	0	clear	
Fort Keogh, Montana	27.66	702.6	30.34	770.6	— 1	—18.3	72	sw.	2	0.9		0	0			0	0	clear	
Fort Macon, North Carolina	29.98	761.5	29.98	761.5	46	7.8	42	nw.	9	4.0		0	0			0	0	clear	
Fort McKavett, Texas	27.89	708.4	30.27	768.8	35.7	2.1	81	sw.	2	0.9		0	0			0	0	clear	
Fort Missoula, Montana	26.87	682.5	30.30	769.6	24	— 4.4	88	s.	1	0.4		0	0			0	0	clear	
Fort St. Michaels, Alaska	30.02	762.5	30.06	763.5	—19	—28.3	100	e.	14	6.3		0	8 s		e.	0	0	fair	
Fort Shaw, Montana	26.37	669.8	30.22	767.6	25	— 3.9	53	sw.	22	9.8		1 cs	0			0	0	clear	
Fort Sill, Indian Territory	29.04	737.6	30.34	770.6	29.5	— 1.4	79	calm	0	0		0	0			0	0	clear	
Fort Stevenson, Dakota	28.30	718.8	30.32	770.1	— 6	—21.1	64	nw.	1	0.4			10 s		calm	0	0	cloudy	
Fort Verde, Arizona					25.4	— 3.7	64	n.			1	0	0			0	0	clear	
Fort Washakie, Wyoming	24.52	622.8			— 3.3	—19.6	72	w.	3	1.3		0	0			0	0	clear	
Fredericksburg, Texas	28.48	723.4	30.28	769.1	35	1.7	89	ne.	1	0.4		0	0			0	0	clear	
Galveston, Texas	30.28	769.1	30.32	770.1	49	9.4	39	e.	18	8.0		7 cs	0	s.		0	0	fair	
Grand Haven, Michigan	29.21	741.9	29.92	760.0	23.0	— 5.0	88	w.	20	8.9			10 s		w.	0.72	18.3	cloudy	
Hatteras, North Carolina	29.94	760.5	29.96	761.0	47	8.3	42	nw.	18	8.0		3 k	0			0.04	1.0	clear	
Helena, Montana	25.91	658.1	30.31	769.9	13	—10.6	66	w.	2	0.9			10 s			0	0	cloudy	
Henrietta, Texas																			
Huron, Dakota	28.83	732.3	30.35	770.9	—10.8	—23.8	60	nw.	3	1.3		0	0			0	0	clear	
Indianapolis, Indiana	29.26	743.2	30.11	764.8	21	— 6.1	64	w.	9	4.0		4 k	0	w.		0.04	1.0	fair	
Indianola, Texas	30.28	769.1	30.31	769.9	52.6	11.4	48	ne.	21	9.4		0	2 k		w.	0	0	clear	
Jacksboro, Texas	29.11	739.4	30.35	770.9	32	0.0	78	se.	5	2.2		0	0			0	0	clear	
Jacksonville, Florida	30.12	765.0	30.17	766.3	49	9.4	50	w.	3	1.3		0	0			0.06	1.5	clear	
Keokuk, Iowa	29.53	750.0	30.23	767.8	12.0	—11.1	70	w.	7	3.1		0	0			0.01	0.3	clear	
Key West, Florida	30.12	765.0	30.15	765.8	73.0	22.8	90	calm	0	0		0	1 s;fg			0	0	clear	
Kittyhawk, North Carolina	29.94	760.5	29.96	761.0	44	6.7	45	nw.	12	5.4		0	0			inap.	inap.	clear	
Knoxville, Tennessee	29.15	740.4	30.23	767.8	30.8	— 0.7	59	w.	12	5.4		0	0			0	0	clear	
La Crosse, Wisconsin	29.25	742.9	30.09	764.3	3	—16.1	72	w.	4	1.8		0	0			0.05	1.3	clear	
La Mesilla, New Mexico	26.21	665.7	30.22	767.6	26.0	— 3.3	67	calm	0	0		0	0			0	0	clear	
Leavenworth, Kansas	29.40	746.7	30.35	770.9	24	— 4.4	73	calm	0	0		3 cs	0			0	0	clear	
Lewiston, Idaho	29.42	747.3	30.29	769.4	28.4	— 2.0	48	ne.	7	3.1		0	1 s		ne.	inap.	inap.	clear	
Little Rock, Arkansas	30.01	762.2	30.34	770.6	33	0.6	52	n.	5	2.2		0	0			0	0	clear	
Los Angeles, California	29.82	757.4	30.22	767.6	41.3	5.2	73	s.	8	3.6		0	0			0	0	clear	
Louisville, Kentucky	29.57	751.1	30.16	766.1	30	— 1.1	88	sw.	18	8.0			9 k;s		sw.	inap.	inap.	cloudy	
Lynchburg, Virginia	29.23	742.4	29.95	760.7	35.0	1.7	49	w.	2	0.9		0	0			0.53	13.5	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	28.98	736.1	30.07	763.8	5	—15.0	76	w.	10	4.5		0	0			0.03	0.8	clear	
Marquette, Michigan	29.11	739.4	29.89	759.2	17	— 8.3	91	nw.	14	6.3			10 n		calm	1.28	32.5	light snow	
Mason, Texas	28.59	726.2	30.32	770.1	33	0.6	78	calm	0	0		0	0			0	0	clear	
Memphis, Tennessee	29.98	761.5	30.33	770.4	33	0.6	50	nw.	12	5.4		0	0			0	0	clear	
Milwaukee, Wisconsin	29.21	741.9	30.01	762.2	13	—10.6	80	w.	13	5.8			10 s		w.	0.13	3.3	cloudy	

FEBRUARY 22, 1882

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.26	768.6	30.30	769.6	42	5.6	57	n.	6	2.7		1 cs	0			0	0	clear	
Montgomery, Alabama	30.02	762.5	30.26	768.6	38.8	3.8	52	n.	6	2.7		0	0			0	0	clear	
Moorhead, Minnesota	29.20	741.7	30.30	769.6	—12	—24.4	100	nw.	2	0.9		0	0			0	0	clear	
Morgantown, W. Virginia	28.99	736.3	30.06	763.5	39.0	3.9	56	w.	21	9.4			10 n		w.	0.04	1.0	light snow	
Mt. Washington, N. H	23.10	586.7	29.72	754.9	6.0	—14.4	87	ne.	14	6.3			10n;fg		ne.	1.03	26.2	light snow	
Nashville, Tennessee	29.69	754.1	30.25	768.3	31.4	— 0.3	76	w.	5	2.2		0	0			inap.	inap.	clear	
New Haven, Connecticut	29.57	751.1	29.69	754.1	26	— 3.3	88	nw.	3	1.3		9 c	0	w.		1.37	34.8	cloudy	
New London, Connecticut	29.64	752.8	29.69	754.1	28	— 2.2	64	nw.	5	2.2		0	0			0.94	23.9	clear	
New Orleans, Louisiana	30.23	767.8	30.29	769.4	50.8	10.4	62	nw.	8	3.6		0	9 s		nw.	0	0	cloudy	
Newport, Rhode Island	29.58	751.3	29.63	752.6	25.0	— 3.9	88	nw.	16	7.2		1 k	1 s	nw.	nw.	1.31	33.3	clear	
New River, N. Carolina					44	6.7	51	w.			1	0	0			0	0	clear	
New Shoreham, Rhode I'd	29.62	752.3	29.69	753.4	27.5	— 2.5	77	nw.	24	10.7		0	4 s		nw.	2.16	54.9	fair	
New York, New York	29.59	751.6	29.78	756.4	32	0.0	74	w.	11	4.9			10 s		w.	0.70	17.8	cloudy	
Norfolk, Virginia	29.92	760.0	29.94	760.5	44	6.7	37	nw.	8	3.6		0	0			inap.	inap.	clear	
North Platte, Nebraska	27.27	692.6	30.37	771.4	24.6	— 4.1	72	w.	6	2.7		0	1 s			0	0	clear	
Olympia, Washington T'y	29.95	760.7	29.99	761.7	36.0	2.2	89	se.	3	1.3			10 s		calm	0.04	1.0	cloudy	
Omaha, Nebraska	29.10	739.1	30.37	771.4	8.3	—13.2	72	calm	0	0		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	30.13	765.3	30.15	765.8	—42.2	—41.2	76	nne.	5	2.2		0	0			0	0	clear	
Oswego, New York	29.36	745.7	29.72	754.9	29.4	— 1.4	73	sw.	9	4.0		0	7 s		w.	0.73	18.5	fair	
Palestine, Texas																			
Pensacola, Florida	30.25	768.3	30.28	769.1	43.6	6.4	50	n.	10	4.5		0	3 s		w.	0	0	clear	
Philadelphia, Pa	29.74	755.4	29.85	758.2	36	2.2	53	w.	14	6.3			10 ks		w.	0.58	14.7	cloudy	
Pike's Peak, Colorado	17.51	444.7	30.23	767.8	— 6.5	—21.4	74	ne.	24	10.7		0	2 s			0.03	0.8	clear	
Pioche, Nevada	24.22	615.2	30.38	771.6	17	— 8.3	58	nw.	7	3.1		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.11	739.4	29.97	761.2	25.0	— 3.9	80	w.	13	5.8			10 n		w.	0.09	2.3	light snow.	
Port Eads, Louisiana	30.26	768.6	30.27	768.8	54.1	12.3	90	ne.	18	8.0			10 s		ne.	0	0	cloudy	
Port Huron, Michigan	29.12	739.6	29.85	758.2	20.0	— 6.7	90	w.	15	6.7			10 n		calm	0.68	17.3	light snow	
Portland, Maine	29.51	749.5	29.56	750.8	19.0	— 7.2	84	n.	25	11.2			10 n			0.62	15.7	light snow	
Portland, Oregon	30.00	762.0	30.07	763.8	35.5	1.9	89	calm	0	0			10 n		calm	0.10	2.5	light rain	
Portsmouth, N. Carolina					46	7.8	60	nw.	22	9.8		0	0			0	0	clear	
Prescott, Arizona	24.84	630.9	30.20	767.1	19	— 7.2	61	s.	2	0.9		0	0			0	0	clear	
Provincetown, Mass	29.52	749.8	29.54	750.3	23	— 5.0	94	nw.	28	12.5			10 n		n.	0.47	11.9	light snow	
Punta Rassa, Florida	30.12	765.0	30.13	765.3	66.5	19.2	81	n.	5	2.2		0	1 s		calm	0	0	clear	
Red Bluff, California	29.88	758.9	30.26	768.6	36.3	2.4	95	calm	0	0		0	1 s			0	0	clear	
Rio Grande City, Texas	30.02	762.5	30.26	768.6	57	13.9	57	e.	4	1.8		10 cs	0	calm		0	0	cloudy	
Rochester, New York	29.04	737.6	29.75	755.6	25	— 3.9	88	w.	1	0.4			10 s		sw.	0.17	4.3	cloudy	
Roseburg, Oregon	29.55	750.6	30.12	765.0	39	3.9	89	calm	0	0			10 s			0	0	cloudy	
Sacramento, California	30.19	766.8	30.27	768.8	38.5	3.6	89	se.	5	2.2		0	0			0	0	clear	
St. Louis, Missouri	29.65	753.1	30.29	769.4	20.0	— 6.7	70	w.	11	4.9		0	0			inap.	inap.	clear	
St. Paul, Minnesota	29.21	741.9	30.15	765.8	1.0	—17.2	72	w.	4	1.8		0	0			0.18	4.6	clear	
St. Vincent, Minnesota	29.33	745.0	30.30	769.6	—24	—31.1	100	nw.	6	2.7		0	0			0	0	clear	
Salt Lake City, Utah	25.90	657.8	30.46	773.7	15	— 9.4	67	calm	0	0		0	0			0	0	clear	
San Antonio, Texas	29.59	751.6	30.31	769.9	39.7	4.3	57	ne.	3	1.3		1 c	0			0	0	clear	
San Diego, California	30.07	763.8	30.14	765.5	42.8	6.0	76	ne.	4	1.8		0	0			0	0	clear	
Sandusky, Ohio	29.22	742.2	29.94	760.5	25	— 3.9	88	w.	24	10.7			10 n			0.14	3.6	light snow	
Sandy Hook, New Jersey	29.73	755.1	29.77	756.1	34.0	1.1	72	nw.	25	11.2		9 k	0	nw.		1.39	35.3	cloudy	
San Francisco, California	30.20	767.1	30.27	768.8	44	6.7	83	sw.	4	1.8		0	0			0	0	clear	
Santa Fé, New Mexico	23.27	591.0	30.31	769.9	21.4	— 5.9	72	se.	2	0.9		0	0			0	0	clear	
Savannah, Georgia	30.04	763.0	30.13	765.3	47.5	8.6	30	w.	8	3.6		0	0			0.01	0.3	clear	
Shreveport, Louisiana	30.10	764.5	30.35	770.9	37	2.8	61	ne.	4	1.8		0	0			0	0	clear	
Silver City, New Mexico	24.31	617.5	30.16	766.1	25	— 3.9	58	nw.	4	1.8		0	0			0	0	clear	
Sitka, Alaska	29.26	743.2	29.33	745.0	30	— 1.1	78	n.	16	7.2		0	5 s		se.	0.51	13.0	fair	
Smithville, North Carolina	30.00	762.0	30.04	763.0	44	6.7	93	nw.	6	2.7		0	0			0	0	clear	
Spokane Falls, Wash. Ter.	28.11	714.0	30.24	768.1	19	— 7.2	80	sw.	1	0.4			10 s			0.05	1.3	cloudy	
Springfield, Illinois	29.51	749.5	30.24	768.1	18	— 7.8	67	w.	12	5.4		0	0			0.01	0.3	clear	
Springfield, Massachusetts	29.52	749.8	29.66	753.4	28.9	— 1.7	84	s.	1	0.4		0	8 ks		nw.	0.93	23.6	cloudy	
Springfield, Mo	28.83	732.3	30.40	772.1	24	— 4.4	73	nw.	5	2.2		0	0			inap.	inap.	clear	
Stockton, Texas	27.07	687.0	30.20	767.1	34.2	1.2	81	calm	0	0		0	0			0	0	clear	
Thatcher's Island, Mass	29.56	750.8	29.62	752.3	21.0	— 6.1	84	n.	32	14.3			10 s		nw.	0.75	19.0	cloudy	
Toledo, Ohio	29.20	741.7	29.94	760.5	24	— 4.4	88	s.	20	8.9			10 n			0.01	0.3	light snow	
Tucson, Arizona	27.65	702.3	30.13	765.3	35	1.7	82	s.	6	2.7		0	0			0	0	clear	
Umatilla, Oregon	29.88	758.9	30.26	768.6	27.0	— 2.8	88	s.	3	1.3			10 s			0	0	cloudy	
Uvalde, Texas	29.29	744.0	30.29	769.4	37	2.8	82	calm	0	0		0	0			0	0	clear	
Vicksburg, Mississippi	30.06	763.5	30.34	770.6	43	6.1	68	nw.	7	3.1		0	0			0	0	clear	
Visalia, California	29.83	757.7	30.21	767.3	34	1.1	83	sw.	3	1.3		0	0			0	0	clear	
Washington, D. C	29.82	757.4	29.94	760.5	33	0.6	50	nw	12	5.4		6 k	0	nw.		0.32	8.1	fair	
West Los Animas, Colorado	26.19	665.2	30.32	770.1	12	—11.1	83	w.	4	1.8		0	0			0	0	clear	
Wickenburg, Arizona					29.9	— 1.2	88	nw.			1	0	0			0	0	clear	
Williamsport, Pa	29.20	741.7	29.83	757.7	28	— 2.2	77	w.	15	6.7		9 c	1 ks		w.	0.75	19.0	cloudy	
Wilmington, N. Carolina	29.97	761.2	30.03	762.7	46	7.8	47	w.	5	2.2		hz	0	calm		0	0	clear	
Winnemucca, Nevada	25.78	654.8	30.30	769.6	6	—14.4	76	ne.	7	3.1		0	0			0.02	0.5	clear	
Wood's Holl, Mass																			
Yankton, Dakota	28.94	735.1	30.36	771.1	— 3	—19.4	48	nw.	1	0.4		0	0			0	0	clear	
Yuma, Arizona	29.99	761.7	30.14	765.5	41.3	5.2	45	nw.	2	0.9		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559.3			51.5	10.8	70	se.	7	3.1			7 s;n			0	0	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.12	765.0	30.13	765.3	76	24.4	81	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C	29.92	760.0	29.94	760.5	78	25.6	100	s.	2	0.9		2 ck	7 ks	s.	calm	0	0	cloudy	J. I. Plume.
Guadeloupe, W. I	30.04	763.0	30.06	763.5	75	23.9	90	e.				2 ks	3 ks			0	0		B. Bigar.
Havana, Cuba, W. I	30.14	765.5	30.19	766.8	75	23.9	82	calm	0	0		0	2 ks		calm	0	0	fair	A. Van Caneghem.
Kingston, Jamaica, W. I	30.09	764.3	30.10	764.5	66.4	19.1	92	n.	1	0.4		0	0			0	0	fine	Robert Johnstone
Navassa, W. I																			F. M. Everett.
Paramaribo, S. A	30.07	763.8	30.07	763.8	78	25.6	86	e.			2	3 c	4 k	e.		0	0		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.46	748.3	29.91	759.7	88	31.1	55	n.			1		10 s		calm	0	0	hazy	Miss Flora A. Nichols.
Rivas, Nicaragua							96	ne.			2	0	8 ks		ne.	0.01	0.3	cloudy	Earl Flint.
Santiago de Cuba, W. I	30.09	764.3	30.12	765.0	73	22.8	76	calm	0	0		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	30.20	767.1	30.25	768.3	—22.0	—30.0		s.	6	2.7		3 k	2 s	s.	s.	0	0	fair	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Gibraltar, Mediterranean	30.44	773.2	58	14.4	81	ene.			3		5	nne.						d. clouds	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S. Alert, N. 7° 27′, E. 71° 07′	29.88	758.9	81.5	27.5	72	nnw.			2		3							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.17	766.3	56.5	13.6	65	nnw.			1		1							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 15° 29′, E. 41° 40′	29.84	757.9	79	26.1	82	sse.			4–5		0					6	sse.	misty	Capt. Lord Chas. Scott.
H. M. S. Boudicea, S. 34° 11′, E. 18° 26′	29.81	757.2	66.5	19.2	78	w.			1–3		10							d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S. 40° 52′, E. 42° 40′	30.06	763.5	68.5	20.3	90	n.			3–4		3					4	ne.	d clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′, W. 61° 31′	30.09	764 3	77	25.0		se.			1–2		3	ne.						misty	Capt. C. Domville.
H. M. Dock Yard, Bermuda, W. I.	29.90	759.4	67.5	19.7	87	s.			3–4		9	ssw.						raining	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	30.17	766.3	65	18.3	83	nnw.			2		5					1–2	n.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S 12° 18′, E. 44° 21′	29.78	756.4	84	28.9		calm			0		6							drizzling	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt. C. A. G. Bridge.
H. M. S. Fawn, Aden, Arabia	30.04	763.0	78.5	25.8	65	e.			2		4	e.						d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	29.89	759.2	40	4.4	82	w.			2		4	w.						d. clouds	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 14° 50′, W. 78° 50′	29.91	759.7	74.5	23.6	79	ese.			3–4		5							d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.56	750.8	53	11.7	79	wsw.			4		8					1 3	ese. s.	d. clouds	Capt. L. F. Jones.
H. M. S. Inconstant, N. 1° 15′, E. 104° 00′	29.84	757.9	80	26.7	82	nnw.			3		5	nnw.				2	nw.	d. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′ E. 113° 24′	30.32	770.1	52	11.1	72	n.			1–2		1	n.						blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	30.00	762.0	63	17.2		calm			0		6								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.74	755.4	70	21.1	90	ese.			2–6		8	w.						misty	Capt. J. E. Erskine.
H. M. S. Northampton, Port Royal, Jamaica, W. I.	30.03	762.7	73	22.8	85	calm			0		2							d. clouds	Capt. E. Drummond.
H. M. S. Orontes, D'Urban, Natal, S. Africa	29.95	760 7	80.5	26.9	92	ene.			3		2					4	cf'd	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 50° 14′, W. 16° 28′	30.66	778.7	51.5	10.8	100	ese.			3		7					2	ese.	misty	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, N. 5° 18′, E. 3° 02′	29.88	758.9	83	28.3	95	wsw.			3		6							d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	29.87	758.7	66	18.9		sse.			2–6		4							squally	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	29.87	758.7	38	3.3	80	ne.			1		1	ene.						d. clouds	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 4° 20′, E. 39° 35′	29.23	742.4	84	28.9	91	ne.			2–3		2	ene.				4	ne.	d. clouds	Capt. E. T. Church.
H. M. S. Thalia																			
H. M. S. Triumph, S. 14° 48′, W. 77° 52′	29.93	760.2	74	23.3	81	se.			3		4	se.				1	se.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 6° 43′, E. 107° 10′	29.88	758.9	80	26.7	95	ne.			5–6		9	ne.				5	n.	d. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.06	763.5	74	23.3		n.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, N. 21° 55′ E. 64° 20′	29.98	761.5	74.5	23.6	56	n.			1		2	e.				2	nw.	d. clouds	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, Santiago, Cape Verd Ids	30.07	763.8	76.6	24.8	66	ne			3		3					2	ne.	d. clouds	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 15° 30′, W. 81° 40′	30.02	762.4	76.6	24.8	98	ene.			4		8							misty	Capt. A. I. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.30	769.6	45	7.2	46	n.	10	4.5	.....	.....	8	.....	n	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	29.58	751.3	18	— 7.8	.....	nw.	17	7.6	.....	.....	5	.....	nw.	0	0	.....	.....	fair	
Naval Hospital,																			
Yokohama, Japan	29.55	750.6	41.5	5.3	45	n.	.....	.....	3	.....	2	.....	nw.	0	0	.....	.....	clear	
Adams,																			
Callao, Peru	29.79	756.7	66	18.9	100	sse.	.....	.....	2	.....	10	.....	.....	0	0	gr'd	.....	cloudy	
Alaska,																			
Valparaiso, Chili	29.97	761.2	63	17.2	83	calm	.....	.....	0	.....	2	.....	.....	0	0	sm'h	.....	fair	
Alert.																			
Batavia, Java*	29.71	754.6	83	28.3	83	s.	.....	.....	1	.....	10	.....	calm	0	0	sm'h	.....	overcast	
Alliance.																			
Norfolk, Va	29.86	758.4	45	7.2	61	nw.	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	clear	
Ashuelot,																			
Tientsin, China	30.43	772.9	32	0.0	100	nnw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn,																			
Sandy Point, Patagonia	29.45	748.0	52	11.1	93	wnw.	7	3.1	.....	.....	5	.....	nw.	0	0	sm'h	.....	fair	
Colorado,																			
New York, N. Y	29.76	755.9	33	0.6	70	wsw.	10	4.5	.....	.....	10	.....	sw.	0.45	11.4	.....	.....	overcast	
Enterprise,																			
Hampton Roads, Va*	29.91	759.7	43	6.1	67	nw.	.....	.....	5-6	.....	1	.....	nw.	.....	.....	.....	.....	clear	
Essex,																			
N. 21° 35′, W. 20° 24′	30.20	767.1	68	20.0	79	se.	.....	.....	3	.....	5	.....	se.	.....	.....	sm'h	.....	fair	
Franklin,																			
Norfolk, Va	29.93	760.2	40	4.4	100	nw.	12	5.4	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Galena.																			
Villafranca, France	30.28	769.1	60	15.6	71	s.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Independence,																			
N. Yard, Mare I'd, Cal	30.10	764.5	41	5.0	82	calm	0	0	.....	.....	10	.....	.....	0	0	.....	.....	cloudy	
Kearsarge.																			
New Orleans, La	30.28	769.1	54	12.2	55	ne.	.....	.....	3	.....	8	.....	wsw.	.....	.....	.....	.....	fair	
Lackawanna.																			
Valparaiso, Chili*	29.93	760.2	61	16.1	100	se.	.....	.....	1	.....	5	.....	se.	.....	.....	.....	.....	cloudy?	
Lancaster.																			
Alexandria, Egypt	29.93	760.2	65	18.3	78	wsw.	.....	.....	3	.....	2	.....	w.	.....	.....	sm'h	.....	fair	
Marion,																			
S. 33° 55,′ E. 18° 25′	29.69	754.1	62	16.7	94	w.	.....	.....	3	.....	8	.....	n.	light	light	mod.	w.	cloudy	
Michigan,																			
Erie, Pa	29.71	754.6	25	— 3.9	60	nw.	.....	.....	7	.....	10	.....	.....	.....	.....	.....	.....	snowing	
Minnesota,																			
Newport, R. I	29.61	752.1	26	— 3.3	.....	nnw.	12	5.4	.....	.....	2	.....	n.	.....	.....	.....	.....	clear	
Monocacy,																			
Yokohama, Japan	29.77	756.1	44	6.7	92	ne.	.....	.....	2	.....	5	.....	n.	.....	.....	.....	.....	fair	
Nipsic.																			
Cadiz, Spain	30.38	771.6	63	17.2	57	se.	.....	.....	6	.....	0	.....	.....	.....	.....	mod.	.....	clear	
Onward,																			
Callao, Peru†	30.03	762.7	65	18.3	100	se.	.....	.....	2	.....	10	.....	nnw.	.....	.....	long	w.	foggy	
Palos,																			
Hong Kong, China	30.29	769.3	54	12.2	55	n.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic,																			
Washington, D. C	29.94	760.5	33	0.6	100	nw.	.....	.....	4	.....	5	.....	nw.	.....	.....	.....	.....	fair	
Pensacola.																			
S. 33° 03′, W. 71° 46′	30.02	762.5	62	16.7	83	calm	0	0	.....	.....	0	.....	.....	0	0	sm'h	.....	clear	
Powhatan.																			
N. 18° 49′, W. 68° 11′	30.21	767.3	75	23.9	72	ene.	.....	.....	2	.....	5	.....	e.	.....	.....	mod.	e.	fair	
Quinnebaug,																			
Alexandria, Egypt	29.90	759.4	63	17.2	72	w.	.....	.....	4	.....	2	.....	calm	.....	.....	sm'h	.....	clear	
Ranger.																			
N. 19° 17′, W. 104° 50′*	29.87	758.7	70	21.1	90	n.	.....	.....	0-1	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond,																			
N. 29° 01′, E. 147° 58′*	29.77	756.1	64	17.8	78	wnw.	.....	.....	2	.....	10	.....	w.	0.15	3.8	mod.	sw.	cloudy	
Shenandoah,																			
S. 28° 46′, W. 25° 30′*	30.17	766.3	75	23.9	95	n.	.....	.....	3	.....	10	.....	n.	.....	.....	sm'h	.....	rainy	
St. Louis,																			
League Island, Pa	30.06	763.5	34	1.1	79	nw.	27.3	12.2	.....	.....	5?	.....	.....	0.48	12.2	.....	.....	clear?	
Swatara,																			
Yokohama, Japan*	29.54	750.3	45	7.2	59	nne.	.....	.....	2	.....	8	.....	n.	.....	.....	sm'h	.....	fair	
Tennessee,																			
Fort Monroe, Va	29.91	759.7	42	5.6	58	nw.	28	12.5	.....	.....	0	.....	.....	0	0	.....	.....	fair	
Vandalia,																			
N. 13° 24′, W. 79° 27′*†	30.07	763.8	78	25.6	86	ene.	.....	.....	6	.....	5	.....	ene.	.....	.....	r'gh	ne.	fair	
Wabash,																			
Boston, Mass	29.60	751.8	22	— 5.6	.....	nw.	11	4.9	.....	.....	8	.....	nw.	0	0	.....	.....	fair	
Wachusetts.																			
Atert Bay, B. C	29.53	750.0	40	4.4	82	ese.	.....	.....	4	.....	10	.....	ese.	.....	.....	.....	.....	raining	
Wyoming,																			
Port Royal, S. C	30.11	764.8	43	6.1	83	nw.	16	7.2	.....	.....	2	.....	calm	0	0	.....	.....	clear	
Yantic,																			
Coxin Hole, Roatan Id*	30.02	762.5	77	25.0	86	ene.	.....	.....	2	.....	5	.....	.....	.....	.....	sm'h	.....	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie,* N. 43° 50′, W. 49° 57′*	29.73	755.1	32	0.0		nne.	4		8		ene.	8 h'r	snow	r'gh	ne.	cloudy	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen. N. 48° 09′, W. 32° 56′*	30.05	763.3	54	12.2		sse.	6		5		s.			h'vy	sse.	fair	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 43° 13′, W. 63° 10′*	29.28	743.7	34	1.1		e.	6		10		ese.	7 h'r	snow	long	ese.	rainy	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 43° 52, W. 42° 02′*†	29.37	746.0	52	11.1		nw.	6		10		s;n.	3 h'r	3h'r	r'gh	con.	overcast	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, N. 40° 35′, W. 69° 39′	29.44	747.8	34	1.1	90	wnw.	7		10?		nnw.			r'gh	w.	clear.?	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, Liverpool, Eng†	30.45	773.4	46	7.8	92	nw.	3		5		nw.	0	0			fine	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†	30.78	781.8	44	6.7	?	w.	2		4		w.				w.		Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,																	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers. Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 53° 00′, W. 25° 40′*†	30.62	777.7	52	11.1		se.	3		10?		se.			mod.	sse.	fair?	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Port au Prince, Hayti, W. I*	30.16	766.1	79	26.1		nne.	2		0			0	0			fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Kingston, Jamaica, W.I*†	29.94	760.5	69	20.6													W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Kingston, Jamaica, W. I.						e.	2		5		ene.			mod.	e.	squally	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 35° —′, W. 74° —′	30.16	766.1				w.	7		8		w.	sh'rs	shr's	r'gh	w.	cloudy	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Gloucester, Mass†	29.79	756.7	28	—2.2		nne.						snow	snow	high cross	ne.	light snow	S. E. Wright.
BRITISH METEOROLOGIC'L OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 37° 12′, W. 32° 59′	29.87	758.7	66	18.9		wsw.	6		6							blue sky	
Baroda, Capt. C. J. Russell, S. 26° 12′, W. 22° 56′	30.16	766.1	78.1	25.6	82	ne.	3		2							d. clouds	
Caldew, Capt. W. Peterson, S. 34° 40′, W. 33° 48′	29.99	761.7	68	20.0		wnw.	6		1							blue sky	
S. S. Cipero, Capt. W. N. Lailey, N. 22° 12′ W. 47° 35′	30.24	768.1	70.7	21.5	67	nne.	3		2					1	une.	d. clouds	
S. City of Agra, Capt. Thos. Young,																	
Coppename, Capt. James Buchan, N. 13° 14′, W. 57° 50′	30.09	764.3	77	25.0	72	ne.	5		3							blue sky	
Bk. Glaramara, Capt. R. Morton,																	
Glencairn, Capt. R. S. Tannock,																	
S. S. Gordon Castle, Capt. W. Waring, N. 34° 28′, E. 21° 01′	29.88	758.9	56	13.3	62	nnw.	5		3							d. clouds	
Bg. Hermine, Capt. S. G. Jones, S. 38° 01′, W. 34° 06′	29.76	755.9	61.7	16.5	78	sw.	6		9							showery	
Hope, Capt. James Campbell, N. 15° 15′, W. 29° 46′	30.08	764.0	72.8	22.7	85	e.	3		5							misty	
S. S. Humboldt, Capt. A. W. Jeffery, N. 23° 20′, W. 61° 58′	30.28	769.1	72	22.2	63	se.	1		8							d. clouds	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 10° 53′, W. 12° 42′	30.07	763.8	78	25.6	77	se.	4		3							d. clouds	
May Hulse, Capt. H. Youlden, S. 46° 25′, W. 83° 29′	29.50	749.3	54.7	12.6	93	nnw.	6		10							overcast	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, Montevideo, Uruguay, S. A.	30.23	767.8	68	20.0	84	nnw.	4		0							blue sky	
Naiad, Capt. John Smith, N. 39° 34′, W. 34° 47′	29.51	749.5	58.6	14.8	100	s.	8		6							misty	
Pole Star, Capt. F. Norman,																	
Queen of Cambria, Capt. M. Parry. S. 3° 03′, E. 83° 40′	29.81	757.2	83	28.3	67	wnw.	2		6							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson,																	
S. Superb, Capt. Berridge																	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Hudson River, N. Y*†	29.92	760.0				w.	6		10			0	0				Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman, N. 25° 02′, W. 80° 03′*†	30.17	766.3	72	22.2		wsw.	3		9		sw.	0	0	sm'h	s.	overcast	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey,																	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	E. F. Stembridge, 3d offi
S. S. Bothnia, Capt. W. McMickan,																	
S. S. Gallia, Capt. W. H. P. Hains, Off Sandy Hook, N. J†	29.87	758.7	34	1.1	100	w.	6		8		w.			sm'h		fine	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Behian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt. Périer d'Hauterive, N. 48° 36′, W. 31° 18′*†	30.12	765.0	50.0	10.0		s.	6	ck	0	sse.		0	0	h'vy	sse.*	cloudy	
S. S. St. Laurent, Capt. A. Sérvan.																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein,																	
S. S. Silesia, Capt. A. Albers, N. 47° 52′, W. 30° 42′*†	30.17	766.3	54.5	12.5		ese.	6		8		s.	0	0	5	ese.	fair	
S. S. Wieland, Capt. C. Hebich,																	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch. N. 37° 38′, W. 71° 47′	29.81	757.2				nw.	6		8?		nw.	0	0		n.	clear?	John Inch.
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, Bahia, Brazil, S. A.*†	30.20	767.1	83	28.3		ene.	1		6?		ne.	0	0			clear?	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *O. H. Mallory & Co., Agents, Nem York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 26° 55′, W. 80° 02′*†	30.25	768.3	68	20.0		nw.	2		3		nw.	0	0	small	nw.	foggy	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 49° 18′, W. 29° 56′*†	30.28	769.1	56	13.3	87	sse.	6		10		sse.	0	0		sse	overcast	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, N. 26° 54′, W. 80° 05′*†	30.25	768.3	73	22.8		nw.	1		0			0	0	sm'h		clear	F. C. Miller, 2d offi.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom [man																	
S. S. City of Alexandria, Capt. L. F. Timmer- N. 22° 47′, W. 84° 46′*†	30.32	770.1	77	25.0		ese.	3								ese.	threatening	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Elbe, Capt. W. Willigerod [nolds																	
S. S. Lessing, Capt. B. Voss,																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke,																	
S. S. P. Caland, Capt. E Deddes,																	
S. S. Schiedam, Capt. E. M. Chevalier,																	
S. S. Scythia, Capt. M Murphy																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur																	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander,																	G. H. Lose, 3d offi.
S. S. Leipzig, Capt. F. Pfeiffer, N. 44° 20′ W. 42° 55′	29.56	750.8	46.5	8.1	92	n.	6		10		n.	8 h'r	light	r'gh	se.	cloudy	Sander & Walter,
S. S. Main, Capt. Julius Barre, Southampton, England*	30.57	776.5	50.0	10.0		w.	2		4		w.	0	0			fine	
S. S. Mosel, Capt. F. Hesse, N. 42° 22′, W. 50° 55′	29.93	760.2	34.2	1.2		ne.	5		8		e.	5 h'r and	rain snow	mod.	ne.	cloudy	J. Hesse.
S. S. Neckar, Capt. R. Bussius. N. 42° 49′, W. 54° 11′	29.84	757.9	35.6	2.0		e.	5		10		ene.	12 h'r and	rain snow	mod.	ne.	overcast	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	
S. S. Oder, Capt. Undeutsch,																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Baltimore, Md	30.07	763.8				ne.	3		4		n.	0	0			fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch N. 47° 08′, W. 32° 57′*	30.09	764.3	56.0	13.3	87	se.	7		6		se.	0	0	r'gh	se.	cloudy	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 32° 08′, E. 133° 10′†	29.84	757.9	47	8.3	85	nnw.	6		2		nw.	0	0	light	nw.	clear	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 37° 39′, W. 140° 06′*†	30.30	769.6	58	14.4	64	w.	3		10					mod.	wnw.	overcast	
S. S. Oceanic, Capt. J. Metcalfe, N. 45° 50′, W. 169° 33′..*	30.09	764.3	46	7.8	92	wsw.	5		9		sw.			3	sw.	overcast	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.35	745.5				w.	2		10							light snow	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Vineyard Haven, Mass.†	29.52	749.8	22	—5.6	72	nnw.	4		5		n.	16 h'r and	rain snow	sm'h		fair	H. K. Hallett.

MERCHANT-MARINE SERIES.—Continued

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter.†	29.95	760.7	39	3.9	81	se.	2	.....	10	.....	se.	.....	.....	.....	.....	rain & snow	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer Seattle, Wash. Ter*†	29.93	760.2	36	2.2	90	se.	2	.....	8	.....	se.	¼ h'r	rain snow	.....	.....	snowing	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d offi.
S. S. Columbia, Capt. Fred. Bolles N. 37° 59′, W. 123° 03′†	30.26	768.6	50	10.0	86	ese.	2	.....	10	.....	calm	0	0	light	nw.	misty	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	30.05	763.3	38	3.3	80	calm	0	.....	10	.....	.....	.....	.....	.....	.....	rainy	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	30.21	767.3	43	6.1	91	wnw.	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	.....
S. S. Geo. W. Elder, Capt. H. G. Morse, N. 40° 54′, W. 124° 36′†	30.03	762.7	46	7.8	.....	ssw.	6	.....	7	.....	sw.	light	light	long	w.	cloudy	.....
S. S. Idaho, Capt. H. M. Hayward, N. 43° 50′, W. 124° 49′†	30.37	771.4	40	4.4	100	sw.	2	.....	10	.....	sse.	.....	.....	.....	sw.	raining	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 24′, W. 118° 14′†	30.12	765.0	55	12.8	80	e.	2	.....	1	.....	nw.	.....	.....	sm'h	se.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace. San Francisco, Cal.†	30.42	772.7	44	6.7	92	nw.	1	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.26	768.6	42	5.6	91	calm	0	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. Victoria, Capt. W. E. Plummer, Nanaimo, Vancouver I'd†	29.90	759.5	37	2.8	80	calm	0	.....	10	.....	s.	.....	.....	.....	.....	cloudy	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 24° 41′, W. 148° 56′	30.36	775.1	66	18.9	78	ene.	3	.....	5	.....	e.	0	0	sm'h	.....	fine	.....
S. S. City of New York, Capt. W. B. Cobb, N. 22° 10′, W. 139° 30′†	30.08	764.0	59	15.0	87	calm	0	.....	10	.....	.....	0	0	h'vy	nw.	cloudy	W. H. Hawes, 2d offi.
S. S. City of Rio de Janeiro, Capt. Cavarly. N. 24° 38′, W. 112° 29′†	30.20	767.1	62	16.7	71	ne.	2	.....	5	.....	ne.	0	0	sm'h	n.	fair	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, Sydney, N. S. W.†	30.07	763.8	79	26.1	58	ne.	4	.....	2	.....	ne.	0	0	sm'h	.....	clear	E. Le Salk.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	30.29	769.4	53	11.7	60	e.	2	.....	0	.....	.....	0	0	.....	.....	clear	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, La Libertad, San Salvador†	29.92	760.0	79	26.1	73	ne.	2	.....	3	.....	s.	0	0	small	sse.	fair	.....
S. S. Grenada, Capt. M. Connolley, N. 16° 14′, W. 98° 30′†	29.93	760.2	79	26.1	95	nw.	2	.....	0	.....	.....	0	0	light	nw.	clear	.....
S. S. South Carolina, Capt. W. J. Russell, Panama, Panama.†	30.03	762.7	84	28.9	75	nw.	2	.....	0	.....	.....	0	0	sm'h	.....	fine	A. W. Hart, 2d offi.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W.	30.00	762.0	73	22.8	71	se.	1	.....	0	.....	.....	.....	.....	.....	.....	fine	.....
QUEBEC S. S. CO. *E. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M. Faircloth. N. 31° 40′, W. 68° 30′†	29.99	761.7	70	21.1	.....	wsw.	6	.....	9	.....	w.	0	0	hv'y	wsw.	fine	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, Antigua, W. I.	.....	.....	.....	.....	.....	ene.	3	.....	0	.....	.....	0	0	sm'h	.....	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes, Antwerp, Belgium*†	30.78	781.8	42	5.6	.....	wsw.	1	.....	7?	.....	.....	0	0	.....	.....	overcast?	.....
S. S. Nederland, Capt. J. Uberweg, N. 51° 30′, W. 21° 35′*	31.06	788.9	52	11.1	.....	sse.	2	.....	10	.....	.....	0	0	long	w.	covered	Athrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, South Foreland, England*	30.77	781.5	48	8.9	77	ssw.	3	.....	9	.....	ne.	0	0	light	ssw.	cloudy	C. H. Grant, 2d offi.
S. S. Switzerland, Capt. J. C. Jamison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon N. 44° 14′ W. 53° 57′*†	29.73	755.1	34	1.1	.....	e.	5	.....	10	.....	e.	0	0	high long	e.	overcast	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, N. 41° 42′, W. 62° 49′*	29.06	738.1	48	8.9	.....	sw.	5	.....	10	.....	wsw.	9 h'r snow	rain & hail	cross	se. wsw.	clearing	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 43° 14′, W. 43° 25′*	29.56	750.8	57.0	13.9	93	nw.	6	.....	9	.....	nw.	12 h'r	12 h'r	mod.	ese.	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Brooklyn, N. Y.†	29.93	760.2	32.0	0.0	.....	wnw.	1	.....	6?	.....	wnw.	18 h'r	18 h'r	.....	.....	clear?	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters, N. 46° 39′, W. 41° 18′*†	29.66	753.4	46	7.8	.....	sw.	4	.....	10	.....	sw.	0	0	hv'y	se.	foggy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th offi.
S. S. Celtic, Capt. Benjamin Gleadell, N. 47° 13′, W. 36° 19′*†	29.68	753.9	53	11.7	93	se.	6	.....	8	.....	s.	0	0	mod.	s.	cloudy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 41° 59′, W. 63° 27′*	29.24	742.7	46	7.8	.....	sw.	8	.....	10	.....	sw.	10 h'r	snow rain	r'gh	sw. ene.	overcast	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. N. 28° 55′, W. 83° 15′†	30.27	768.8	56	13.3	50	nnw.	3	0	0			0	0	sm'h		clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 25° 17′, W. 42° 23′*†	30.16	766.1	68	20.0		w.	3		4		w.	0	0	mod.	n.	fair	C. Bailey.
Bk. Alpha, Capt. O. Grönn N. 18° 05′, W. 52° 40′*†	30.18	766.6	75	23.9		ne.	5		4		ne.	0	0	long	n.	fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby, N. 45° 25′ W. 28° 05′*†	30.10	764.5	60	15.6	82	ese.	5		2		sse.	½ h'r	light	con.		clear	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, N. 22° 00′, W. 69° 10′*†	30.20	767.1	77	25.0		ese.	2		5		e.	0	0	mod.	ne.	fair	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, S. 8° 05′, W. 30° 10′*†	30.00	762.0	85	29.4		sse.	6		1		sse.	0	0	sm'h	se.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen,																	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia, N. 40° 28′, W. 73° 45′*†	29.80	756.9				wnw.	4										G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 41° 00′, W. 53° 43′*†	29.78	756.4				ese.	3				e.	6 h'r	light	mod	ene.	misty	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill, S. 57° 22′ W. 64° 50′†	29.30	744.2				wsw.	4		5?		sw.	0	0	long	wsw.	clear.?	A. J. Pettengill.
S. Enoch Train, Capt. H. D. Chapman, Bremerhaven, Germany*	30.37	771.4				w.	3		10		w.	0	0			overcast	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.																	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C†	30.01	762.2	35	1.7	80	wnw.	5		6		nw.	0.33	8.4			fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 19° 30′, W. 44° 52′			74	23.3		nne.	3		5		nne.	0	0	sm'h		fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 29° 18′, W. 72° 24′*†	30.02	762.5				sse	5		0			0	0	sm'h	sse.	clear	
Bk. Geo. Booth, Capt. D. Williams, S. 7° 00′, W. 32° 14′*†	29.85	758.2	86	30.0		se.	2					0	0			clear	D. Williams.
Bk. Granville, Capt. R. Bonney N. 25° 47′, W. 40° 17′*†	30.25	768.3	70	21.1		nw.	3					0	0	mod.	nw.	clear	
Schr. Henry Denison, Capt. Jno. Fehring																	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 37° 43′. E. 68° 40′*	30.19	766.8				ese.	3		3		se.	0	0	long	wsw.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann,																	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith, N. 33° 34′, E. 71° 41′*†	29.90	759.4				wnw.	7		1		w.	0	0	con.			A. Smith.
Schr. Moravian, Capt. Geo T. L. Compte N. 30° 07′, W. 70° 28′*†	29.45	748.0				sw.					sw.			hv'y	sw.	cloudy	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen,																	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 20° 24′, W. 36° 45′*†	30.40	772.1	71	21.7	85	nnw.	2		2		nnw.			h'vy	nw.		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Fiume, Austria†	30.24	768.1	53	11.7	53	calm	0		0							clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 34° 30′, W. 20° 00′*†	30.10	764.5				ne.					ne.	¼ h'r	¼ h'r			cloudy	J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	29.99	761.7	45	7.2		w.	1		0			0	0			fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 32° 35′, W. 42° 30′*	29.97	761.2	68.5	20.3	91	sw.	3		5		sw.			r'gh	sw.	d. clouds	H. N. T. Sumner.
Bk. Sunbeam, Capt. Joseph Hand, N. 22° 32′, W. 40° 27′*†	30.11	764.8	72	22.2	90	wnw.	2		5		w.	0	0	mod.	wnw.	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert,																	
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 49° 05′, W. 7° 59′*†	30.45	773.4	58	14.4	76	e.	2				e.			sm'h		clear	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, S. 20° 31′, W. 36° 05′*†	30.10	764.5				nne. ne.					nne.			mod.	ne.		N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 23, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.43	773.0	60.8	16.0	83	w.			2		0			0	0	clear	Moiroud.
Algiers			30.46	773.7	56.5	13.6	84	nw.			2		0			0	0	clear	Nicolas.
La Calle			30.48	774.1	61.5	16.4	66	nne.			1		2			0	0	fair	Foufrède.
Tunis			30.44	773.1															Jacques.
Sfax																			Gau.
Saida			30.45	773.5	63.7	17.6	67	ne.			1		0			0	0	clear	Dumas.
Tebessa			30.48	774.2	50.7	10.4	60	nw.			2		0			0	0	clear	Derché.
Geriville					55.8	13.2	45	nne.			1		0			0	0	clear	Lonchamp.
Laghouat			30.52	775.3	57.2	14.0	41	s.			1		0			0	0	clear	Herbin.
Biskra			30.49	774.5	66.6	19.2	31	n.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.18	766.6	30.27	768.8	57.8	14.3	62	se.	10	4.5			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.61	752.0	30.16	766.1	53.2	11.8	43	sw.			3		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.21	741.8	29.99	761.8	40.3	4.6	74	wnw.	19.2	8.6			10			0.067	1.7		Dr. Wierzbiski.
Eperies	29.07	738.3	29.97	761.1	42.8	6.0	66	nw.			3		10 ks		se.	0	0		Julius Mikolik.
Gratz	28.90	734.0	30.15	765.7	58.6	14.8	23	nw.			4		0			0	0		Andreas Rospini.
Hermannstadt	28.61	726.7	30.10	764.4	38.3	3.5	60	nw.			4		6			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.93	734.9	30.32	770.1	43.2	6.2	67	nw.			2		0			0	0	clear	The Staff.
Lemberg	28.76	730.4	29.77	756.2	30.5	2.5	91	nw.			4		10			0.161	4.1		Dr. T. Stanecki.
Pola	30.18	766.5	30.29	769.4	49.1	9.5	71	ese.			1		0			0	0		I. R. Hydrographic Office.
Szathmar	29.54	750.2	30.00	761.9	32.4	0.2	76	e.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	29.75	755.7	30.04	763.0	47.1	8.4	76	w.			5		8			0	0		Karl Stancel.
Trieste	30.21	767.4	30.32	770.0	47.8	8.8	76	calm			0		0			0	0		Rieder.
Vienna	29.50	749.4	30.24	768.1	44.6	7.0	57	nw.			3		9			0	0		I. R. Central Met. Obs'y
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	30.04	763.0	30.14	765.5	49.9	9.9	60	wsw.	13	5.8			6			0	0	d. clouds	W. Boswell.
Armagh, Observatory	30.12	765.0	30.36	771.1	46.4	8.0	76	wsw.	8	3.6			10					overcast	S. Call.
Bidston, Liverpool Obs'y			30.38	771.6	42.8	6.0	79	w.	16	7.2			10					overcast	John Harmup.
Bolton, Sharples	29.82	757.4	30.36	771.1	42.2	5.7	79	w.	12	5.4			10					overcast	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.91	759.7	30.30	769.6	46.1	7.8	72	w.			2		8			0	0	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	80.0	26.7	66	ne.			3		3					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			30.36	771.1	44.0	6.7	72	nw.			0.4		10					overcast	John McLaren.
Chatham, School M. E.	30.31	769.9	30.48	774.2	42.4	5.8	75	n.			1		10					misty	Lance Opl. G. A. Pickles.
Falmouth, Observatory	30.16	766.1	30.40	772.1	47.6	8.7	87	ese.			3		10					foggy	The Staff.
Fort Napier, Natal	27.61	701.3	29.82	757.4	80.2	26.8	61	calm			0		4						Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	88.0	31.1	69	nw.			1		3					blue sky	Sergt. John Robinson.
Galway, Queen's College			30.29	769.4				s.			1		10			0	0	gloomy	J. O'Donaghue.
Gibraltar, Mediterranean	30.37	771.4	30.42	772.7	60.0	15.6	82	e.			3		7					d. clouds	Opl. O. Baldwin.
Glasgow, Observatory	30.04	763.0	30.25	768.3	47 5	8.6	74	w.			3		10					gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	30.25	768.3	30.43	772.9	43.1	6.2	74	n.			1		10					overcast	The Staff.
Guernsey	30.10	764.5	30.41	772.4	49.0	9.4	85	ne.			1		7					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.39	771.9	30.43	772.9	44.5	6.9	63	nw.	6	2.7			10					threatening	The Staff.
Leicester, Museum	30.07	763.8	30.33	770.4	43.5	6.4	64	sw.			2		10					overcast	J. C. Smith.
Malta, Mediterranean	30.21	767.3	30.28	769.1	58.6	14.8	73	ne.			2		3					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.15	765.8	30.20	767.1	71.0	21.7	100	w.			1		4			blank	blank	d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.88	758.9	30.42	772.7	40.1	4.5	72	w.			1		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	30.18	766.6	30.41	772.4	43.7	6.5	65	wsw.			1		10					misty	The Staff.
Plymouth	30.33	770.4	30.41	772.4	46.9	8.3	83	e.			3		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			29.98	761.5	47.3	8.5	87	w.	40	17.9			0					blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.01	762.2	30.08	764.0	38.0	3.3	60	ne.			2		3					d. clouds	W. H. Lyne.
Sheffield	30.05	763.3	30.34	770.6	45.3	7.4	71	ssw.			1		10			0	0	overcast	W. F. Cooper.
Silloth Rectory	30.28	769.1	30.31	769.9	45.2	7.3	86	w.			2		10			0	0	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.35	770 9	44.2	6.8	69	w.	17	7.6			10					overcast	I. New.
Stratfield Turgiss	30.21	767.3	30.43	772.9	45.8	7.7	62	ne.			2		8					d. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.30	769.6	30.35	770.9	50	10.0	78	se.			4		8					gloomy	W. Newcombe.
Valencia, Observatory	30.30	769.6	30.33	770.4	49.5	9 7	77	se.	10	4.5			10					d. clouds	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.97	761.2	30.00	762.0	78.0	25.6	59	e.	8.0	3.6		8 c	0			0	0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.98	761.5	30.01	762.2	83.0	28.3	48	sse.	19	8.5		4	6			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

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STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.					15.6	— 9.1		ne.	3	1.3			10 n			0.10	2.5	cloudy	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.49	749.0	29.54	750.3	20	— 6.7	100	n.	30	13.4			10 n			0.57	14.5	light snow	H. J. Cundall, C. E.
Chatham, N. B.*	29.75	755.6	29.82	757.4	15	— 9.4	100	n.	17	7.6			10 n		n.	0.54	13.7	light snow	G. A. Blair.
Cornwall, Ontario	29.80	756.9	30.01	762.2	9.8	—12.3	100	e.			1		10 n			0.100	2.5	cloudy	James Smith, M. A.
Dalhousie, N. B.	29.71	754.6	29.89	759.2	14.0	—10.0		w.			1		10 s			0.05	1.3	cloudy	H. A. Johnson.
Father Point, Quebec*	30.00	762.0	30.02	762.5	13	—10.6	87	ne.	30	13.4			8 s		calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.48	748.8	30.47	773.9	—22	—30.0	100	se.	2	0.9		0	0			0	0	clear	James Stewart.
Fredericton, N. B.	29.74	755.4	29.81	757.2	18.0	— 7.8	84	n.	7	3.1			10 s			0.250	6.3	cloudy	Prof. Harrison.
Granton, Ontario	28.92	734.6	30.10	764.5	16.5	— 8.6	92	w.	5	2.2			10 n			0.10	2.5	cloudy	James Grant.
Halifax, N. S.*	29.30	744.2	29.44	747.8	22	— 5.6	87	nw.	16	7.2		5 k	0	ne.		0.450	11.4	fair	A. Allison.
Hamilton, Ontario	29.60	751.8	30.02	762.5	21.7	— 5.7	90	sw.			2		10 ks			0.20	5.1	cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.69	754.1	30.05	763.3	13	—10.6	87	ne.	3	1.3		8 ck	2 n	n.		0.06	1.5	snowing	A. P. Knight, M. A.
Little Glace Bay, N. S.	29.36	745.7	29.40	746.7	26.0	— 3.3	100	ne.			9		10 n			0.50	12.7	snowing	C. H. Rigby.
Montreal, Quebec*	29.81	757.2	30.04	763.0	12	—11.1	76	n.	5	2.2		2 ck	2 s	ne.		0.10	2.5	fair	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.29	744.0	30.03	762.7	20	6.7	84	n.	8	3.6		5 k	5 ks	ne.	ne.	0.01	0.3	cloudy	Rev. R. Mosley.
Peterboro, Ontario	29.26	743.2	30.05	763.3	27.3	— 2.6	88	n.			1		10 n			inap.	inap.	snowing	J. Dixon, B. A.
Port Dover, Ontario	29.33	745.0	30.07	763.8	18	— 7.8	85	calm	0	0			10 n		calm	inap.	inap.	threatening	H. Morgan.
Port Stanley, Ontario	29.40	746.7	30.10	764.5	16	— 8.9	91	nw.	6	2.7			10 ks		nw.	0.05	1.3	cloudy	M. Payne.
Quebec, Quebec*	29.66	753.4	30.00	762.0	14	—10.0	83	ne.			5	0	2 s		ne.	0.15	3.8	fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.57	751.1	30.07	763.8	6	—14.4	87	calm	0	0		8 c	0	nw.		inap.	inap.	fair	W. H. McIntyre.
Saugeen, Ontario*	29.27	743.4	30.04	763.0	20	— 6.7	96	n.	2	0.9			8 ks			0.27	6.9	cloudy	
St. Andrews, N. B.	29.68	753.9	29.73	755.1	17	— 8.3	87	n.	14	6.3		5 k	5 k	n.	ne.	0.55	14.0	cloudy	
St. John, N. B.	29.50	749.3	29.67	753.6	17.0	— 8.3	100	ne.	23	10.3		0	7 ks			0.560	14.2	cloudy	G. Murdock, C. E.
St. Pierre, N. F.			29.33	745.0	21.2	— 6.0		ne.			5					0	0		N. F. Land, Com't.
Stratford, Ontario	28.70	729.0	30.07	763.8	19.0	— 7.2	94	w.	10	4.5			10 s			0.200	5.1	cloudy	C. I. Macgregor, M. A.
Sydney, C. B.*	29.26	743.2	29.32	744.7	25	— 3.9	100	n.	24	10.7			10 n			0.90	22.9	light snow	T. C. Hill, C. E.
Toronto, Ontario*	29.63	752.6	30.03	762.7	25	— 3.9	88	w.	5	2.2			10 ks		w.	0.04	1.0	cloudy	Magnetic Observatory.
Windsor, N. S.	29.39	746.5	29.48	748.8	21.0	— 6.1	100	n.	32	14.3			10 n			0	0	cloudy	Prof. W. R. Butler.
Woodstock, Ontario	28.93	734.8	30.07	763.8	18.6	— 7.4	71	sw.	16	7.2			9 ks			0.05	1.3	cloudy	Prof. Wolverton
Yarmouth, N. S.*	29.51	749.5	29.57	751.1	22	— 5.6	76	n.	4	1.8			10 k		n.	0.10	2.5	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.44	747.8	29.69	754.1	27	— 2.8		e.	2	0.9			10			0.50	12.7	snowing	John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.29	769.4	30.58	776.7	42.4	5.8	75	ese.			2		0			0	0		N. Titoushkin.
Sung-shu-chwang	24.75	628.7			26.1	— 3.3	55	calm			0		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	30.49	774.4	30.52	775.1	33.1	0.6	98	e.	2.2	1.0			0			0	0	clear	M. Marc Dechevrens.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.80	756.8	29.84	758.0	46.8	8.2	75	nw.	34	15			2						Oversergent Fischer.
Fanöe	30.04	763.1	30.06	763.6	44.8	7.1	86	wnw.			6		1						Overloerer Lauridsen.
Godthaab, Greenland	30.06	763.5	30.10	764.6	13.5	—10.3	83	nne.			5		0						S. Kleinschmidt.
Stykkisholm, Iceland	29.82	757.3	29.86	758.4	18.7	— 7.4		ne.			8		8						A. O. Thorlacius.
Thorshavn	29.71	754.7	29.75	755.6	43.5	6.4	88	wsw.	16.7	8			8						Overloerer Bergh.
Vestervig	29.84	757.8	29.93	760.1	45.3	7.4	91	w.			6		10						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.74	755.5	30.41	772.4	51.1	10.6	80	calm			0	2 c	0			0	0	clear	M. Labroue, Director.
Alençon, Normal School	29.90	759.5	30.45	773.5	48.2	9	89	ne.			2		k		sw.	0	0		M. Nicot, Director.
Arras, Engineer School	30.12	765.1	30.39	772.0	43.9	6.6	83	sw.			1		10 n			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	30.28	769.0	30.35	771.0	59.0	15	48	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.85	758.1	30.42	772.6	49.6	9.8	54	e.			1		0			0	0	clear	M. Saillard, Director.
Beauvais, Normal School	30.20	767.0	30.47	774.0	44.4	6.9	83	e.			1		10			0	0	covered	M. Frère Eugène Mari
Besançon, Normal School			30.38	771.7	44.6	7	97	ene.			1		10 n		se.	0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	30.10	764.5	30.36	771.2	54.9	12.7	55	s.			1		0			0.004	0.1	clear	M. Rayet, Director.
Bourges, Normal School	29.84	757.8	30.39	772.0	52.7	11.5	56	nne.			2		0			0	0	clear	M. Postel, Director.
Brest, Naval Observatory	30.12	765.0	30.36	771.2	55.0	12.8	76	e.			1		2		e.	0	0		M. de Kennaree, Dir.
Caen, Normal School	30.35	770.9	30.43	772.9	50.0	10	76	nnw.			1		0			0	0	clear	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	30.10	764.4	30.43	772.9	38.5	3.6	90	calm			0		0			0	0	clear	M. Jadot, Director.
Charleville, Normal School.	29.96	760.9	30.49	774.5	41.0	5	82	n.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.99	736.3	30.36	771.1	55.0	12.8	42	nw.			1		0			0	0	clear	M. Alluard, Director.
Cluny, Normal School	29.57	751.0	30.45	773.3	48.4	9.1	56	ssw.			1		0			0	0	clear	M. de Villemontée, Dir.
Commercy, Normal School.	29.56	750.8	30.47	773.8	48.7	9.3	64	ene.			1	5 c		ene.	ene.	0	0	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.82	706.5	30.34	770.6	57.2	14	40	sw.			2					0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.21	741.8	30.35	770.8	54.9	12.7	41	nw.			1		0			0	0	clear	M. Kina, Director.
Grenoble, Normal School	29.58	751.4	30.37	771.5	48.2	9	50	ese.			1	0	0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.71	729.3	30.32	770.2	52.7	11.5	57	se.			1	0	0			0	0	clear	M. Rivoire, Director.
Lamballe, Normal School	30.10	764.5	30.37	771.5	51.8	11	63	e.			1		2		e.	0	0	slightly cl'dy	M. Ollitrault, Director.
Lescar, Normal School	29.77	756.1	30.34	770.5	61.2	16.2	38	ne.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.27	768.9	30.37	771.5	53.6	12	65	se.			1		0			0	0	clear	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.34	745.1	30.43	772.8	45.9	7.7	64	e.			1		0			0	0	hazy	M. André, Director.
Mans, Normal School	30.10	764.6	30.42	772.7	46.6	8.1	54	ese.			3		0			0	0	clear	M. Piboen, Director.
Marseille, Observatory	30.10	764.4	30.37	771.3	56.5	13.6	47	wnw.			1		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.08	637.1	29.93	760.1	48.2	9.0	23	se.	9.4	4.2			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.23	767.9	30.37	771.3	56.5	13.6	67	se.			2		0			0	0	clear	M. Galzin, Director.
Nancy, Normal School	29.63	752.7	30.44	773.2	46.0	7.8	66	w.			1	0	2 k			0	0	slightly cl'dy	M. Hasse, Director
Nantes, Observatory	30.23	767.8	30.39	771.9	52.7	11.5	62	se.			0-1	0	0			0	0	clear	M. Larocque, Director.
Nice																0	0		Capt. Boissière, Director.
Perpignan, Observatory	30.27	768.8	30.38	771.6	56.8	13.8	41	se.	5.6	2.5			0			0	0	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.45	544.9			38.1	3.4		s.			1		1		w.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.30	744.2	30.40	772.2	50.0	10	68	n.			1		0			0	0	hazy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.41	645.5			37.4	3.0	56	sse.			3		0			0.004	0.1	clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.34	770.7	30.37	771.5	53.1	11.7	78	s.			1		5		ssw.	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.14	765.6	30.36	771.2	49.1	9.5	62	se.			1		0			0	0	clear	M. Monillot, Director.
Rodez, Normal School	28.17	715.5	30.37	771.4	46.8	8.2	52	nw.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.40	772.2	30.45	773.4	46.4	8	66	nnw.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.26	768.5	30.41	772.5	51.3	10.7	69	e.			1		2		e.	0	0	slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.28	769.1	30.45	773.3	41.4	5.2	97	nnw.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.69	754.0	30.42	772.6	56.8	13.8	62	ne.			1		1		w.	0	0	clear	M. Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.92	759.9	30.41	772.4	46.4	8.0	77	ne.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.16	766.1	30.45	773.5	41.0	5.0	100	e.			1		0			0.004	0.1	foggy	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.48	748.7	30.34	770.6	39.9	4.4	77	w.			2	0	9 s			0	0	light fog	Prof. Dr. Hoh.
Berlin	29.91	759.6	30.09	764.2	45.5	7.5	73	sw.			6		10			0.012	0.3		Prof. Dr. Arndt.
Breslau	29.51	749.5	30.04	763.0	44.4	6.9	66	wnw.			5		10			0	0		Royal University Obs'y.
Carlsruhe	29.97	761.3	30.43	772.9	43.5	6.4	72	sw.			2		10	nw.		0	0	foggy	Albert Senz.
Cassel	29.56	750.8	30.28	769.0	44.2	6.8	69	w.			3	0	7 k		w.	0	0		Dr. H. Möhl.
Frankfort on the Main	30.01	762.2	30.39	771.9	42.4	5.8	82	ssw.			1		10			0	0		Physical Society.
Friedrichshafen	28.96	735.5	30.45	773.5	40.3	4.6	84	s.			1		0			0	0		Wilhelm, Chief Tel.
Hamburg	30.08	764.0	30.17	766.4	45.7	7.6	82	w.			3		10			0.008	0.2	raining	E. Preller.
Kiel	30.08	764.0	30.10	764.4	46.0	7.8	79	w.			6		10			0.031	0.8		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.82	757.3	30.25	768.3	45.5	7.5	62	w.			5		9	wnw.		0	0		H. Leppig, Asst.
Magdeburg	30.01	762.3	30.21	767.2	47.3	8.5	71	w.			4	0	6 ks		nw.	0	0		Dr. Assmann.
Memel	29.46	748.3	29.50	749.4	37.6	3.1	90	nw.			6	2 c	0						Issermann.
Munich	28.53	724.6	30.41	772.5	41.5	5.3	66	nw.			2		1	n.		0	0		Central Station
Neufahrwasser	29.66	753.3	29.67	753.7	45.7	7.6	66	wnw.			8		7			0	0		A. Lothes.
Neustadt, Palatinate	29.85	758.3	30.39	771.9	39.6	4.2	84	w.			4		10	w.		0	0		Dicknether.
Stuttgart	29.45	747.9	30.37	771.4	43.7	6.5	71	nw.			1		4	w.		0	0		Prof. Dr. Schoder.
Wustrow	29.99	761.8	30.02	762.5	42.1	5.6	88	wnw.			6		10			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.72	755.0	30.13	765.4	41.0	5.0		ne.			2.5		5			0.031	0.8		Schmidt & Wourlisch
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	30.04	763.1	30.10	764.4	75.3	24.1	59	wsw.	19	8.5			0			0	0	blue sky	
Deesa	29.48	748.8	29.96	760.9	81.2	27.3	12	nnw.	11.0	4.9			0			0	0	blue sky	
Bombay	29.87	758.6	29.90	759.6	76.7	24.8	53	nw.	13	5.8			0			0	0	blue sky	
Poona, Yarrowda	28.02	711.8	29.86	758.6	83.6	28.7	13	wnw.	21	9.4			0			0	0	blue sky	
Belgaum	27.34	694.3	29.86	758.4	79.5	26.4	42	w.	11	4.9			0			0	0	blue sky	
Lahore	29.32	744.8	30.09	764.3	66.6	19.2	29	w.	0.9	0.4			0			0	0	blue sky	
Roorkee	29.10	739.1	30.03	762.7	67.4	19.7	34	nw.	2.2	1.0			7			0	0		
Agra	29.43	747.4	30.00	762.0	76.7	24.8	19	nw.	4.8	2.2			4		n.	0	0		
Nagpur	28.84	732.5	29.87	758.7	87.5	30.8	25	sw.	4.3	1.9			0			0	0	blue sky	
Jubbulpore	28.58	725.8	29.95	760.7	73.8	23.2	34	ne.	2.5	1.1			0			0.02	0.5	blue sky	
Lucknow	29.57	751.0	29.95	760.6	77.2	25.1	44	nne.	2.0	0.9			8	nw.		0	0	d. clouds	
Allahabad	29.58	751.4	29.90	759.4	77.8	25.4	46	calm	1.9	0.8			0			0	0	blue sky	
Patna	29.73	755.1	29.92	759.9	74.1	23.4	50	ne.	4.4	2.0			0			0	0	blue sky	
Hazaribagh	27.88	708.3	29.94	760.3	69.8	21.0	25	nw.	8.2	3.7			8	nw.	se.	0.10	2.5	thud'rstorm	
Cuttack	29.85	758.1	29.93	760.2	81.8	27.7	52	ssw.	0.8	0.4			2			0	0	d. clouds	
Calcutta, Alipore	29.90	759.3	29.92	759.9	78.5	25.8	51	ssw.	2.0	0.9			0			0	0	blue sky	
Dhubri	29.82	757.4	29.94	760.5	70.1	21.2	46	calm	4.0	1.8			0			0	0	blue sky	
Chittagong	29.84	757.9	29.93	760.3	74.8	23.8	48	nne.	1.2	0.5			0			0	0	blue sky	
Sibsagar	29.65	753.2	30.00	762.0	67.4	19.7	72	ne.	2.0	0.9			10	w.	w.	0	0	d. clouds	
Jeypore	28.56	725.3	30.02	762.5	74.7	23.7	25	ne.	9.2	4.1			7	ne.		0	0	d. clouds	
Zanzibar, Africa	29.80	756.9			84.1	28.9	74	n.	9.0	4.0			3k;fk		nne.	0.37	9.4	d. clouds	
Trichinopoly	29.63	752.6			88.5	31.4	45	e.	1	0.4			3			0	0	d. clouds	
Bellary	28.40	721.3			89.0	31.7	17	se.	2.9	1.3			2			0	0	d. clouds	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.89	759.1	30.30	769.7	49.5	9.7	63	w.	1.3	0.6			0			0	0		Prof. Giovanni Clodig
Milan	29.80	756.8	30.33	770.3	50.7	10.4	49	wsw.	4.9	2.2			0			0	0		Prof. Schiaparelli.
Padua	30.17	766.4	30.29	769.3	49.8	9.9	64	sse.	3.8	1.7			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.39	746.5	30.32	770.0	49.0	9.8	57	se.	1.8	0.8			0			0	0		Prof. P. F. Denza.
Genoa	30.15	765.7	30.34	770.7	55.4	13.0	69	se.	6.3	2.8			8	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.36	720.4	30.31	769.9	47.5	8.6	51	n.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.24	768.1	30.29	769.4	45.3	7.4	80	n.	3.1	1.4			0			0	0		Prof. Luigi Guidi.
Florence	30.10	764.4	30.35	770.9	51.8	11.0	73	ne.			2		10	sw.		0	0		Prof. Costantino Pitter.
Leghorn	30.21	767.3	30.30	769.5	55.0	12.8	78	w.	0.7	0.3			4	w.		0	0		Prof. P. Monte.
Rome	30.12	765.0	30.30	769.5	60.1	15.6	37	wsw.	6.3	2.8			0			0	0		Prof. P. S. Ferrari.
Lecce	29.98	761.4	30.24	768.0	53.4	11.9	59	nne.	19.9	8.9			1	n.		0	0		Prof. C. de Giorgi.
Cosenza	29.38	746.2	30.28	769.2	53.6	12.0	74	wnw.	4.3	1.9			0			0	0		Prof. D. Conti.
Cagliari	30.15	765.7	30.34	770.7	60.1	15.6	47	nw.			4		0			0	0		Prof. A. Pacinotti.
Palermo	30.12	765.1	30.37	771.5	60.4	15.8	38	ne.	4.3	1.9			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.22	767.5	30.26	768.7	56.8	13.8	56	e.	12.5	5.6			10	nne.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.78	756.5	30.31	769.9	58.5	14.7	46	wsw.	0	0			1	n.		0	0		Prof. T. Brioschi.
Stelvio	22.33	567.1			29.3	— 1.5	51	s.			1		0			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.39	568.8			29.7	— 1.3	48	ne.			2		0			0	0	clear	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.05	763.3	30.09	764.3	23.1	— 4.9	90	s.	2.7	1.2		ck	2 ks			0.007	0.2	fair	
Hakodate	30.08	764.0	30.09	764.3	26.5	— 3.1	58	n.	2.8	1.3			4		se.	0	0		
Hiroshima, I. M. Obs'y †	30.32	770.1	30.33	770.4	33.9	1.1	85	ne.	1.2	0.5		9 ck	0			0	0	cloudy	K. Sasaki.
Kanazawa	30.18	766.6	30.29	769.3	32.3	0.2	82	nw.	11.9	5.3		7 ck	0	n.		0.490	12.4	fair	S. Endo.
Kioto	30.09	764.3	30.28	769.1	33.0	0.6	71	nw.	3.1	1.4		ck	3 s			0	0	fair	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.17	766.3	30.39	771.9	35.7	2.1	75	n.	0.9	0.4		0	0			0	0	clear	S. Takehayashi.
Niigata	30.10	764.5	30.14	765.5	35.4	1.9	77	w.	16.2	7.2			10 n			0.400	10.2	snowing	
Nobiru	30.07	763.8	30.09	764.3	30.9	— 0.6	96	ne.	2.5	1.1		0	1 s			0.005	0.1	clear	H. Midzushina.
Sapporo					15.7	— 9.1	67	s.	1.8	0.8			4			0	0		
Tokei Obs'y, Yeddo	30.02	762.5	30.09	764.3	39.5	4.2	74	n.	1.8	0.8		0	8 s			0	0	cloudy	The Staff.
Wakayama	30.25	768.3	30.31	769.9	36.6	2.6	69	n.	5.3	2.4		0	0			0	0	clear	Y. Kuwamura.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.43	620.5	30.21	767.2	52.2	11.3	79	wsw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.71	754.6	29.97	761.2	60.0	15.6	100	nnw.	5.3	2.3		2 cs	0	sw.		0	0	clear	F. Quijano, U. E.
Mexico, Central Obs'y	23.15	588.0	30.30	769.6	49.3	9.6	67	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.30	617.3	30.49	774.6	55.4	13.0	78	sse.			5	0	1 k		s.	0	0		M. Tena, M. D.
Pabellon, Aguascalientes	23.99	609.3	30.10	764.4	48.4	9.1	65									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.45	595.7	30.41	772.3	42.1	5.6	73	calm	0	0		0	0			0	0		Prof. P. Spina.
San Luis Potosi	24.26	616.3	30.40	772.3	52.8	11.6	63	se.			1		10			0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.62	574.6	30.33	770.5	51.3	10.7	69	ne.	2.8	1.2		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.72	754.9	29.90	759.4	82.0	27.8	72	ene.	18.5	8.3	.....	0	8 n;ks	.....	e.	0.17	4.3	fair	Oliver & Figor.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.43	772.8	30.43	772.8	44.8	7.1	.....	w.	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Groningen	30.24	768.0	30.29	769.4	45.3	7.4	.....	w.	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Helder	30.31	769.9	30.31	769.9	43.7	6.5	.....	wsw.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.37	771.5	30.37	771.5	43.2	6.2	88	wsw.	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Utrecht	30.32	770.2	30.37	771.4	45.5	7.5	78	wsw.	.....	.....	2	.....	8	.....	.....	0	0	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.74	755.5	29.81	757.1	37.8	3.2	80	w.	4	2	.....	.....	10	.....	.....	0.118	3.0	snowing	
Brono	29.21	741.9	29.25	742.9	30.4	— 0.9	82	nw.	18	8	.....	.....	10	.....	.....	0.165	4.2	snowing	
Christiania	29.43	747.5	29.58	751.3	42.4	5.8	41	nnw.	18	8	.....	.....	0	.....	.....	0	0	.....	
Gjæsvær	28.98	736.1	29.00	736.7	17.4	— 8.1	.....	se.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.08	738.5	29.12	739.7	24.3	— 4.3	93	n.	.....	.....	2	.....	10	.....	.....	0.201	5.1	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	56.3	13.5	82	sse.	21.7	9.7	.....	.....	7	.....	.....	0.433	11.0	.....	Dr. J. A. Sampaio.
Campo Major	29.35	745.4	30.35	771.0	60.6	15.9	39	s.	6.3	2.8	.....	.....	8	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.05	763.2	30.13	765.4	66.4	19.1	70	sw.	1.8	0.8	.....	.....	5	.....	.....	0.283	7.2	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.98	761.6	30.35	770.8	61.2	16.2	73	sse.	13.6	6.1	.....	.....	7	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	29.47	748.4	29.54	750.2	57.9	14.4	84	s.	21.0	9.4	.....	.....	10	.....	.....	0.559	14.2	.....	
Saint Paul de Loando	29.71	754.6	29.91	759.6	82.8	28.2	82	n.	0.7	0.3	.....	.....	4	s.	.....	0	0	.....	
Serra da Estrella	25.50	647.6	30.34	770.7	41.4	5.2	66	se.	21.0	9.4	.....	.....	4	.....	.....	0	0	.....	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.66	728.0	29.82	757.3	13.8	—10.1	.....	sse.	7	3	.....	5 ck	0	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	28.88	733.6	28.90	734.1	10.0	—12.2	81	e.	9	4	.....	.....	10	.....	.....	0	0	.....	Capt. Sseliwerstow.
Astrakhan	29.91	759.6	29.82	757.5	25.3	— 3.7	87	n.	2	1	.....	.....	10 n	.....	.....	0.098	2.5	.....	Capt. Wisganow.
Barnaul	29.62	752.3	30.16	766.0	15.3	— 9.3	69	calm	0	0	.....	.....	5	.....	.....	0	0	light clouds	Meteorological Obs'y.
Dorpat	28.82	732.1	29.07	738.3	31.3	— 0.4	52	nw.	16	7	.....	0	4 ks	.....	.....	0.059	1.5	.....	Observatory.
Ekaterinburg	28.37	720.6	29.36	745.8	23.9	— 4.5	55	wsw.	9	4	.....	.....	10	.....	.....	0.008	0.2	solar halo	Meteorological Obs'y.
Kasan	29.06	738.1	29.35	745.4	12.4	—10.9	71	sw.	13	6	.....	.....	10	.....	.....	0.008	0.2	.....	Observatory.
Kertch	29.82	757.4	29.84	757.9	33.3	0.7	52	sw.	11	5	.....	0	8 n	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	28.67	728.2	29.31	744.4	40.1	4.5	66	nw.	22	10	.....	c	9 ks;n	.....	.....	0	0	.....	Observatory.
Lugan	29.30	744.3	29.52	749.8	21.2	— 6.0	77	ssw.	34	15	.....	.....	10	.....	.....	0.008	0.2	.....	Meteorological Obs'y.
Moscow	28.38	720.9	28.87	733.3	23.4	— 4.8	76	sw.	4	2	.....	.....	10 s	.....	.....	0.024	0.6	.....	Meteorological Obs'y.
Nikolaiev	29.67	753.5	29.74	755.3	29.7	— 1.3	74	sw.	45	20	.....	.....	10 n	.....	.....	0	0	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.04	763.1	30.13	765.3	— 8.0	—22.2	80	nw.	2	1	.....	.....	0	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	30.06	763.5	30.20	767.1	36.0	2.2	44	calm	0	0	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	28.81	731.7	28.82	732.1	27.1	— 2.7	81	w.	22	10	.....	ck	7 n	.....	.....	.....	.....	snowing	Central Physical Obs'y.
Tashkend, Laboratory	28.41	721.7	30.01	762.3	46.8	8.2	63	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.39	721.0	29.83	757.6	43.7	6.5	49	nw.	22	10	.....	0	7 k	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	30.21	767.3	30.28	769.0	10.9	—11.7	88	calm	0	0	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.31	744.5	29.74	755.5	39.9	4.4	89	w.	22	10	.....	.....	10 n	.....	.....	.....	.....	raining	Astronomical Obs'y.
Wilna	28.96	735.5	29.38	746.3	37.4	3.0	71	w.	9	4	.....	.....	3	.....	.....	0	0	.....	Berg, Assistant.
Yeniseisk	30.10	764.5	30.41	772.4	16.3	— 8.7	83	e.	7	3	.....	.....	0	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.14	765.5	49	9.4	92	wsw.	.....	.....	4	5	5	w.	.....	0	0	.....	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.25	768.3	30.35	771.0	56.3	13.5	68	sw.	4.3	1.9	.....	.....	0	.....	.....	0	0	clear	Antonio Rave, Director
Bilbao, Met. Obs'y	30.33	770.3	30.39	771.8	65.5	18.6	41	se.	2.2	1.0	.....	0	0	.....	.....	0	0	clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.37	695.2	30.35	770.8	57.7	14.3	30	w.	6.9	3.1	.....	0	1	.....	.....	0	0	almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.16	715.3	30.43	772.8	56.5	13.6	36	e.	3.8	1.7	.....	6	0	.....	.....	0	0	light clouds	The Staff.
Murcia, Met. Obs'y	30.31	769.9	30.47	773.8	57.7	14.3	62	sw.	1.3	0.6	.....	0	1	.....	.....	0	0	almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.33	744.9	30.23	767.8	59.4	15.2	47	sse.	17.4	7.8	.....	0	3	.....	.....	0	0	.....	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.12	764.9	30.18	766.5	74.0	23.3	75	nne.	8.9	4.0	.....	0	1 k;s	.....	.....	0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	30.00	762.1	30.06	763.5	76.2	24.6	72	e.	0	0	.....	0	8 ck	.....	ene.	0	0	cloudy	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.31	769.8	30.41	772.4	59.0	15.0	60	e.	13.8	6.2	.....	.....	10	.....	se.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I.	30.08	764.0	30.17	766.3	66.6	19.2	93	calm	0	0	.....	7 cs	2 k	sw.	sw.	0	0	d. clouds	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.03	762.7	30.16	766.1	67.6	19.8	79	nnw.	7.4	3.3	.....	0	7 ks	.....	n.	inap.	inap.	cloudy	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	28.85	732.9	28.89	733.9	11.1	—11.6	85	n.	.....	.....	4	.....	0	.....	.....	0	0	.....	
Umea	28.91	734.2	28.96	735.5	32.7	0.4	89	n.	.....	.....	4	.....	6	.....	.....	0	0	.....	
Hernosand	29.06	738.2	29.11	739.5	34.3	1.3	48	wnw.	.....	.....	7	.....	2	.....	.....	0	0	.....	
Stockholm	29.22	742.3	29.40	746.8	34.2	1.2	36	nw.	.....	.....	8	.....	0	.....	.....	0.138	3.5	.....	
Wisby	29.38	746.2	29.44	747.7	38.8	3.8	90	nw.	.....	.....	7	.....	3	.....	.....	0.055	1.4	.....	
Sub-Series.																			
Upsala	29.27	743.5	29.36	745.7	34.9	1.6	69	nw.	17.2	7.7	.....	.....	2	wnw.	.....	0	0	.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.95	735.3	30.41	772.4	43.0	6.1	70	nne.	.....	.....	2	.....	.....	.....	.....	0	0	clear	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.12	765.0	35.6	2.0	84	ne.	11	5.0	.....	.....	4	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.17	766.4	52.9	11.6	.....	n.	.....	.....	1	.....	0	.....	.....	0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.74	755.4	59.0	15.0	68	sw.	.....	.....	3	0	5 n	.....	sw.	0.56	14.2	.....	Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Barometer. Corrected for instrumental error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Albany, New York	29.95	760.7	30.04	763.0	18.5	— 7.5	76	n.	5	2.2		3 cs	0			0.01	0.3	clear	
Alpena, Michigan	29.40	746.7	30.11	764.8	20	— 6.7	84	nw.	7	3.1			10 n			0.06	1.5	light snow	
Atlanta, Georgia	29.07	738.4	30.29	769.4	36.0	2.2	56	nw.	8	3.6		0	0			0	0	clear	
Atlantic City, New Jersey	30.02	762.5	30.03	762.7	26.3	— 3.2	80	w.	8	3.6		0	0			0	0	clear	
Augusta, Georgia	30.06	763.5	30.26	768.6	41.4	5.2	43	nw.	5	2.2		0	0			0	0	clear	
Baltimore, Maryland	30.06	763.5	30.12	765.0	32	0.0	60	n.	5	2.2		0	7s;fg			inap.	inap.	fair	
Barnegat, New Jersey	29.97	761.2	29.99	761.7	27.2	— 2.7	70	w.	17	7.6		0	1 k			0	0	clear	
Bismarck, Dakota	28.29	718.6	30.27	768.8	15	— 9.4	83	e.	6	2.7		0	hz.			inap.	inap.	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.18	690.4	30.14	765.5	27	— 2.8	88	se.	6	2.7			10 s		calm	0	0	cloudy	
Boston, Massachusetts	29.73	755.1	29.89	759.2	15.0	— 9.4	75	nw.	12	5.4		10 ck	hz.	nw.		0.03	0.8	cloudy	
Brownsville, Texas	30.15	765.8	30.20	767.1	63	17.2	100	ne.	4	1.8			10 n		ne.	0.04	1.0	light rain	
Buffalo, New York	29.26	743.2	30.06	763.5	22.5	— 5.3	85	sw.	19	8.5			10 n			0.02	0.5	light snow	
Burlington, Vermont	29.70	754.4	30.02	762.5	10.3	—12.1	89	ne.	3	1.3			10 n		ne.	0.04	1.0	light snow	
Cairo, Illinois	29.97	761.2	30.39	771.9	34.5	1.4	76	w.	4	1.8		0	0			0	0	clear	
Campo, California	27.42	696.5	30.06	763.5	22.8	— 5.1	88	e.	4	1.8		0	0			0	0	clear	
Camp Thomas, Arizona	27.27	692.6	30.10	764.5	31.5	— 0.3	86	calm			0	0	0			0	0	clear	
Cape Henry, Virginia	30.08	764.0	30.10	764.5	35	1.7	69	n.	10	4.5		2 k	0	nw.		0	0	clear	
Cape May, New Jersey	30.01	762.2	30.04	763.0	31	— 0.6	68	nw.	37	6.5		0	2 ks		nw.	0	0	clear	
Castroville, Texas	29.47	748.5	30.31	769.9	44	6.7	76	nw.	3	1.3		0	5 s		nw.	0	0	fair	
Cedar Keys, Florida	30.21	767.3	30.23	767.8	50	10.0	47	n.	10	4.5		0	0			0	0	clear	
Champaign, Illinois	29.39	746.5	30.26	768.6	14.0	—10.0	73	nw.	7	3.1		2 k	0	nw.		0	0	clear	
Charleston, S. Carolina	30.12	765.0	30.18	766.6	44	6.7	68	nw.	10	4.5		0	0			0	0	clear	
Charlotte, N. Carolina	29.26	743.2	30.15	765.8	39.0	3.9	35	nw.	12	5.4		0	0			0	0	clear	
Chattanooga, Tennessee	29.45	748.0	30.31	769.9	35.0	1.7	69	w.	2	0.9		0	sk.			0	0	clear	
Cheyenne, Wyoming	24.02	610.1	30.27	768.8	19.2	— 7.1	48	w.	6	2.7		0	0			0	0	clear	
Chicago, Illinois	29.50	749.3	30.25	768.3	12.6	—10.8	71	w.	8	3.6		9 k	0	w.		inap.	inap.	cloudy	
Chincoteague, Virginia	30.06	763.5	30.08	764.0	31	— 0.6	100	nw.	24	10.7		0	3 s		n.	0	0	clear	
Cincinnati, Ohio	29.56	750.8	30.25	768.3	26	— 3.3	64	w.	8	3.6		0	0			0	0	clear	
Cleveland, Ohio	29.39	746.5	30.18	766.6	20.6	— 6.3	78	sw.	13	5.8			10 s			0.01	0.3	cloudy	
Coleman City, Texas																			
Columbus, Ohio	29.29	744.0	30.19	766.8	22	— 5.6	73	w.	16	7.2			10 ks		nw.	inap.	inap.	cloudy	
Concho, Texas	28.27	718.0	30.29	769.4	38	3.3	92	calm	0	0		0	c			0	0	clear	
Davenport, Iowa	29.66	753.4	30.36	771.1	13	—10.6	61	nw.	8	3.6		hz.	0	calm		0	0	clear	
Dayton, Washington T'y	28.19	716.0	30.00	762.0	33	0.6	88	sw.	12	5.4		0	0			0.17	4.3	clear	
Deadwood, Dakota	25.28	642.1	30.20	767.1	30	— 1.1	71	sw.	8	3.6		0	0			0	0	clear	
Decatur, Texas					47	8.3	63	se.	7	3.1		0	0			0	0	clear	
Delaware Breakwater, Del.	30.04	763.0	30.06	763.5	31	— 0.6	78	nw.	32	14.3		0	2 s			0	0	clear	
Denison, Texas	29.54	750.3	30.38	771.0	36.8	2.7	72	calm	0	0		0	0			0	0	clear	
Denver, Colorado	24.77	629.1	30.29	769.4	25.0	— 3.9	58	s.	9	4.0		0	0			0	0	clear	
Des Moines, Iowa	29.45	748.0	30.42	772.7	4	—15.6	72	nw.	4	1.8		0	0			0	0	clear	
Detroit, Michigan	29.39	746.5	30.14	765.5	21.0	— 6.1	84	w.	9	4.0		0	0			0.08	2.0	clear	
Dodge City, Kansas	27.62	701.5	30.36	771.1	23	— 5.0	73	w.	1	0.4		0	0			0	0	clear	
Dubuque, Iowa	29.57	751.1	30.33	770.4	6.5	—14.2	52	nw.	2	0.9		0	0			0	0	clear	
Duluth, Minnesota	29.57	751.1	30.33	770.4	10	—12.2	80	n.	4	1.8		0	0			0	0	clear	
Eagle Pass, Texas	29.47	748.5	30.31	769.9	53.2	11.8	66	se.	4	1.8			10 s			0	0	cloudy	
Eagle Rock, Idaho	25.35	643.9	30.25	768.3	2	—16.7	76	n.	5	2.2		10 cs	0			0	0	cloudy	
Eastport, Maine	29.66	753.4	29.73	755.1	19	— 7.2	76	n.	23	10.3		2 c	6 s	n.	n.	0.25	6.3	cloudy	
El Paso, Texas	26.33	668.8	30.21	767.3	43	6.1	53	w.	4	1.8			10 s		sw.	0	0	cloudy	
Erie, Pennsylvania	29.33	745.0	30.10	764.5	24	— 4.4	88	w.	13	5.8			10 s			0.15	3.8	cloudy	
Escanaba, Michigan	29.47	748.5	30.19	766.8	18	— 7.8	100	nw.	6	2.7			10 n			0.07	1.8	heavy snow	
Fort Apache, Arizona	25.01	635.2	30.11	764.8	21	— 6.1	53	ne.	2	0.9		0	0			0	0	clear	
Fort Assinnaboine, Montana	26.92	683.8	29.96	761.0	23	— 5.0	51	e.	1	0.4			10 s			0	0	cloudy	
Fort Bennett, Dakota	28.55	725.2	30.28	769.1	8	—13.3	80	se	1	0.4		0	0			0	0	clear	
Fort Benton, Montana	26.95	684.5	29.95	760.7	28	— 2.2	77	sw.	3	1.3		0	3 ks		calm	0	0	clear	
Fort Buford, Dakota	27.94	709.7	30.12	765.0	10	—12.2	61	e.	2	0.9		0	0			0	0	clear	
Fort Custer, Montana	26.69	677.9	30.05	763.3	18	— 7.8	70	s.	4	1.8			10 s		calm	0	0	cloudy	
Fort Davis, Texas	25.26	641.6	30.22	767.6	35	1.7	82	calm	0	0		0	0			0	0	clear	
Fort Elliott, Texas	27.44	697.0	30.34	770.6	20	— 6.7	46	nw.	4	1.8		0	0			0	0	clear	
Fort Gibson, Indian T'y	29.79	756.7	30.39	771.9	30.5	— 0.8	77	n.	2	0.9		0	0			0	0	clear	
Fort Grant, Arizona	25.28	642.1	30.14	765.5	40	4.4	86	ne.	6	2.7		3 cs	0			0	0	clear	
Fort Griffin, Texas	28.99	736.3	30.36	771.1	36	2.2	89	se.	2	0.9		0	0			0	0	clear	
Fort Keogh, Montana	27.39	695.7	30.07	763.8	6	—14.4	76	ne.	4	1.8		5 c	0			0	0	fair	
Fort Macon, North Carolina	30.07	763.8	30.08	764.0	40	4.4	65	nw.	8	3.6		0	sk.		calm	0	0	clear	
Fort McKavett, Texas	27.94	709.7	30.32	770.1	40.4	4.7	73	calm	0	0		7 ck	0			0	0	fair	
Fort Missoula, Montana	26.52	673.6	29.95	760.7	22	— 5.6	88	w.	1	0.4			10 s			0	0	cloudy	
Fort St. Michaels, Alaska	30.08	764.0	30.12	765.0	—25	—31.7	100	calm	0	0		0	0			0	0	clear	
Fort Shaw, Montana	26.12	663.4	29.97	761.2	31	— 0.6	62	sw.	26	11.6		0	0			0	0	clear	
Fort Sill, Indian Territory	29.08	738.6	30.39	771.9	32	0.0	81	n.	12	5.4		0	0			0	0	clear	
Fort Stevenson, Dakota	28.21	716.5	30.23	767.8	14	—10.1	67	nw.	3	1.3		0	0			0	0	clear	
Fort Verde, Arizona					25.1	— 3.8	76	nw.			1	0	0			0	0	clear	
Fort Washakie, Wyoming	24.48	621.8			— 1.6	—18.7	58	sw.	3	1.3		0	0			0	0	clear	
Fredericksburg, Texas	28.51	724.1	30.31	769.9	42	5.6	67	w.	2	0.9		0	0			0	0	clear	
Galveston, Texas	30.27	768.8	30.31	769.9	54	12.2	61	ne.	10	4.5		10 c	0	sw.		0	0	cloudy	
Grand Haven, Michigan	29.44	747.8	30.16	766.1	26.0	— 3.3	88	nw.	12	5.4			10 n		w.	0.26	6.6	light snow	
Hatteras, North Carolina	30.04	763.0	30.06	763.5	43	6.1	74	nw.	14	6.3		3 k	0	nw.		0	0	clear	
Helena, Montana	25.63	651.0	30.03	762.7	21	— 6.1	73	calm	0	0			10 s			0	0	cloudy	
Henrietta, Texas	29.40	746.7	30.45	773.8	35	1.7	79	calm	0	0		0	0			0	0	clear	
Huron, Dakota	28.89	733.8	30.41	772.4	—10.3	—23.5	63	se.	5	2.2		0	0			0	0	clear	
Indianapolis, Indiana	29.41	747.0	30.26	768.6	17.5	— 8.1	76	w.	10	4.5		1 k	0	w.		0	0	clear	
Indianola, Texas	30.27	768.8	30.30	769.6	58.0	14.4	58	ne.	16	7.2		3 ck	3 ks	sw.	sw.	0	0	fair	
Jacksboro, Texas	29.13	739.9	30.37	771.4	36	2.2	79	se.	1	0.4		0	0			0	0	clear	
Jacksonville, Florida	30.18	766.6	30.23	767.8	46	7.8	53	sw.	3	1.3		hz.	0			0	0	clear	
Keokuk, Iowa	29.67	753.6	30.37	771.4	12.0	—11.1	70	nw.	6	2.7		0	0			0	0	clear	
Key West, Florida	30.16	766.1	30.19	766.8	70.5	21.4	68	n.	15	6.7		0	1 s			0	0	clear	
Kittyhawk, North Carolina	30.07	763.8	30.09	764.3	39	3.9	65	ne.	18	8.0		0	0			0	0	clear	
Knoxville, Tennessee	29.22	742.2	30.30	769.6	30.9	— 0.6	69	w.	6	2.7		0	0			0	0	clear	
La Crosse, Wisconsin	29.49	749.0	30.33	770.4	7	—13.9	76	w.	4	1.8		0	0			0	0	clear	
La Mesilla, New Mexico	26.20	665.5	30.21	767.3	35.5	1.9	48	calm	0	0		0	1 s			0	0	clear	
Leavenworth, Kansas	29.47	748.5	30.42	772.7	25	— 3.9	64	calm	0	0		0	0			0	0	clear	
Lewiston, Idaho	29.08	738.6	29.96	761.0	39	3.9	59	ne.	1	0.4		0	1 s		ne.	0	0	clear	
Little Rock, Arkansas	30.04	763.0	30.37	771.4	37	2.8	89	calm	0	0		0	0			0	0	clear	
Los Angeles, California	29.71	754.6	30.11	764.8	39.3	4.1	73	ne.	2	0.9		0	0			0	0	clear	
Louisville, Kentucky	29.67	753.6	30.26	768.6	27	— 2.8	88	w.	12	5.4		1 k	c	w.		0	0	clear	
Lynchburg, Virginia	29.38	746.2	30.10	764.5	35.0	1.7	53	nw.	1	0.4		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.21	741.9	30.30	769.6	11	—11.7	80	nw.	10	4.5			10 s		nw.	0	0	cloudy	
Marquette, Michigan	29.40	746.7	30.18	766.6	20	— 6.7	84	nw.	12	5.4			10 s		nw.	0.25	6.3	cloudy	
Mason, Texas	28.62	726.9	30.35	770.9	38	3.3	82	w.	3	1.3		2 cs	0	calm		0	0	clear	
Memphis, Tennessee	30.03	762.7	30.38	771.6	42	5.6	65	nw.	4	1.8		0	0			0	0	clear	
Milwaukee, Wisconsin	29.44	747.8	30.24	768.1	13	—10.6	80	w.	8	3.6			10 s		w.	0.01	0.3	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.28	769.1	30.32	770.1	42	5.6	73	n.	4	1.8		5 cs	4 ks	nw.	nw.	0	0	cloudy	
Montgomery, Alabama	30.07	763.8	30.31	769.9	40.5	4.7	64	n.	2	0.9		1 c	0			0	0	clear	
Moorhead, Minnesota	29.33	745.0	30.43	772.9	—10	—23.3	100	calm	0	0		0	0			0	0	clear	
Morgantown, W. Virginia	29.07	738.4	30.14	765.5	29.8	— 1.2	71	w.	13	5.8			10 n			0.03	0.8	light snow	
Mt. Washington, N. H.	23.30	591.8	29.92	760.0	5.0	—15.0	83	ne.	24	10.7			fg		ne.	0.18	4.6	light fog	
Nashville, Tennessee	29.76	755.9	30.32	770.1	34.8	1.6	75	w.	2	0.9		0	0			0	0	clear	
New Haven, Connecticut	29.82	757.4	29.94	760.5	22	— 5.6	73	nw.	10	4.5		4 c	0	w.		0	0	fair	
New London, Connecticut	29.88	758.9	29.93	760.2	24	— 4.4	61	n.	6	2.7		0	0			0	0	clear	
New Orleans, Louisiana	30.24	768.1	30.30	769.6	52.0	11.1	57	n.	6	2.7			10 s		n.	0	0	cloudy	
Newport, Rhode Island	29.85	758.2	29.90	759.4	20.2	— 6.6	66	nw.	12	5.4		2 c	1 ks	sw.	nw.	0	0	clear	
New River, N. Carolina					41	5.0	48	nw.			1	0	0			0	0	clear	
New Shoreham, Rhode I'd.	29.88	758.9	29.91	759.7	23.5	— 4.7	61	nw.	22	9.8		0	0			0	0	clear	
New York, New York	29.80	756.9	29.99	761.7	28	— 2.2	77	w.	11	4.9			10 s		w.	inap.	inap.	cloudy	
Norfolk, Virginia	30.07	763.8	30.10	764.5	38	3.3	62	ne.	2	0.9		0	0			0	0	clear	
North Platte, Nebraska	27.20	690.9	30.30	769.6	23.6	— 4.7	70	calm	0	0		0	0			0	0	clear	
Olympia, Washington T'y	29.97	761.2	30.01	762.2	33.0	0.6	90	s.	5	2.2		0	0			0.23	5.8	clear	
Omaha, Nebraska	29.16	740.7	30.43	772.9	8.0	—13.3	63	n.	4	1.8		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	30.27	768.8	30.29	769.4	—43.2	—41.8	76	sw.	5	2.2		0	0			0	0	clear	
Oswego, New York	29.67	753.6	30.02	762.5	23.0	— 5.0	73	s.	2	0.9			10 s			0.42	10.7	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.29	769.4	30.32	770.1	44.0	6.7	56	n.	8	3.6		0	7 s		w.	0	0	fair	
Philadelphia, Pa.	29.93	760.2	30.04	763.0	29	— 1.7	77	nw.	13	5.8		0	0			0	0	clear	
Pike's Peak, Colorado	17.66	448.6	30.38	771.6	6	—14.4	40	sw.	20	8.9		0	0			0	0	clear	
Pioche, Nevada	24.06	611.1	30.22	767.6	26	— 3.3	70	s.	5	2.2		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.30	744.2	30.16	766.1	23.5	— 4.7	80	w.	9	4.0			10 s		w.	0.07	1.8	cloudy	
Port Eads, Louisiana	30.28	769.1	30.30	769.6	57.7	14.3	62	ne.	12	5.4			10 s			0	0	cloudy	
Port Huron, Michigan	29.41	747.0	30.14	765.5	14.0	—10.0	85	sw.	4	1.8			10 s		calm	0.08	2.0	cloudy	
Portland, Maine	29.82	757.4	29.87	758.7	22.0	— 5.6	73	n.	12	5.4			10 s			0.06	1.5	cloudy	
Portland, Oregon	29.96	761.0	30.03	762.7	35.0	1.7	89	s.	2	0.9			10 s		calm	0.58	14.7	cloudy	
Portsmouth, N. Carolina					42	5.6	70	ne.	11	4.9		3 k	0	n.		0	0	clear	
Prescott, Arizona	24.76	628.9	30.12	765.0	23.4	— 4.8	76	s.	3	1.3		0	0			0	0	clear	
Provincetown, Mass.	29.81	757.2	29.84	757.9	22.5	— 5.3	88	nw.	14	6.3			10 n			0.23	5.8	light snow	
Punta Rassa, Florida	30.17	766.3	30.18	766.6	58.5	14.7	62	n.	10	4.5		0	0			0	0	clear	
Red Bluff, California	29.69	754.1	30.07	763.8	46.9	8.3	89	calm	0	0		0	9 s			0.01	0.3	cloudy	
Rio Grande City, Texas	29.97	761.2	30.22	767.6	60	15.6	87	e.	2	0.9			10 s		calm	0	0	cloudy	
Rochester, New York	29.31	744.5	30.02	762.5	22	— 5.6	100	w.	3	1.3			10 n		w.	0.03	0.8	light snow	
Roseburg, Oregon	29.51	749.5	30.08	764.0	36.5	2.5	84	calm	0	0			10 s			0.07	1.8	cloudy	
Sacramento, California	30.01	762.2	30.09	764.3	45.5	7.5	93	se.	5	2.2			9 s			0	0	cloudy	
St. Louis, Missouri	29.75	755.6	30.39	771.9	22.7	— 5.2	74	nw.	10	4.5		0	0			0	0	clear	
St. Paul, Minnesota	29.40	746.7	30.34	770.6	— 2.0	—18.9	87	sw.	6	2.7		0	0			0	0	clear	
St. Vincent, Minnesota	29.41	747.0	30.38	771.6	—25	—31.7	100	se.	4	1.8		0	0			0	0	clear	
Salt Lake City, Utah	25.70	652.8	30.26	768.6	17	— 8.3	70	calm	0	0		0	0			0	0	clear	
San Antonio, Texas	29.59	751.6	30.31	769.9	46.6	8.1	68	ne.	3	1.3		1 c	6 ks		w.	0	0	fair	
San Diego, California	29.98	761.5	30.05	763.3	43.8	6.6	93	ne.	5	2.2		0	0			0	0	clear	
Sandusky, Ohio	29.46	748.3	30.18	766.6	21	— 6.1	84	w.	17	7.6			10 s			0.04	1.0	cloudy	
Sandy Hook, New Jersey	29.95	760.7	29.99	761.7	29.0	— 1.7	77	w.	24	10.7		1 c	9 ks	calm	w.	0	0	cloudy	
San Francisco, California	30.02	762.5	30.10	764.5	48.0	8.9	86	sw.	4	1.8			9 s		sw.	0	0	cloudy	
Santa Fé, New Mexico	23.31	592.1	30.35	770.9	25.4	— 3.7	52	calm	0	0		0	0			0	0	clear	
Savannah, Georgia	30.13	765.3	30.22	767.6	43	6.1	41	nw.	10	4.5		0	0			0	0	clear	
Shreveport, Louisiana	30.13	765.3	30.38	771.6	40	4.4	82	n.	3	1.3		0	0			0	0	clear	
Silver City, New Mexico	24.31	617.5	30.16	766.1	30	— 1.1	61	s.	3	1.3		3 cs	0	calm		0	0	clear	
Sitka, Alaska	29.40	746.7	29.48	748.8	28.5	— 1.9	86	e.	4	1.8			10 n		e.	0.19	4.8	light snow	
Smithville, North Carolina	30.08	764.0	30.12	765.0	39	3.9	65	nw.	4	1.8		0	0			0	0	clear	
Spokane Falls, Wash. Ter.	27.78	705.6	29.91	759.7	32	0.0	100	sw.	12	5.4			10 n			0.25	6.3	heavy snow	
Springfield, Illinois	29.63	752.6	30.36	771.1	18	— 7.8	68	nw.	9	4.0		0	0			0	0	clear	
Springfield, Massachusetts	29.81	757.2	29.95	760.7	19.4	— 7.0	70	nw.	3	1.3		1 c	0			0	0	clear	
Springfield, Mo.	28.88	733.5	30.45	773.4	28.5	— 1.9	70	nw.	2	0.9		0	0			0	0	clear	
Stockton, Texas	27.14	689.3	30.27	768.8	40.2	4.6	82	se.	4	1.8		0	0			0	0	clear	
Thatcher's Island, Mass.	29.83	757.7	29.89	759.2	22.0	— 5.6	88	n.	20	8.9			10 s		n.	0.03	0.8	cloudy	
Toledo, Ohio	29.44	747.8	30.18	766.6	22	— 5.6	88	w.	14	6.3			10 s		w.	0.01	0.3	cloudy	
Tucson, Arizona	27.59	700.8	30.07	763.8	38	3.3	82	se.	4	1.8		0	0			0	0	clear	
Umatilla, Oregon	29.70	754.4	30.08	764.0	34.5	1.4	63	sw.	16	7.2		0	1 s			0.04	1.0	clear	
Uvalde, Texas	29.29	744.0	30.29	769.4	48	8.9	71	e.	4	1.8			10 s		calm	c	0	cloudy	
Vicksburg, Mississippi	30.10	764.5	30.37	771.4	45	7.2	53	calm	0	0		5 ck	sk	calm	calm	0	0	fair	
Visalia, California	29.69	754.1	30.07	763.8	36	2.2	79	se.	3	1.3		0	1 s			0	0	clear	
Washington, D. C.	29.99	761.7	30.11	764.8	30	— 1.1	67	n.	8	3.6		0	4 ks		w.	0	0	fair	
West Los Animas, Colorado	26.15	664.2	30.28	769.1	12	—11.1	83	w.	4	1.8		0	0			0	0	clear	
Wickenburg, Arizona					29.2	— 1.6	88	nw.			1	4 c	0	nw.		0	0	fair	
Williamsport, Pa.	29.42	747.3	30.05	763.3	24.5	— 4.2	90	w.	15	6.7			10 s		w.	0	0	cloudy	
Wilmington, N. Carolina	30.06	763.5	30.12	765.0	44	6.7	60	nw.	5	2.2		hz	0	calm		0	0	clear	
Winnemucca, Nevada	25.58	649.7	30.10	764.5	25	— 3.9	76	ne.	4	1.8			10 s		calm	0	0	cloudy	
Wood's Holl, Mass.																			
Yankton, Dakota	29.01	736.8	30.43	772.9	— 5	—20.6	62	n.	2	0.9		0	5 ks			0	0	fair	
Yuma, Arizona	29.86	758.4	30.01	762.2	41.7	5.4	63	ne.	4	1.8		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.03	559.6			53.0	11.7	85	sw.	1	0.4		1 k	9 n; s			0.02	0.5	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.11	764.8	30.12	765.0	76	24.4	85	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.98	761.5	30.00	762.0	77	25.0	86	se.	2	0.9			10 ks		s.	0	0	threatening	J. I. Plume.
Guadeloupe, W. I.	30.02	762.5	30.04	763.0	74	23.3	86	e.				1 k	0			0	0	clear	B. Bigar.
Havana, Cuba, W. I.	30.18	766.6	30.23	767.8	75	23.9	76	n.	2.4	1.1		0	2 ks		calm	0	0	fair	A. Van Oaneghem.
Kingston, Jamaica, W. I.	30.11	764.8	30.12	765.0	68.2	20.1	81	calm	0	0		0	0			0	0	fine	Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.08	764.0	30.08	764.0	77	25.0	86	e.			2	4 c	3 k	e.		0	0		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.47	748.5	29.92	760.0	84	28.9	81	calm			0	7 ck	2 ks	calm	calm	0.06	1.5	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua							94	ne.			4	0	1 ks		ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.10	764.5	30.12	765.0	72	22.2	75	n.	2.4	1.1		0	0			0	0	clear	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.14	765.5	30.19	766.8	—21.0	—29.4		s.	10	4.5		1 c	0	s.		0	0	fair	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level. Inch	Barometer reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill	Sea-swell. Character.	Sea-swell. Dir'n from.	Weather.	Observers.
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Gibraltar, Mediterranean	30.50	774.7	57	13.9	81	ene.			2		4	nne.						d. clouds	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S. Alert, N. 6° 57′, E. 70° 00′	29.90	759.4	81.8	27.7	78	n.			3-4		8							showery	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.35	770.9	59	15.0	64	ene.			2		3	nne.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 17° 39′, E. 40° 20′	29.82	757.4	78	25.6	82	sse.			4-6		0					5	sse.	misty	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.99	761.7	68	20.0	69	ese.			4-5		2	calm						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S 40° 51′, E. 47° 18′	29.99	761.7	65	18.3	92	nnw.			6		1	ese.				3	n.	blue sky	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′, W. 61° 31′	30.08	764.0	77	25.0		calm			0		2	ne.						misty	Capt. C Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.85	758.2	64.5	18.1	57	wnw.			2-3		3	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	30.12	765.0	66	18.9	94	n.			1-2		4					1-2	n.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 12° 18′, E. 44° 21′	29.82	757.4	84	28.9		nnw.			2		6							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt C. A. G. Bridge.
H. M. S. Fawn, N. 13° 00′, E. 43° 38′	29.83	757.7	77.5	25.3	77	s.			6		0					5	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.16	766.1	37.5	3.1	85	nnw.			2		3	nw.				1	nw.	d. clouds	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 15° 50′, W. 80° 30′	29.97	761.2	73	22.8	78	se.			3-4		7					2 2	se. s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.51	749.5	53	11.7	73	w.			2		6	sw.						d. clouds	Capt. L. F. Jones.
H. M. S. Inconstant, Singapore, Malay Pen.	29.85	758.2	79	26.1	86	ne.			4		7	ne.				1	ne.	squally	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′, E. 113° 24′	30.32	770.1	54	12.2	79	nw.			1		1	nw.						blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.95	760.7	62	16.7		calm			0		10							overcast	Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	30.32	770.1	68	20.0	84	se.			1		1	se.						blue sky	Capt. J. E. Erskine.
H. M. S. Northampton, Port Royal, Jamaica, W. I.	30.05	763.3	70	21.1	88	n.			1		1							blue sky	Capt. E. Drummond.
H. M. S. Orontes, S. 29° 31′, E. 31° 31′	30.07	763.8	78.5	25.8	97	ssw.			4		8					4	ssw.	misty	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 48° 58′, W. 16° 35′	30.13	765.3	54	12.2	97	se.			3		6					3	se.	d. clouds	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, N. 4° 32′, E. 4° 40′	29.90	759.4	84	28.9	96	ssw.			2		4	ssw.						d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	29.84	757 9	66	18.9		se.			2-4		7							squally	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	29.96	761.0	36	2.2	90	wsw.			1		2							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 4° 04′, E. 39° 43′	29.26	743.2	83	28.3	100	nne.			5-6		1	ne.				6	nne.	blue sky	Capt. E. T. Church.
H. M. S. Thalia																			
H. M. S. Triumph, S. 15° 52′, W. 80° 20′	29.99	761.7	72	22.2	80	sse.			3		6	se.				2	se.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 2° 58′, E. 105° 30′	29.88	758.9	80	26.7	97	ene.			4		6	ene.				5	ene.	d. clouds	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.06	763.5	71	21.7		ne.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, N. 21° 05′, E. 66° 40′	30.07	763.8	75.5	24.2	44	e.			1-2		0							blue sky	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Bengo																			Carlos Candid dos Reis.
Quanza, Santiago, Cape Verd Ids	30.06	763.5	77.9	25.5	64	ne.			2		3					2	ne.	d. clouds	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Bälder, N. 18° 10′, W. 83° 04′	30.09	764.2	78.1	25.6	90	ne.			3		5							d. clouds	Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.24	768.1	47	8.3	84	ne.	2	0.9			8		sw.	0	0			fair	
N. Yard, Portsmouth, N. H.	29.97	761.2	17	— 8.3		n.	8	3.6			8		n.	0	0			fair	
Naval Hospital.																			
Yokohama, Japan	29.87	758.7	42	5.6	45	nw.			5		8		nw.	0	0			cloudy	
Adams.																			
Callao, Peru	29.71	754.6	68	20.0	95	sse.			2		5			0	0	gr'd		fair	
Alaska.																			
Valparaiso, Chili	29.96	761.0	66	18.9	64	se.			1		0			0	0	sm'h		clear	
Alert,																			
S. 4° 36′, E. 107° 23′*	29.74	755.4	83	28.3	83	nw.			1		5		calm			sm'h		fair	
Alliance.																			
N. 35° 50′, W. 74° 30′	29.98	761.5	43	6.1	75	ne.			3		2			0	0			clear	
Ashuelot,																			
Tientsin, China	30.26	768.6	39	3.9	38	ssw.			1		0							clear	
Brooklyn,																			
Sandy Point, Patagonia	29.25	742.9	57	13.9	87	nnw.	5	2.2			10		calm	0.02	0.5	sm'h		raining	
Colorado,																			
New York, N. Y.	29.95	760.7	29	— 1.7	89	wnw.	18	8.0			10		se.	0	0			overcast	
Enterprise,																			
Hampton Roads, Va*	30.08	764.0	39	3.9	82	nne.			5–6		2					sm'h		clear	
Essex,																			
N. 20° 21′, W. 21° 10′	30.17	766.3	70	21.1	85	ese.			3		0					sm'h	e.	clear	
Franklin,																			
Norfolk, Va	30.09	764.3	38	3.3	63	nne.	4	1.8			2		nnw.	0	0			clear	
Galena.																			
Villafranca, France	30.33	770.4	58	14.4	88	ese.			1		0					sm'h		clear	
Independence,																			
N. Yard, Mare I'd, Cal	29.95	760.7	45	7.2	84	calm	0	0			10			0	0			overcast	
Kearsarge,																			
New Orleans, La	30.31	769.9	54	12.2	67	ene.			2		10							cloudy	
Lackawanna.																			
Valparaiso, Chili*	29.94	760.5	61	16.1	94	calm			0		0							clear	
Lancaster.																			
Alexandria, Egypt	29.71	754.6	60	15.6	55	wsw.			3–5		5		wsw.			mod.	wsw.	fair	
Marion,																			
S. 33° 48′ E. 18° 28′	29.82	757.4	66	18.9	84	s.			2		2		s.	0	0	long	ssw.	fair	
Michigan,																			
Erie, Pa	30.04	763.0	24	— 4.4	88	nw.			6		8		nw.					cloudy	
Minnesota,																			
Newport, R. I	29.91	759.7	21	— 6.1		wnw.	10	4.5			2		calm					fair	
Monocacy,																			
Yokohama, Japan	30.08	764.0	42	5.6	100	nnw.			3		8		nnw.					fair	
Nipsic,																			
Cadiz, Spain	30.40	772.1	60	15.6	65	se.			4		10					sm'h		cloudy	
Onward,																			
Callao, Peru†	30.04	763.0	66	18.9	95	se.			1		2		n.			long	w.	clear	
Palos,																			
Hong Kong, China	30.33	770.4	52	11.1	73	ene.			2		0							clear	
Passaic,																			
Washington, D. C	30.11	764.8	31	— 0.6		nw.			4		5		nw.					fair	
Pensacola.																			
S. 31° 12′, W. 72° 10′	30.04	763.0	62	16.7	77	sse.			3		10		calm	0	0	mod.	s.	cloudy	
Powhatan,																			
N. 17° 45′, W. 66° 13′	30.14	765.5	78	25.6	65	ene.			1		2		e.			sm'h	e.	fair	
Quinnebaug,																			
Alexandria, Egypt	29.72	754.9	59	15.0	59	sw.			6		2		sw.			sm'h		clear	
Ranger.																			
N. 19° 17′, W. 104° 50′*	29.68	753.9	69	20.6	85	ne.			1		0			0	0	sm'h		clear	
Richmond,																			
N. 29° 35′, E. 147° 36′*	29.85	758.2	63	17.2	40	w.			5		5		w.	0	0	long	nw.	fair	
Shenandoah,																			
S. 28° 31′, W. 24° 28′*	30.24	768.1	77	25.0	91	nnw.			1		8		n.			sm'h		cloudy	
St. Louis,																			
League Island, Pa	30.28	769.1	28	— 2.2	89	wnw.	18.2	8.1			2			0	0			clear	
Swatara.																			
Yokohama, Japan*	29.88	758.9	45	7.2	61	n.			4		10		n.			mod.	n.	cloudy	
Tennessee.																			
Fort Monroe, Va	30.09	764.3	38	3.3	81	nnw.	6	2.7			2		e.	0	0			fair	
Vandalia,																			
N. 15° 55′, W. 80° 41′*†	30.18	766.6	77	25.0	82	ene.			2		0							clear	
Wabash,																			
Boston, Mass	29.69	754.1	15	— 9.4		nw.	7	3.1			8		nw.	0	0			hazy	
Wachusetts.																			
Atert Bay, B. C	29.69	754.1	33	0.6		ssw.			2		5							fair	
Wyoming,																			
Port Royal, S. C	30.22	767.6	43	6.1	59	nw.	8	3.6			2		calm	0	0			clear	
Yantic,																			
N. 17° 07′, W. 87° 45′*	30.02	762.5	77	25.0	86	ene.			4		5					sm'h		fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland																	
S. S. Circassian, Capt. W. H. Smith,																	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 45° 03′, W. 45° 35′*	29.25	742.9	46	7.8		se.	6		10		ese.	4 h'r	4 h'r	r'gh	e.	cloudy	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, N. 46° 21′, W. 39° 09′*	29.39	746.5	46	7.8		sse.	4		4		s.			h'vy	sse.	fair	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, N. 43° 12′, W. 67° 15′*	29.82	757.4	25	—3.9		nnw.	6		10		n.	5 h'r	snow	cross	ssw. e.	cloudy	
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 41° 47′, W. 46° 38′*†	29.17	740.9	52	11.1		sw.	2		3?		w.	1 h'r	1 h'r	mod.	wsw.	cloudy?	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Off Cape Henlopen, Del.	30.02	762.5	26	—3.3	88	wnw.	3		2		nw.			sm'h	w.	fine	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, St. George's Channel.†	30.33	770.4	48	8.9	85	sw.	4		2?		ssw.	light	light	sm'h	s.	overcast?	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†	30.10	764.5	43	6.1	100	wsw.	6		1		w.				w.	clear	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,																	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 54° 20′, W. 17° 40′*†	30.28	769.1	52	11.1		sse.	3		9		sse.			very light	sse.	fine	H. Young.
S. S. Galatia, Capt. J. D. Allison																	John Daw, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,																	C. P. Krause.
S. S. Alvo, Capt. D. Williams. Petit Guave, Hayti, W. I.*	30.16	766.1	79	26.1		nne.	2		0			0	0			fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Kingston, Jamaica, W.I*†	29.96	761.0	70	21.1													W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, Kingston, Jamaica, W. I.						e.	1									clear	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 38° —′, W. 74° —′	30.20	767.1				n.	7		1		w.	0	0	slight	nw.	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Mickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,																	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 34° 22′, W. 31° 46′	30.31	769.9	68	20.0		ssw.	3		5							blue sky	
Baroda, Capt. C. J. Russell, S. 27° 09′, W. 22° 00′	30.20	767.1	79.5	26.4	82	nne.	1		7							d. clouds	
Bk. Caldew, Capt. W. Peterson S. 32° 31′, W. 31° 57′	30.34	770.6	71.3	21.8		se.	4		3							d. clouds	
S. S. Cipero, Capt. W. N. Lailey N. 24° 38′, W. 45° 45	30.15	765.8	71	21.7	80	n.	1		1							blue sky	
S. City of Agra, Capt. Thos. Young,																	
Coppename, Capt. James Buchan N. 16° 00′, W. 58° 44′	30.14	765.5	76	24.4	64	ne.	4		10							overcast	
Bk. Glaramara, Capt. R. Morton,																	
Glencairn, Capt. R. S. Tannock, N. 6° 50′, E 93° 00′	29.87	758.7	82	27.8	83	ne.	4		2							blue sky	
S. S. Gordon Castle, Capt. W. Waring,																	
Hermine, Capt. S. G. Jones, S. 36° 20′, W. 32° 43′	30.25	768.3	65.7	18.7	68	sw.	3		1							blue sky	
Hope, Capt. James Campbell N. 13° 26′, W. 29° 40′	30.11	764.8	75.5	24.2	81	ene.	3		5							d. clouds	
S. S. Humboldt, Capt. A. W. Jeffery, N. 26° 00′, W. 64° 07′	30.14	765.5	71.5	21.9	80	wsw.	5		5							squally	
S. Lochee, Capt. J. Raeburn, R. N. R., S. 9° 10′, W. 14° 20′	30.06	763.5	79.4	26.3	69	se.	3		4							d. clouds	
May Hulse, Capt. H. Youlden, R. N. R., S. 45° 25′, W. 83° 23′	29.47	748.5	51.5	10.8	79	w.	5		4							d. clouds	
Bk. Mertola, Capt. E. W. Turner,																	
Minho, Capt. J. Lawson, S. 34° 40′, W. 53° 39′	30.20	767.1	71.6	22.0	80	nne.	4		7							showery	
Nalad, Capt. J. Smith, N. 41° 14′, W. 34° 42′	29.44	747.8	57.5	14.2	97	ene.	4		4							d. clouds	
Pole Star, Capt. F. Norman,																	
Queen of Cambria, Capt. M. Parry. S. 0° 52′, E. 84° 48′	29.83	757.7	83	28.3	70	nnw.	4		7							d. clouds	
S. S. Strathleven, Capt. C. W. Pearson																	
S. Superb, Capt. Berridge,																	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Hudson River, N.Y*†	30.02	762.5				w.	3		8		n.	0	0			fine	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman, N. 24° 43′, W. 83° 23′*†	30.22	767.6	74	23.3		nne.	3		2		ne.	0	0	sm'h	nne.	fine	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 27° 10′, W. 86° 43′*†	30.25	768.3	63	17.2		ne.			0					sm'h		clear	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,																	E. F. Stembridge, 3d offi.
S. S. Gallia, Capt. W. H. P. Hains, N. 40° 31′, W. 67° 00′†	29.62	752.3	34	1.1	79	wnw.	6		10		wnw.	snow	snow	mod.	wnw.	dull	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO.																	
Louis de Bebian, Agent, New York.																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt. Périer d'Hauterive, N. 49° 12′, W. 23° 30′*†	30.00	762.0	48.2	9.0		s.	3	c	o	sse.		o	o	sm'h	sse.	clear	
S. S. St. Laurent, Capt. A. Sérvan,																	A. Servan.
HAMBURG AMERICAN PACKET CO.																	
Kurnhardt & Co., Agents, N. Y.																	
S. S. Gellert, Capt. Kuhlewein,																	
S. S. Silesia, Capt. A. Albers. N. 46° 43′, W. 38° 06′*†	29.52	749.8	55.6	13.1		sse.	6		8		ssw.	1 h'r	1 h'r	5	sse.	raining	
S. S. Wieland, Capt. C. Hebich,																	Jorgensen, Wolkowotz
JOHNSTON LINE.																	
Patterson, Ramsey & Co., Agents, Baltimore.																	
S. S. Thanemore, Capt. John Inch N. 39° 12′, W. 66° 31′	29.76	755.9				nw.	6		8?		nw.	snow	sq'lls		n.	clear.?	John Inch.
LAMPERT & HOLT'S LINE.																	
Lampert & Holt, Liverpool, England.																	
S. S. Hevelius, Capt. J. Carroll, S. 12° —, W. 36° —*†	30.21	767.3	82	27.8		ene.	3		5?		e.	o	o	sm'h		clear.?	J. Carroll.
LEYLAND LINE.																	
Thayer & Lincoln, Agents, Boston.																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE.																	
C. H. Mallory & Co., Agents, New York.																	
S. S. Colorado, Capt. M. B. Crowell, Key West, Florida*†	30.29	769.4	68	20.0		n	3		o			o	o			clear	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE.																	
Punch, Edye & Co, Agents, New York.																	
S. S. Freja, Capt. A. C. Struckmann, N. 48° 18′, W. 35° 20′*†	29.65	753.1	57	13.9	93	s.	6		haze		s.	o	o	cross	se; sw.		A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO.																	
Jas. E. Ward & Co., Agents, New York.																	
S. S. Niagara, Capt. J. B. Baker, Havana, Cuba, W. I*†	30.32	770.1	79	26.1		ne.	2		o			o	o	sm'h		clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, [man																	
S. S. City of Alexandria, Capt. L. F. Timmer-Progress Roads, C. A.*† [nolds	30.31	769.9	77	25.0		ese.	4								ese.	misty	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Elbe, Capt. W. Willigerod																	
S. S. Lessing, Capt. B. Voss																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke																	
S. S. P. Caland, Capt. E. Deddes,																	
S. S. Schiedam, Capt. E. M. Chevalier,																	
S. S. Scythia, Capt. M. Murphy																	
NORTH GERMAN LLOYD.																	
A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur, N. 53° 54′, E. 6° 46′*†	30.26	768.6	42.8	6.0		wnw.	5		8		wnw.	6 h'r	6 h'r	r'gh	wnw.	overcast	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 23° 43′, W. 17° 48′*	30.20	767.1	71.4	21.9		se.	3		o			o	o	mod.	se.	clear	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer, N. 45° 53′, W. 37° 37′	29.48	748.8	57	13.9	87	sse.	6		8		sse.	8 h'r	light	long	se.	hazy	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 49° 50′, W. 9° 36′*	30.34	770.6	55.4	13.0		se.	4		3		se.	o	o	light	se.	fine	
S. S. Mosel, Capt. F. Hesse, N. 44° 07′, W. 44° 46′	29.35	745.5	47.8	8.8		se.	5		9		sse.	10 h'r	10 h'r	mod.	se.	rainy	J. Hesse.
S. S. Neckar, Capt. R. Bussius, N. 42° 14′, W. 59° 26′	29.18	741.2	31.5	−0.3		wsw.	7		10		w.	7 h'r and	rain snow	very high	wsw.	squally	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	
S. S. Oder, Capt. C. Undeutsch,																	Montz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, Baltimore, Md	30.13	765.3				nne.	2		2		nne.	o	o			fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch, N. 46° 07′, W. 38° 44′*	30.40	772.1	58.0	14.4	97	sse.	6		5?		s.	o	o	long	sse.	cloudy?	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO.																	
Leland Stanford, President, San Francisco.																	
S. S. Belgic, Capt. H. Davison, N. 30° 33′, E. 129° 28′†	30.28	769.1	54	12.2	73	n.	5		2		n.	o	o	mod.	nw.	clear	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 37° 27′, W. 144° 44′†*	30.06	763.5	58	14.4	93	wsw.	6		7		w.			mod.	w.	cloudy	
S. S. Oceanic, Capt. J. Metcalfe, N. 45° 50′, W. 163° 33′*	30.37	771.4	44	6.7	92	sse.	4		7		s.			2		foggy	
OCEAN S. S. CO.																	
George Young, Agent, New York.																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.55	750.6				nw.	4		4		nw.					snowy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Vineyard Sound, Mass†	29.82	757.4	26	−3.3	77	nnw.	4				nne.	6 h'r	snow			snowing	H. K. Hallett.

MERCHANT-MARINE SERIES.—Continued

Vessels and Masters.	Barometer reduced to sea-level. Inch.	Barometer reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Sea Swell. Character.	Sea Swell. Direction.	Weather.	Observers.
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	30.06	763.5	40	4.4	82	s.	1	.....	0	.....	.....	.....	.....	.....	.....	clear	E. W. Holmes.
S. S. Willamette, Capt. L. Meyer, Seattle, Wash. Ter*†	30.07	763.8	36	2.2	90	se.	2	.....	4	.....	ese.	0	0	.....	.....	foggy	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.99	761.7	36	2.2	91	se.	1	.....	10	.....	s.	.....	.....	.....	.....	light rain	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	30.04	763.0	47	8.3	85	calm	0	.....	10	.....	.....	.....	.....	sm'h	.....	gloomy	.....
S. S. G. W. Elder, Capt. H. G. Morse, N. 37° 48′, W. 122° 32′†	30.03	762.7	47	8.3	.....	var.	2	.....	7	.....	se.	light	light	long	w.	cloudy	.....
S. S. Idaho, Capt. H. M. Hayward, N. 46° 55′, W. 124° 50′†	29.92	760.0	49	9.4	64	nw.	1	.....	2	.....	s.	.....	.....	.....	s.	clear	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 32° 40′, W. 117° 14′†	30.02	762.5	55	12.8	80	nw.	3	.....	1	.....	nw.	.....	.....	sm'h	nw.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, San Simon, Cal†	30.13	765.3	42	5.6	91	nw.	1	.....	8	.....	.....	0	0	.....	.....	cloudy	.....
S. S. State of California, Capt. G. Debney, San Francisco, Cal†	30.07	763.8	45	7.2	92	calm	0	.....	5†	.....	.....	0	0	.....	.....	cloudy†	.....
S. S. Victoria, Capt. W. E. Plummer, Nanaimo, Vancouvers Id†	29.86	758.5	30	—1.1	89	calm	0	.....	2	.....	s.	.....	.....	.....	.....	clear	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 22° 49′, W. 151° 28′	30.27	768.8	67	19.4	84	e.	3	.....	8	.....	e.	1 h'r	light	sm'h	.....	showery	.....
S. S. City of New York, Capt. W. B. Cobb, N. 33° 50′, W. 135° 10′†	29.59	751.6	57	13.9	75	sse.	5	.....	10	.....	.....	rain	rain	mod.	nw.	raining	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 22° 58′, W. 108° 15′†	30.20	767.1	63	17.2	72	n.	3	.....	2	.....	ne.	0	0	long	n.	hazy	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, Sydney, N. S. W†	30.18	766.6	73	22.8	67	s.	6	.....	10	.....	ne.	0	0	sm'h	.....	cloudy	E. Le Saik.
S. S. City of Tokio, Com. J. Maury, Hong Kong, China†	30.29	769.4	59	15.0	70	e.	1	.....	5	.....	e.	0	0	.....	.....	fair	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 12° 34′, W. 87° 55′†	29.96	761.0	79	26.1	86	ene.	5	.....	1	.....	s.	0	0	r'gh	e.	clear	.....
S. S. Grenada, Capt. M. Connolley, Acapulco, Mexico†	29.93	760.2	76	24.4	90	calm	0	.....	0	.....	.....	0	0	.....	.....	clear	.....
S. S. South Carolina, Capt. W. J. Russell, Punta Arenas, Costa Rica, C. A†	30.01	762.2	80	26.7	82	sse.	4	.....	0	.....	.....	0	0	sm'h	.....	fine	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, Sydney, N. S. W	30.26	768.6	72	22.2	49	se.	1	.....	0	.....	.....	.....	.....	.....	.....	fine	.....
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth N. 28° 27′, W. 66° 00′†	30.09	764.3	70	21.1	.....	wnw.	3	.....	2	.....	w.	2 h'r	hv'y	long	sw.	fine	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, Dominica, W. I.	.....	.....	.....	.....	.....	ene.	2	.....	0	.....	.....	0	0	sm'h	.....	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes Antwerp, Belgium*†	30.46	773.7	43	6.1	.....	var.	1	.....	8	.....	w.	0	0	.....	.....	overcast	.....
S. S. Nederland, Capt. J. Ueberweg, N. 51° 03′, W. 28° 15′*†	30.48	774.2	52	11.1	.....	sse.	4	.....	2	.....	sse.	driz.	driz.	long	ssw.	clear	Albrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	30.49	774.4	46	7.8	69	w.	2	.....	10	.....	w.	0	0	.....	.....	cloudy	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon, N. 44° 30′, W. 48° 52′*†	29.05	737.9	36	2.2	.....	w.	2	.....	1	.....	e.	13 h'r	rain snow	crose	ene.	dense fog	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, N. 40° 50′, W. 64° 26′*	29.38	746.2	30	—1.1	.....	wnw.	7	.....	10	.....	nw.	snow	shr's	r'gh	nw.	cloudy	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 44° 44′, W. 38° 32′*	29.33	745.0	57.0	13.9	93	sw.	3	.....	8	.....	sw.	2 h'r	2 h'r	high	ese.	foggy	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Brooklyn, N. Y.†	29.93	760.2	29.3	—1.5	.....	wnw.	1	.....	10	.....	wnw.	.....	.....	.....	.....	covered	J. T. Eiberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 44° 36′, W. 47° 23′*†	29.38	746.2	52	11.1	.....	wsw.	2	.....	10	.....	.....	3 h'r	light	r'gh	ese.	hazy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th offi.
S. S. Celtic, Capt. Benjamin Gleadell N. 48° 44′, W. 29° 30′†*	29.68	753.9	51	10.6	93	se.	4	.....	2	.....	sse.	0	0	mod.	sse.	clear	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 41° 17′, W. 65° 37′*	29.63	752.6	29	—1.7	.....	w.	6	.....	10	.....	ne. wsw.	3 h'r	snow sleet	r'gh	wnw.	cloudy	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, Cedar Keys, Florida†	30.30	769.6	49.5	9.7	40	nne.	3	0	0			0	0			clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 23° 40′, W. 40° 36′*†	30.19	766.8	69	20.6		nw.	1		0			0	0	sm'h	nnw.	clear	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 18° 04′, W. 54° 50′*†	30.15	765.8	74	23.3		e.	4		5		e.	2 h'r	light	mod.	ne.	squally	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 45° 09′ W. 33° 20′*†	29.65	753.1	60	15.6	82	se.	4		10		sse.	0	0	con.	se.	cloudy	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewi N. 23° 11′, W. 69° 31′*†	30.17	766.3	78	25.6		s.	2		2		se.	0	0	mod.	e.	clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, S. 10° 43′, W. 32° 36′*†	30.05	763.3	85	29.4		se.	6		2		se.	0	0	sm'h	se.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen, N. 31° 20′ W. 77° 50′†	30.13	765.3				nnw.	5					0	0	sm'h	nw.	fair	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia. N. 39° 20′, W. 69° 44′*†	29.90	759 4				wnw.	4					0	0	mod.	w.	fair	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 40° 56′, W. 53° 45′*†	29.27	743.4				wnw.	6		8		wnw.	8 h'r	h'vy	high	nw.		G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 57° 59′, W. 65° 23′†	29.30	744.2				w.	1		2		n.	0	0	long	wsw.	clear	A. J. Pettingill.
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	30.15	765.8				wnw.	4		9		wnw.	0	0			squally	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr																	J. C. Andreson, Jr.
U.S.F.C.S.S. Fish Hawk, Lt. Tanner, U.S.N. Washington, D. C†	30.13	765.3	35	1.7	80	wnw.	3		5		sw.	0	0			fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison.																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 19° 53′, W. 46° 52′			76	24.4		ne.	1		0			0	0	sm'h		fine	
Bk. Gamaliel, Capt. D. J. Anthony, N. 32° 04′, W. 73° 15′*†	29.09	738.9				wnw.	7		0			0	0	r'gh	wsw.	clear	
Bk. Geo. Booth, Capt. D. Williams S. 9° 30′, W. 33° 10′*†	29.85	758.2	85	29.4		se.	3					0	0			clear	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 23° 21′, W. 39° 37′*†	30.26	768.6	74	23.3		w.	1					0	0	mod.	wnw.	clear	
Schr. Henry Denison, Capt. Jno. Fehring N. 35° 39′, W. 74° 09′†	29.96	761 0				ne.	6		5		nne.	0	0	mod.	nne.	fair	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 36° 10′, E. 70° 28′*	30.24	768.1				e.	3		4		ene.	0	0	long	wsw.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann, N. 38° 57′, W. 72° 11′*†	29.95	760.7				n.	5		8		n.	2 h'r	light snow	sm'h	nnw.	snowing	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith. N. 34° 11′, W. 68° 54′*†	29.91	759.7				nnw.	5		2		nw.	0	0	long	nw.	fair	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte, N. 28° 29′, W. 70° 50′†*	29.30	744.2				sw.					sw.			hv'y	sw.	fair	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen																	Sorensen & Arvesen
Bk. Pawashick, Capt. Edwin Fry, N. 19° 58′, W. 37° 27′*†	30.40	772.1	71.5	21.9	85	nnw.	1				ne.			hv'y	nnw.	fine	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Gulf of Quarnero, Aust ia†	30.24	768.1	53	11.7	66	sw.	2		0					sm'h		clear	G. S. d'Ancona.
Bk Pilgrim, Capt. J. Connolly S. 36° 09′, W. 15° 28′*†	30.15	765.8				wsw.						1 h'r	1 h'r			cloudy	J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	30.11	764.8	45	7.2		nw.	1		0			0	0			fine	H. Mehaffey, 2d mate.
Bk. Stella, Capt. H. N. T. Sommer, S. 32° 54′, W. 43° 20′*	30.21	767.3	75.2	24.0	94	ne.	2		4		e.			mod.	sw.	d. clouds	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 21° 38′, W. 40° 37′*†	30.13	765.3	75	23.9	85	sw.	2		8		nw.	0	0	mod.	n.	cloudy	J. Green.
Bg. Wauburn, Capt. I. W. Covert,																	
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 49° 40′, W. 7° 06′*†	30.18	766.6	56	13.3	74	e.	2				e.			sm'h		covered	H. T. Schmidt.
Bk. Winifried, Capt. N. P. Dutton. S. 21° 52′, W. 37° 05′*†	30.15	765.8				var.					nw. ne.			mod.	se.	rainy	N. P. Dutton.

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W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co. Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 24, 1882.

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.40	772.1	62.6	17.0	84	w.			2		0			0	0	clear	Moiroud.
Algiers			30.43	772.8	59.0	15.0	80	w.			1		8			0	0	very cloudy	Nicolas.
La Calle			30.46	773.7	61.9	16.6	75	e.			3		0			0	0	clear	Fonfrède.
Tunis			30.47	773.9															Jacques.
Sfax																			Gau.
Saida			30.44	773.1	63.3	17.4	37	ne.			1		0			0	0	clear	Dumas.
Tebessa			30.48	774.3	58.3	14.6	33	nw.			1		0			0	0	clear	Derché.
Geriville					54.3	12.4	57	ssw.			1		0			0	0	clear	Lonchamp.
Laghouat			30.55	776.0	59.0	15.0	39	sw.			1		0			0	0	clear	Herbin.
Biskra			30.52	775.1	64.0	17.8	31	n.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	30.07	763.8	30.16	766.0	64.8	18.2	80	sw.	2	0.9			2			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.78	756.4	30.34	770.6	50.4	10.2	52	se.			1		0			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.47	748.6	30.26	768.7	43.5	6.4	71	wnw.	13.6	6.1			10			0.020	0.5		Dr. Wierzbiski.
Eperies	29.30	744.3	30.21	767.2	44.6	7.0	67	nw.			3		10 ks		se.	0	0		Julius Mikolik.
Gratz	29.01	736.8	30.29	769.3	46.9	8.3	59	s.			1		0			0	0		Andreas Rospini.
Hermannstadt	28.75	730.2	30.22	767.6	45.3	7.4	64	nw.			4		6			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.91	734.2	30.30	769.5	43.9	6.6	74	e.			1		0			0	0	clear	The Staff.
Lemberg	29.07	738.4	30.09	764.3	38.8	3.8	92	nw.			2		10			0.354	9.0		Dr. T. Stanecki.
Pola	30.23	767.9	30.35	770.8	49.8	9.9	88	w.			2		0			0	0		I. R. Hydrographic Office.
Szathmar	29.74	755.5	30.22	767.5	44.6	7.0	63	sw.			2		9			0	0		Joseph Midlinszky, S. J.
Szegedin	30.01	762.2	30.30	769.5	51.1	10.6	68	nw.			3		0			0	0		Karl Stancel.
Trieste	30.25	768.3	30.35	770.9	46.8	8.2	81	calm			0		0			0	0		Rieder.
Vienna	29.60	751.8	30.33	770.4	46.4	8.0	52	nw.			1		0			0	0		I. R. Central Met. Obs'y
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.81	757.2	29.91	759.7	49.3	9.6	64	sw.	16	7.2			3			0	0	blue sky	W. Boswell.
Armagh, Observatory	29.78	756.4	30.03	762.7	46.4	8.1	81	sw.	13	5.8			10					overcast	S. Call.
Bidston, Liverpool Obs'y			30.11	764.8	45.2	7.3	77	sw.	9	4.0			10					overcast	John Hartnup.
Bolton, Sharples	29.56	750.8	30.10	764.5	39.8	4.3	91	sw.	6	2.7			10					raining	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.68	753.9	30.07	763.8	43.7	6.5	74	sw.			2		8			0.06	1.5	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	83.0	28.3	60	ne.			2		3					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			30.14	765.5	47.0	8.3	77	nw.			0.6		8					overcast	John McLaren.
Chatham, School M. E.	30.06	763.5	30.19	766.8	44.9	7.2	88	sw.			1		10					misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.93	760.2	30.16	766.1	50.9	10.5	85	sse.			2		9					overcast	The Staff.
Fort Napier, Natal	27.71	703.8	29.92	760.0	86.2	30.1	40	se.			2		0					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.59	751.6	29.83	757.7	87.0	30.6	69	w.			1		5					d. clouds	Sergt. John Robinson.
Galway, Queen's College			29.94	760.5				ssw.			2		5			0.03	0.8	blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.38	771.6	30.43	772.9	61.6	16.4	75	e.			2		5					d. clouds	Cpl. O. Baldwin.
Glasgow, Observatory	29.77	756.1	29.97	761.2	45.7	7.6	84	sw.			3		10 k			blank	blank	gloomy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.99	761.7	30.17	766.3	43.5	6.4	83	wsw.			1		10					overcast	The Staff.
Guernsey	29.92	760.0	30.23	767.8	50.0	10.0	85	sw.			1		8					d. clouds	A. Collenette, F. M. S.
Kew, Observatory	30.15	765.8	30.18	766.6	45.2	7.3	67	w.	11	4.9			9					misty	The Staff.
Leicester, Museum	29.89	759.2	30.15	765.8	44.0	6.7	68	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.29	769.4	30.36	771.1	63.4	17.4	64	nw.			2		1					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.13	765.3	30.18	766.6	70.0	21.1	71	n.			2		7					d clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.72	754.9	30.26	768.6	41.8	5.4	79	ssw.			0–1		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	29.96	761.0	30.18	766.6	43.6	6.4	71	sw.			1		10					overcast	The Staff.
Plymouth	30.11	764.8	30.18	766.6	49.2	9.6	85	sw.			1		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			29.79	756.7	47.8	8.8	77	ssw.	17	7.6			3					blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.18	766.6	30.25	768.3	47.0	8.3	62	sw.			2		6					d. clouds	W. H. Lyne.
Sheffield	29.84	757.9	30.13	765.3	44.4	6.9	80	sw.			2		10			0.04	1.0	overcast	W. F. Cooper.
Stilton Rectory	30.00	762.0	30.03	762.7	45.3	7.4	91	wsw.			3		10			0.045	1.2	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.11	764.8	40.4	4.7	87	sw.	5	2.2			10					drizzling	I. New.
Stratfield Turgiss	29.97	761.2	30.20	767.1	48.3	9.1	70	w			3		6					d. clouds	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.06	763.5	30.11	764.8	55	12.8	86	se.			6		10					gloomy	W. Newcombe.
Valencia, Observatory	29.95	760.7	29.97	761.2	50.9	10.5	84	se.	30	13.4			6			blank	blank	d. clouds	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.96	761.0	29.99	761.7	68.5	20.3	97	e.	16.7	7.5			10 s			0	0	foggy	John Duthie.
Cape Town, C. G. H. Obs'y								wnw.	17	7.6						0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.					14.6	— 9.7		ne.	2	0.9			10 n			0	0	cloudy	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.83	757.7	29.87	758.7	23	— 5.0	86	n.	17	7.6			10 n			0.23	5.8	light snow	H. J. Cundall, C. E.
Chatham, N. B*	30.01	762.2	30.07	763.8	23	— 5.0	84	nw.	16	7.2			10 s		nw.	0.01	0.3	cloudy	G. A. Blair.
Cornwall, Ontario	30.10	764.5	30.31	769.9	13	—10.6	100	e.			1		fg			0	0	dense fog	James Smith, M. A.
Dalhousie, N. B.	29.90	759.4	30.07	763.8	21	— 6.1		w.			3		10 s			0	0	cloudy	H. A. Johnson.
Father Point, Quebec*	30.27	768.8	30.30	769.6	12	—11.1	91	nne.	5	2.2		0	2 s		calm	0.01	0.3	clear	J. McWilliams.
Fort Garry, Manitoba*	29.27	743.4	30.19	766.8	4	—15.6	96	w.	21	9.4		0	0			0	0	clear	James Stewart.
Fredericton, N. B.	30.02	762.5	30.09	764.3	22.0	— 5.6	72	nw.	7	3.1			10 s			0	0	cloudy	Prof. Harrison.
Granton, Ontario	29.24	742.7	30.45	773.4	11.6	—11.3	88	calm	0	0		0	0			0	0	clear	James Grant.
Halifax, N. S*	29.69	754.1	29.83	757.7	25	— 3.9	88	n.	18	8.0		8 k	0	n.		inap.	inap.	cloudy	A. Allison.
Hamilton, Ontario	29.98	761.5	30.41	772.4	13.9	—10.1	81	sw.			1	0	0			0	0	clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.98	761.5	30.35	770.9	8	—13.3	83	n.	4	1.8		0	0			0.02	0.5	clear	A. P. Knight, M. A.
Little Glace Bay, N. S.	29.65	753.1	29.70	754.4	25.0	— 3.9	90	ne.			5	8 k	0	ne.		0.60	15.2	cloudy	C. H. Rigby.
Montreal, Quebec*	30.11	764.8	30.34	770.6	7	—13.9	73	n.	12	5.4		2 cs	2 ks	ne.		0	0	fair	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.69	754.1	30.48	774.2	— 5	—20.6	62	n.	4	1.8		0	0			inap.	inap.	clear	Rev. R. Mosley.
Peterboro, Ontario	29.61	752.1	30.44	773.2	10.7	—11.8	79	calm			0	0	0			0	0	clear	J. Dixon, B. A.
Port Dover, Ontario	29.65	753.1	30.40	772.1	18	— 7.8	100	nw.	6	2.7		0	0			inap.	inap.	clear	H. Morgan.
Port Stanley, Ontario	29.71	754.6	30.43	772.9	12	—11.1	100	n.	3	1.3		0	0			0	0	clear	M. Payne.
Quebec, Quebec*	29.93	760.2	30.28	769.1	13	—10.6	80	nw.			1	0	0			0	0	clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.92	760.0	30.45	773.4	— 9	—22.8	100	nw.	5	2.2		0	0			0	0	clear	W. H. McIntyre.
Saugeen, Ontario*	29.66	753.4	30.47	773.9	5	—15.0	100	calm	0	0		0	0			0.05	1.3	clear	
St. Andrews, N. B.	29.95	760.7	30.00	762.0	22	— 5.6	83	n.	6	2.7			10 n			0	0	cloudy	
St. John, N. B.	29.84	757.9	30.02	762.5	24.0	— 4.4	74	ne.	15	6.7			10 s			0	0	cloudy	G. Murdock, C. E.
St. Pierre, N. F.			29.41	747.0	24.8	— 4.0		ne.			6					0	0		N. F. Land, Com't.
Stratford, Ontario	29.04	737.6	30.46	773.7	8.7	—12.9	94	calm	0	0		0	0			0	0	clear	C. I. Macgregor, M. A.
Sydney, C. B*	29.60	751.8	29.67	753.6	26	— 3.3	92	n.	25	11.2		4 cs	4 n		n.	0.30	7.6	clearing	T. C. Hill, C. E.
Toronto, Ontario*	30.00	762.0	30.42	772.7	16	— 8.9	80	n.	10	4.5		0	0			0.02	0.5	clear	Magnetic Observatory.
Windsor, N. S.	29.77	756.1	29.87	758.7	24.5	— 4.2	94	n.	18	8.0			10 n			0.20	5.1	cloudy	Prof. W. R. Butler.
Woodstock, Ontario	29.27	743.4	30.44	773.2	12.6	—10.8	66	nw.	5	2.2		0	0			0	0	clear	Prof. Wolverton
Yarmouth, N. S*	29.77	756.1	29.84	757.9	26	— 3.3	80	ne.	6	2.7			10 k		ne.	0	0	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.34	745.2	29.59	751.6	38	3.3	100	ne.	3	1.3			10			inap.	inap.		John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.29	769.4	30.58	776.7	46.6	8.1	64	calm			0		10			0	0		N. Titoushkin.
Sung-shu-chwangf	24.83	630.7			32.0	0.0	48	e.			1		0			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	30.36	771.1	30.39	771.8	39.6	4.2	83	e.	2.9	1.3			2 ks		sw.	0	0	clear	M. Marc Dechevrens,
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.02	762.4	30.06	763.6	46.6	8.1	74	wnw.	16	7			3						Oversergent Fischer.
Fanöe	30.08	764.0	30.10	764.5	41.0	5.0	92	wsw.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	30.03	762.8	30.08	763.9	7.7	—13.5	84	ne.			4		0						S. Kleinschmidt.
Stykkisholm, Iceland	28.89	733.7	28.93	734.8	16.9	— 8.4		ne.			8		10					snowing	A. O. Thorlacius.
Thorshavn	29.32	744.6	29.35	745.5	47.8	8.8	84	sw.	36	16			8					raining	Overloerer Bergh.
Vestervig	29.91	759.8	30.00	762.1	42.4	5.8	91	wsw.			4		10						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.72	754.9	30.37	771.5	61.9	16.6	66	calm			0	2 c	k;s			0	0		M. Labroue, Director.
Alençon, Normal School	29.78	756.5	30.34	770.5	45.5	7.5	94	sw.			4	c	0	ne.		0	0		M. Nicot, Director.
Arras, Engineer School	29.97	761.2	30.23	767.8	48.2	9.0	82	nw.			3		k			0	0		M. Klein, Commandant.
Avignon, Normal School	30.31	769.8	30.39	771.8	59.0	15	48	n.			1		0			0	0	clear	M. Giraud, Director.
Bar-sur-Seine	29.74	755.5	30.31	769.8	51.4	10.8	63	sw.			1		6			0	0	cloudy	M. Saillard, Director.
Beauvais, Normal School	30.00	762.1	30.28	769.1	41.9	5.5	84	wnw.			1		10			0	0	covered	M. Frère Eugène Mari
Besançon, Normal School			30.47	773.9	50.0	10	74	s.			1		2 n		se.	0	0	slightly cl'dy	M. Gobin, Director.
Bordeaux, Observatory	30.00	762.1	30.27	768.8	63.0	17.2	34	sw.			1		8			0	0	very cloudy	M. Rayet, Director.
Bourges, Normal School	29.76	755.8	30.32	770.0	53.1	11.7	63	se.			1		1		se.	0	0	clear	M. Postel, Director.
Brest, Naval Observatory	29.97	761.3	30.22	767.5	52.2	11.2	85 *	s.			1		9		s.	0	0		M. de Kennaree, Dir.
Caen, Normal School	30.20	767.0	30.28	769.0	51.1	10.6	80	sw.			1		2		e.	0	0	slightly cl'dy	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.89	759.1	30.22	767.5	50.0	10.0	66	ssw.			2		2		sw.	0	0	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School.	29.78	756.3	30.30	769.6	48.6	9.2	80	e.			1		0			0	0	clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.94	735.1	30.29	769.3	62.8	17.1	53	nw.			1	2 c	0			0	0	clear	M. Allnard, Director.
Cluny, Normal School	29.50	749.2	30.39	771.9	52.2	11.2	75	s.			1		0			0	0	clear	M. de Villemontée, Dir.
Commercy, Normal School.	29.42	747.2	30.32	770.0	51.4	10.8	68	ne.			1		2 s	ne.	ne.	0	0	slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.85	707.4	30.39	771.9	59.0	15	42	w.			1	cs	0			0	0		M. Jeanginard, Director.
Gréasque, du. Rhone	29.23	742.5	30.36	771.2	59.2	15.1	47	se.			1		2		s.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.56	750.7	30.33	770.4	56.1	13.4	38	sse.			1	0	0			0	0	clear	M. Ablard, Director.
Guéret, Normal School	28.70	729.0	30.28	769.1	56.5	13.6	40	sw.			1	c	0	w.		0	0		M. Rivoire, Director.
Lamballe, Normal School	30.00	761.9	30.27	768.9	52.7	11.5	70	s.			1		5		s.	0	0	cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.70	754.4	30.26	768.5	69.8	21	20	wsw.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.17	766.4	30.28	769.0	52.7	11.5	93	s.			3		10			0	0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.29	744.0	30.36	771.1	52.5	11.4	51	e.			1		0			0	0	hazy	M. André, Director.
Mans, Normal School	30.01	762.2	30.33	770.3	46.9	8.3	87	sw.			1		2		sw.	0	0	slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	30.10	764.5	30.37	771.4	57.0	13.9	63	w.			1		1			0	0		M. Stephan, Director
Montlouis l'Institutenr	25.08	637.0	29.92	760.0	47.8	8.8	30	sw.	5.6	2.5			0			0	0	clear	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.23	767.9	30.37	771.3	55.4	13	79	se.			2		0			0	0	foggy	M. Galzin, Director.
Nancy, Normal School	29.50	749.2	30.31	769.8	41.7	5.4	88	wsw.			1		0			0	0	clear	M. Hasse, Director
Nantes, Observatory	30.13	765.3	30.29	769.4	57.6	14.2	60	se.			0-1	7 c	0			0	0		M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.26	768.5	30.37	771.3	56.7	13.7	57	se.	5.6	2.5			2	e.	e.	0	0		Dr. Fines, Director.
Pic-du-Midi, Summit	21.42	544.0			29.5	—1.4		s.			1		1		s.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.27	743.4	30.33	770.4	60.1	15.6	75	s.			1		0			0	0	hazy	M. Tallien.
Puy de Dôme Obs'y, Summit	25.39	644.9			45.1	7.3	41	ssw.			2		2			0	0	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.23	767.9	30.26	768.7	52.7	11.5	75	s.			1		10			0	0	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.04	762.9	30.25	768.4	53.2	11.8	82	s.			1		10			0	0	covered	M. Mouillot, Director.
Rodez, Normal School	28.12	714.2	30.29	769.3	53.6	12	43	sw.			1		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	30.21	767.4	30.26	768.6	46.0	7.8	80	sw.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	30.11	764.7	30.26	768.7	49.6	9.8	71	sw.			1		5		sw.	0	0	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.13	765.4	30.30	769.6	42.8	6.0	86	ssw.			2		10		w.	0.012	0.3	covered	M. Renou, Director.
Toulouse, Observatory	29.63	752.7	30.37	771.3	62.2	16.8	52	se.			1		1		w.	0	0	clear	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.78	756.3	30.27	768.8	45.0	7.2	83	w.			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.01	762.2	30.30	769.6	42.8	6.0	88	ssw.			1		10		w.	0.008	0.2	covered	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.42	747.3	30.28	769.2	42.8	6.0	60	se.			2	0	3 s;k			0	0		Prof. Dr. Hob.
Berlin	30.03	762.8	30.21	767.4	47.8	8.8	71	sw.			2		8			0	0		Prof. Dr. Arndt.
Breslau	29.73	755.2	30.27	768.8	44.4	6.9	59	wnw.			4		8	wnw.		0.020	0.5		Royal University Obs'y.
Carlsruhe	29.86	758.5	30.32	770.1	40.6	4.8	81	sw.			2		0			0	0		Albert Senz.
Cassel	29.49	749.1	30.21	767.3	41.7	5.4	77	ssw.			3	0	6 k		sw.	0	0		Dr. H. Möhl.
Frankfort on the Main	29.93	760.1	30.30	769.7	45.5	7.5	68	ssw.			1		7			0	0		Physical Society.
Friedrichshafen	28.84	732.6	30.34	770.5	40.3	4.6	84	sw.			3		2	sw.		0	0		Wilhelm, Chief Tel.
Hamburg	30.11	764.9	30.21	767.3	41.5	5.3	83	wsw.			4		10			0	0		E. Preller.
Kiel	30.14	765.5	30.15	765.9	43.2	6.2	83	w.			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.85	758.2	30.29	769.3	42.4	5.8	66	sw.			3		9	w.		0	0		H. Leppig, Asst.
Magdeburg	30.05	763.3	30.25	768.3	43.7	6.5	74	ssw.			2		10 ks		nw.	0	0		Dr. Assmann.
Memel	29.97	761.3	30.02	762.5	35.8	2.1	80	wnw.			4	2 c	0						Issermann.
Munich	28.42	721.8	30.30	769.5	47.7	8.7	55	ne.			1		1	nw.		0	0		Central Station.
Neufahrwasser	30.09	764.2	30.10	764.6	44.6	7.0	77	w.			2		10			0	0		A. Lothes.
Neustadt, Palatinate	29.74	755.4	30.27	768.9	42.8	6.0	85	w.			1		10	w.		0	0		Dicknether.
Stuttgart	29.34	745.2	30.27	768.8	40.1	4.5	81	n.			1		5	w.		0	0		Prof. Dr. Schoder.
Wustrow	30.15	765.8	30.18	766.5	41.7	5.4	91	sw.			4		10 s			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.89	759.2	30.29	769.3	55.4	13.0		ne.			1.0		1 k			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurnachee	30.07	763.7	30.12	765.1	78.0	25.6	57	wnw.	15	6.7			0			0	0	blue sky	
Deesa	29.53	750.0	30.00	762.0	84.8	29.3	18	n.	12.0	5.4			0			0	0	blue sky	
Bombay	29.90	759.3	29.93	760.3	79.3	26.3	54	nnw.	19	8.5			0			0	0	blue sky	
Poona, Yarrowda	28.66	712.7	29.88	759.0	89.0	31.7	12	ne.	3	1.3			0			0	0	blue sky	
Belgaum	27.37	695.1	29.86	758.4	86.0	30.0	16	nnw.	9	4.0			0			0	0	blue sky	
Lahore	29.32	744.6	30.08	764.0	69.5	20.8	24	w.	2.1	0.9			0			0	0	blue sky	
Roorkee	29.08	738.6	30.01	762.2	67.4	19.7	31	nw.	4.6	2.1			1			0	0		
Agra	29.49	749.0	30.07	763.7	73.0	22.8	18	w.	5.8	2.6			2		nw.	0	0		
Nagpur	28.91	734.4	29.95	760.8	84.7	29.3	22	nne.	4.7	2.1			0			0	0	blue sky	
Jubbulpore	28.66	727.8	30.02	762.6	77.8	25.4	22	calm	2.5	1.1			0			0	0	blue sky	
Lucknow	29.62	752.3	30.00	762.0	75.2	24.0	23	wsw.	4.6	2.1			0			0	0	blue sky	
Allahabad	29.68	753.9	30.00	762.0	74.8	23.8	30	nw.	2.4	1.1			0			0	0	blue sky	
Patna	29.76	756.0	29.95	760.8	74.3	23.5	47	nw.	2.6	1.2			0			0	0	blue sky	
Hazaribagh	27.91	708.9	29.95	760.7	72.8	22.7	44	n.	6.7	3.0			0			0.51	13.0	thnd'r storm	
Cuttack	29.84	757.9	29.92	760.0	79.1	26.2	56	nw.	12	5.4			6			0.09	2.3	d. clouds	
Calcutta, Alipore	29.90	759.3	29.92	759.9	77.2	25.1	52	ssw.	8.0	3.6			10		w.			thnd'r storm	
Dhubri	29.82	757.4	29.94	760.5	74.4	23.6	47	calm	3.3	1.5			0			0	0	blue sky	
Chittagong	29.85	758.2	29.94	760.5	76.4	24.7	59	calm	1.4	0.6			8			0	0	d. clouds	
Sibsagar	29.68	753.9	30.03	762.8	68.0	20.0	70	ne.	1.7	0.8			4			0	0		
Jeypore	28.62	726.9	30.09	764.3	72.2	22.3	18	nne.	5.8	2.6			0			0	0	blue sky	
Zanzibar, Africa	29.83	757.7			85.9	29.9	66	ne.	11.7	5.2			4k;fk		ene.	0	0	d. clouds	
Trichinopoly	29.65	753.1			81.3	27.4	71	ese.	2	0.9			10			0	0	overcast	
Bellary	28.42	721.9			89.0	31.7	21	e.	3.8	1.7			2			0	0	d. clouds	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.93	760.2	30.35	770.8	54.7	12.6	66	s.	0.7	0.3			0			0	0		Prof. Giovanni Clodig.
Milan	29.82	757.3	30.35	770.8	55.2	12.9	60	sw.	6.9	3.1			0			0	0		Prof. Schiaparelli.
Padua	30.24	768.1	30.35	771.0	49.5	9.7	71	se.	3.1	1.4			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.41	746.9	30.33	770.4	51.8	11.0	57	se.	1.8	0.8			0			0	0		Prof. P. F. Denza.
Genoa	30.20	767.1	30.40	772.1	54.7	12.6	62	s.	1.3	0.6			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.38	720.8	30.33	770.3	52.9	11.6	49	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.30	769.7	30.35	771.0	49.8	9.9	71	sw.	2.5	1.1			0			0	0		Prof. Luigi Guidi.
Florence	30.12	765.1	30.38	771.6	56.8	13.8	54	w.			2		5			0	0		Prof. Costantino Pitter.
Leghorn	30.24	768.2	30.33	770.4	57.4	14.1	62	nw.	3.8	1.7			10	w.		0	0		Prof. P. Monte.
Rome	30.19	766.9	30.37	771.4	57.9	14.4	53	wsw.	1.3	0.6			2			0	0		Prof. P. S. Ferrari.
Lecce	30.06	763.6	30.32	770.2	56.3	13.5	65	ne.	16.8	7.5			1			0	0		Prof. C. de Giorgi.
Cosenza	29.44	747.7	30.34	770.7	57.6	14.2	74	ese.	4.3	1.9			0			0	0		Prof. D. Conti.
Cagliari	30.18	766.6	30.38	771.6	57.7	14.3	51	nw.			2		3			0	0		Prof. A. Pacinotti.
Palermo	30.15	765.9	30.41	772.3	60.1	15.6	49	ne.	4.9	2.2			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.31	769.9	30.36	771.1	58.1	14.5	66	sw.	6.9	3.1			0			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.82	757.5	30.35	770.9	57.9	14.4	65	s.	0	0			1	nw.		0	0		Prof. T. Brioschi.
Stelvio	22.33	567.1			26.6	— 3.0	47	s.			1		1			0	0	clear	Prof. P. F. Denza.
Valdobbia	22.39	568.7			29.8	— 1.2	44	se.			2		3			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.30	769.6	30.34	770.6	36.8	2.7	89	s.	8.0	3.6		ck	8 s		w.	0	0	cloudy	
Hakodate	30.28	769.1	30.29	769.3	32.3	0.2	75	wnw.	12.0	5.4			6		wnw.	0	0	cloudy	
Hiroshima, I. M. Obs'y	30.38	771.6	30.39	771.9	37.6	3.1	81	nne.	6.0	2.7		3cs;ck	0			0	0	fair	K. Sasaki.
Kanazawa	30.33	770.4	30.44	773.2	31.7	— 0.2	68	se.	9.4	4.2		1 ck	0			0.010	0.3	clear	S. Endo.
Kioto	30.25	768.3	30.44	773.2	31.3	— 0.4	80	e.	2.8	1.3		0	0			0	0	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.24	768.1	30.45	773.4	38.9	3.8	85	s.	0.7	0.3		3cs;ck	0			0.110	2.8	clear	S. Takehayashi.
Niigata	30.36	771.1	30.40	772.1	32.9	0.5	91	s.	2.9	1.3		7 ck	0	w.		0.045	1.1	cloudy	
Nobiru	30.34	770.6	30.36	771.1	33.3	0.7	77	nnw.	16.0	7.1		ck	1c s	w.		0	0	overcast	H. Midzushina.
Supporo					25.0	— 3.9	91	calm	0	0			10			0	0	covered	
Tokei Obs'y, Yeddo	30.29	769.3	30.36	771.1	38.3	3.5	68	e.	4.4	2.0		3 c	0	wsw.		0	0	clear	The Staff.
Wakayama	30.37	771.4	30.43	772.9	34.6	1.4	74	ene.	3.0	1.3		7 ck	0			0	0	fair	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.47	621.6	30.22	767.6	55.0	12.8	79	sw.			1	5 cs	0	w.		0	0	½ cloudy	Prof. M. Leal.
Mazatlan	29.81	757.1	30.07	763.8	60.0	15.6	97	e.	1.6	0.8		0	1 s			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.19	589.3	30.39	771.9	46.4	8.0	76	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.26	616.2	30.44	773.2	55.8	13.2	80	s.			4	3 c	3 k	s.	s.	0	0	½ cloudy	M. Tena, M. D.
Pabellon, Aguascalientes	24.03	610.2	30.14	765.6	49.1	9.5	67									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.52	597.4	30.45	773.5	42.8	6.0	83	calm	0	0		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.33	618.0	30.38	771.6	50.5	10.3	69	e.			1		10		e.	0	0	covered	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.65	575.3	30.37	771.6	52.7	11.5	77					0	0			0.119	3.0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.72	754.9	29.91	759.7	81.0	27.2	61	e.	16.0	7.2	.....	4 cs;c	6 ks;k	wsw.	ese.	0.05	1.3	cloudy.	Oliver & Figot.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.20	767.0	30.20	767.0	46.2	7.9	.....	sse.	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Groningen	30.16	766.0	30.21	767.4	42.1	5.6	.....	sw.	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Helder	30.19	766.8	30.19	766.8	41.0	5.0	.....	sw.	.....	.....	2	.....	.....	.....	.....	0.008	0.2	.....	
Hellevoetsluis	30.19	766.7	30.19	766.7	43.3	6.3	83	sse.	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Utrecht	30.18	766.5	30.22	767.7	42.3	5.7	81	sw.	.....	.....	2	.....	8	.....	.....	0	0	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.73	755.1	29.79	756.7	44.2	6.8	91	ssw.	20	9	.....	.....	10	.....	.....	0.102	2.6	raining	
Brono	29.60	751.8	29.64	752.8	21.2	— 6.0	64	nw.	18	8	.....	.....	10	.....	.....	0.315	8.0	.....	
Christiania	29.60	751.8	29.75	755.6	34.5	1.4	69	wsw.	0	0	.....	.....	10	.....	.....	0	0	foggy	
Gjæsvær	29.58	751.2	29.60	751.8	9.3	—12.6	.....	ne.	.....	.....	4	.....	8	.....	.....	.....	.....	.....	
Lodingen	29.52	749.8	29.57	751.0	16.7	— 8.5	82	n.	.....	.....	6	.....	10	.....	.....	0.248	6.3	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	60.4	15.8	81	wsw.	9.8	4.4	.....	.....	3	.....	.....	0.118	3.0	.....	Dr. J. A. Sampaio.
Campo Major	29.33	745.0	30.32	770.0	71.2	21.8	27	e.	2.5	1.1	.....	.....	8	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.01	762.3	30.10	764.6	62.6	17.0	91	wsw.	1.8	0.8	.....	.....	10	.....	.....	0.992	25.2	rain & fog	Capt. D. A. de Cunha.
Lisbon, Observatory	29.93	760.2	30.29	769.3	61.2	16.2	74	se.	6.9	3.1	.....	.....	10	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	29.64	752.9	29.71	754.7	62.6	17.0	76	w.	17.4	7.8	.....	.....	3	.....	.....	0.567	14.4	.....	
Saint Paul de Loando	29.75	755.7	29.95	760.8	80.6	27.0	86	nnw.	0.7	0.3	.....	.....	3	w.	.....	0.677	17.2	.....	
Serra da Estrella	25.49	647.5	30.31	769.8	44.8	6.8	46	se.	37.4	16.7	.....	.....	8	.....	.....	0.008	0.2	.....	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.69	728.8	29.83	757.6	23.0	— 5.0	.....	sw.	7	3	.....	.....	10 n	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	29.33	744.9	29.35	745.4	2.1	—16.6	72	nne.	2	1	.....	.....	10	.....	.....	0	0	.....	Capt. Sseliwerstow.
Astrakhan	29.64	752.8	29.56	750.7	33.8	1.0	81	sw.	18	8	.....	10 cp	0	.....	.....	0.098	2.5	.....	Capt. Wisganow.
Barnaul	29.54	750.4	30.07	763.8	25.0	— 3.9	62	calm	0	0	.....	.....	9	.....	.....	0	0	.....	Meteorological Obs'y.
Dorpat	29.49	749.0	29.74	755.4	28.4	— 2.0	50	w.	9	4	.....	.....	10 n	.....	.....	0	0	.....	Observatory.
Ekaterinburg	28.53	724.6	29.55	750.5	15.8	— 9.0	54	ssw.	9	4	.....	10c;cs	0	.....	.....	0.016	0.4	solar halo	Meteorological Obs'y.
Kasan	28.78	730.9	29.06	738.1	14.0	—10.0	83	sse.	4	2	.....	.....	10	.....	.....	0.028	0.7	light snow	Observatory.
Kertch	29.80	757.0	29.82	757.5	39.0	3.9	70	wnw.	11	5	.....	0	5 ks	.....	.....	0.079	2.0	.....	Lagorio & Sastyrez.
Kieff	29.15	740.4	29.81	757.1	34.9	1.6	39	nw.	13	6	.....	c	3 ks	.....	.....	0	0	.....	Observatory.
Lugan	29.32	744.6	29.53	750.0	30.9	— 0.6	82	wsw.	45	20	.....	.....	8	.....	.....	0.012	0.3	.....	Meteorological Obs'y.
Moscow	28.67	728.2	29.17	741.0	16.5	— 8.6	70	n.	7.8	3.5	.....	.....	10 s	.....	.....	0.043	1.1	.....	Meteorological Obs'y.
Nikolaiev	29.91	759.7	29.98	761.5	41.5	5.3	72	nnw.	31	14	.....	cs	6 n	.....	.....	0	0	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.27	768.8	30.35	771.0	— 6.2	—21.2	82	calm	0	0	.....	.....	10	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	30.35	770.9	30.49	774.5	34.7	1.5	29	ne.	4	2	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.58	751.3	29.60	751.7	14.7	— 9.6	72	wnw.	16	7	.....	0	0	.....	.....	0.039	1.0	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.34	719.8	29.90	759.4	57.6	14.2	56	ne.	4	2	.....	.....	0	.....	.....	0	0	.....	Teich, A. M.
Tiflis	28.48	723.3	29.94	760.4	39.0	3.9	42	nw.	45	20	.....	0	2 k	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	30.11	764.7	30.17	766.4	23.4	— 4.8	90	calm	0	0	.....	0	6 k	.....	.....	0	0	.....	
Warsaw	29.71	754.5	30.15	765.8	39.2	4.0	90	w.	9	4	.....	.....	10 ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.51	749.6	29.95	760.7	33.5	0.9	56	nw.	11	5	.....	.....	6	.....	.....	0	0	.....	Berg, Assistant.
Yeniseisk	30.02	762.6	30.34	770.5	18.9	— 7.3	67	e.	9	4	.....	.....	3	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.74	755.4	49	9.4	93	ssw.	.....	.....	4	10	3	ssw.	.....	0.1	3.	gloomy	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.21	767.3	30.32	770.0	59.0	15.	66	sw.	3.6	1.6	.....	.....	0	.....	.....	0	0	clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.25	768.3	30.31	769.8	65.9	19.4	40	w.	2.2	1.0	.....	3	5	w.	.....	0	0	almost cov'd	Prof. Manuel de Naveran'
Burgos, Met. Obs'y	27.37	695.1	30.34	770.7	59.0	15.0	41	s.	6.9	3.1	.....	0	6	.....	.....	0	0	cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.15	715.0	30.39	772.0	61.2	16.2	44	sw.	3.4	1.5	.....	0	3	.....	.....	0	0	light clouds	The Staff.
Murcia, Met. Obs'y	30.26	768.6	30.41	772.4	64.2	17.9	51	ene.	1.1	0.5	.....	0	0	.....	.....	0	0	clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.22	742.2	30.11	764.8	63.3	17.4	43	sse.	11.2	5.0	.....	.....	10	.....	.....	0	0	covered	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.11	764.8	30.18	766.5	71.3	21.8	87	n.	11.6	5.2	.....	0	4 k;s	.....	n.	0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	30.04	763.0	30.10	764.5	75.7	24.3	73	ene.	0	0	.....	4 c	2 ks	.....	ene.	0	0	fair	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.26	768.6	30.36	771.2	66.0	18.9	43	e.	8.0	3.6	.....	2	3	s.	se.	0	0	.....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.01	762.3	30.10	764.6	70.2	21.2	98	calm	0	0	.....	4 k	5 k	sw.	sw.	0	0	.....	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.04	763.0	30.17	766.3	69.4	20.8	79	nw.	5.8	2.6	.....	.....	9 ks	.....	nw.	0.01	0.3	covered	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.53	750.1	29.57	751.1	6.8	—14.0	100	calm	.....	.....	0	.....	10	.....	.....	0	0	.....	
Umea	29.47	748.4	29.52	749.7	22.3	— 5.4	90	nw.	.....	.....	8	.....	1	.....	.....	0.118	3.0	.....	
Hernosand	29.56	750.9	29.61	752.2	32.2	0.1	40	wnw.	.....	.....	4	.....	4	.....	.....	0	0	.....	
Stockholm	29.62	752.3	29.80	756.8	36.3	2.4	57	wsw.	.....	.....	2	.....	1	.....	.....	0	0	.....	
Wisby	29.82	757.4	29.88	758.9	36.7	2.6	72	w.	.....	.....	4	.....	3	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	29.66	753.4	29.75	755.6	35.4	1.9	54	sw.	9.4	4.2	.....	.....	7	.....	.....	0	0	.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.89	733.7	30.32	770.1	51.8	11.0	47	n.	.....	.....	1	.....	.....	.....	.....	0	0	clear	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.29	769.3	44.4	6.9	56	sw.	9	4.0	.....	.....	6	.....	n.	0	0	.....	The Observatory.
Valona	.....	.....	30.28	769.2	58.6	14.8	.....	nw.	.....	.....	1	.....	0	.....	.....	0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.99	761.8	52.2	11.2	91	sw.	.....	.....	1		10 n	.....	sw.	0.21	5.3	.....	Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.19	766.8	30.28	769.1	22.3	— 5.4	73	n.	5	2.2			10 s			0	0	cloudy	
Alpena, Michigan	29.80	756.9	30.50	774.7	13.5	—10.3	80	nw.	5	2.2		0	0			0.11	2.8	clear	
Atlanta, Georgia	29.12	739.6	30.34	770.6	32.2	0.1	54	nw.	13	5.8		0	0			0	0	clear	
Atlantic City, New Jersey	30.21	767.3	30.22	767.6	22.4	— 5.3	78	nw.	10	4.5		0	0			0	0	clear	
Augusta, Georgia	30.13	765.3	30.33	770.4	36.4	2.4	46	nw.	3	1.3		0	0			0	0	clear	
Baltimore, Maryland	30.24	768.1	30.29	769.4	31	— 0.6	67	nw.	7	3.1		0	6 s		nw.	0	0	fair	
Barnegat, New Jersey	30.19	766.8	30.21	767.3	21.8	— 5.7	67	n.	20	8.9		0	2 k		n.	inap.	inap.	clear	
Bismarck, Dakota	28.28	718.3	30.26	768.6	3	—16.1	76	calm	0	0		0	hz.			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.06	687.3	30.02	762.5	30	— 1.1	81	w	2	0.9			10 s		calm	0.08	2.0	cloudy	
Boston, Massachusetts	29.99	761.7	30.15	765.8	18.0	— 7.8	75	nw.	11	4.9		7 c	hz.	nw.		0	0	fair	
Brownsville, Texas	30.17	766.3	30.22	767.6	66	18.9	100	calm	0	0			10 s			0.81	20.6	cloudy	
Buffalo, New York	29.60	751.8	30.40	772.1	21	— 6.1	84	nw.	5	2.2		0	sk.			0.04	1.0	clear	
Burlington, Vermont	29.98	761.5	30.29	769.4	13.3	—10.4	85	n.	10	4.5			10 n		n.	0.01	0.3	light snow	
Cairo, Illinois	30.10	764.5	30.52	775.2	28.5	— 1.9	77	n.	10	4.5		0	0			0	0	clear	
Campo, California	27.47	697.7	30.11	764.8	26	— 3.3	88	ne.	1	0.4		2 c	0	w.		0	0	clear	
Camp Thomas, Arizona	27.30	693.4	30.13	765.3	51	10.6	83	calm			0		10 n			inap.	inap.	light rain	
Cape Henry, Virginia	30.22	767.6	30.24	768.1	32	0.0	78	nw.	28	12.5		0	8 ks		nw.	0	0	cloudy	
Cape May, New Jersey	30.20	767.1	30.23	767.8	27	— 2.8	64	n.	24	10.7		0	0			inap.	inap.	clear	
Castroville, Texas	29.45	748.0	30.29	769.4	54	12.2	80	se.	5	2.2			10 s			0	0	cloudy	
Cedar Keys, Florida	30.28	769.1	30.30	769.6	45	7.2	53	n.	11	4.9		0	0			0	0	clear	
Champaign, Illinois	29.66	753.4	30.53	775.4	20.3	— 6.5	84	calm	0	0		0	0			0	0	clear	
Charleston, S. Carolina	30.17	766.3	30.23	767.8	41	5.0	57	n.	9	4.0		0	0			0	0	clear	
Charlotte, N. Carolina	29.39	746.5	30.28	769.1	32.0	0.0	60	ne.	5	2.2		0	fg.			0	0	clear	
Chattanooga, Tennessee	29.56	750.8	30.42	772.7	29.5	— 1.4	60	n.	7	3.1		1 cs	0	calm		0	0	clear	
Cheyenne, Wyoming	24.05	610.9	30.30	769.6	33.3	0.7	33	nw.	8	3.6		0	0			0	0	clear	
Chicago, Illinois	29.76	755.9	30.51	774.9	19.8	— 6.8	77	nw.	3	1.3		0	0			inap.	inap.	clear	
Chincoteague, Virginia	30.21	767.3	30.23	767.8	29	— 1.7	67	n.	21	9.4		2 c	5 s	n.	n.	0	0	fair	
Cincinnati, Ohio	29.81	757.2	30.50	774.7	26	— 3.3	76	n.	6	2.7			10 ks		n.	0	0	cloudy	
Cleveland, Ohio	29.67	753.6	30.46	773.7	26.3	— 3.2	80	n.	14	6.3		0	1 k		n.	0.08	2.0	clear	
Coleman City, Texas																			
Columbus, Ohio	29.55	750.6	30.45	773.4	26	— 3.3	76	nw.	6	2.7			10 s		nw.	inap.	inap.	cloudy	
Concho, Texas	28.20	718.6	30.31	769.9	50	10.0	80	calm	0	0			10 s			0	0	cloudy	
Davenport, Iowa	29.80	756.9	30.50	774.7	23	— 5.0	61	e.	4	1.8		hz.	4 s	calm	calm	0	0	fair	
Dayton, Washington T'y	28.16	715.3	29.97	761.2	33	0.6	88	sw.	4	1.8			10 n			0.02	0.5	light snow	
Deadwood, Dakota	25.39	644.9	30.31	769.9	20	— 6.7	87	se.	1	0.4		0	0			0	0	clear	
Decatur, Texas					48	8.9	74	s.	10	4.5			10 s			0	0	cloudy	
Delaware Breakwater, Del.	30.21	767.3	30.23	767.8	28	— 2.2	77	n.	30	13.4		2 k	2 ks	n.	n.	0	0	fair	
Denison, Texas	29.50	749.3	30.34	770.6	49.5	9.7	63	se.	6	2.7			10 s			0	0	cloudy	
Denver, Colorado	24.84	630.9	30.36	771.1	30.5	— 0.8	51	s.	6	2.7		0	0			0	0	clear	
Des Moines, Iowa	29.45	748.0	30.42	772.7	20	— 6.7	84	se.	6	2.7		0	0			0	0	clear	
Detroit, Michigan	29.72	754.9	30.47	773.9	29.0	— 1.7	77	nw.	8	3.6		0	0			0.01	0.3	clear	
Dodge City, Kansas	27.52	699.0	30.20	768.6	40	4.4	86	s.	7	3.1			10 s			0	0	cloudy	
Dubuque, Iowa	29.73	755.1	30.49	774.4	11.5	—11.4	70	w.	1	0.4		0	fg.		calm	0	0	clear	
Duluth, Minnesota	29.67	753.6	30.43	772.9	7	—13.9	76	calm	0	0		0	3 s		calm	0	0	clear	
Eagle Pass, Texas	29.52	749.8	30.36	771.1	54.0	12.2	86	se.	5	2.2			10 s			0	0	cloudy	
Eagle Rock, Idaho	25.30	642.6	30.20	767.1	2	—16.7	76	n.	6	2.7		0	0			0	0	clear	
Eastport, Maine	29.97	761.2	30.04	763.0	23	— 5.0	73	n.	17	7.6			10 s		n.	inap.	inap.	cloudy	
El Paso, Texas	26.35	669.3	30.23	767.8	46	7.8	38	sw.	2	0.9			10 s		calm	0	0	cloudy	
Erie, Pennsylvania	29.63	752.6	30.40	772.1	26	— 3.3	88	n.	7	3.1			8 ks		n.	0.02	0.5	cloudy	
Escanaba, Michigan	29.80	756.9	30.52	775.2	22	— 5.6	76	nw.	1	0.4		3 c	4 s	nw.		0.13	3.3	fair	
Fort Apache, Arizona	25.06	636.5	30.16	766.1	28	— 2.2	61	ne.	3	1.3		0	5 s		calm	0	0	fair	
Fort Assinnaboine, Montana	27.16	689.9	30.20	767.1	24	— 4.4	53	e.	4	1.8		0	7 s			0	0	fair	
Fort Bennett, Dakota	28.53	724.6	30.26	768.6	10	—12.2	60	calm	0	0		0	0			0	0	clear	
Fort Benton, Montana	27.16	689.9	30.16	766.1	28	— 2.2	67	calm	0	0		0	0			0	0	clear	
Fort Buford, Dakota	28.09	713.5	30.27	768.8	14	—10.0	66	s.	1	0.4		0	0			0	0	clear	
Fort Custer, Montana	26.84	681.7	30.20	767.1	20	— 6.7	58	calm	0	0		0	0			0	0	clear	
Fort Davis, Texas	25.23	640.8	30.19	766.8	40	4.4	86	s.	1	0.4			10 s		calm	0	0	cloudy	
Fort Elliott, Texas	27.34	694.4	30.24	768.1	39	3.9	73	s.	12	5.4			10 s		se.	0	0	cloudy	
Fort Gibson, Indian T'y	29.74	755.4	30.34	770.6	43.0	6.1	60	e.	4	1.8		9 cs	0	e.		0	0	cloudy	
Fort Grant, Arizona	25.32	643.1	30.18	766.6	46	7.8	74	sw.	4	1.8			10 s			0.02	0.5	cloudy	
Fort Griffin, Texas	28.97	735.8	30.34	770.6	48	8.9	77	calm	0	0		3 cs	0	w.		0	0	clear	
Fort Keogh, Montana	27.57	700.3	30.25	768.3	13	—10.6	66	s.	3	1.3		0	0			0	0	clear	
Fort Macon, North Carolina	30.22	767.6	30.23	767.8	32	0.0	68	nw.	20	8.9		hz.	hz.	calm	calm	0	0	light haze	
Fort McKavett, Texas	27.97	710.4	30.35	770.9	51.3	10.7	61	sw.	7	3.1			10 s			0	0	cloudy	
Fort Missoula, Montana	26.65	676.9	30.08	764.0	16	— 8.9	83	ne.	1	0.4			10 s			0.07	1.8	cloudy	
Fort St. Michaels, Alaska	29.79	756.7	29.83	757.7	—29	—33.9	100	n.	18	8.0			10 s			0	0	cloudy	
Fort Shaw, Montana	26.29	667.8	30.14	765.5	28	— 2.2	67	w.	8	3.6		0	0			0	0	clear	
Fort Sill, Indian Territory	28.99	736.3	30.30	769.6	44	6.7	80	s.	6	2.7			10 s			0	0	cloudy	
Fort Stevenson, Dakota	28.24	717.3	30.26	768.6	3	—16.1	76	calm	0	0		0	hz.		calm	0	0	dense haze	
Fort Verde, Arizona					35	1.7	66	nw.			1	3 cs	4 s	sw.	w.	0	0	fair	
Fort Washakie, Wyoming	24.47	621.5			5.8	—14.6	81	w.	3	1.3		0	0			0	0	clear	
Fredericksburg, Texas	28.50	723.9	30.30	769.6	54	12.2	64	calm	0	0			10 s			0	0	cloudy	
Galveston, Texas	30.26	768.6	30.30	769.6	60	15.6	71	se.	12	5.4			10 n		sw.	0.03	0.8	light rain	
Grand Haven, Michigan	29.78	756.4	30.49	774.4	27.0	— 2.8	88	ne.	2	0.9			10 s			0.03	0.8	cloudy	
Hatteras, North Carolina	30.18	766.6	30.20	767.1	33	0.6	68	ne.	17	7.6		5 k	hz.	ne.		0	0	fair	
Helena, Montana	25.73	653.5	30.13	765.3	18	— 7.8	70	calm	0	0		0	5 s			0	0	fair	
Henrietta, Texas	29.28	743.7	30.32	770.1	48	8.9	71	se.	12	5.4			10 s			0	0	cloudy	
Huron, Dakota	28.75	730.2	30.27	768.8	13	—10.6	70	se.	1	0.4			10 s			0	0	cloudy	
Indianapolis, Indiana	29.65	753.1	30.50	774.7	19	— 7.2	76	n.	1	0.4		0	0			inap.	inap.	clear	
Indianola, Texas	30.26	768.6	30.29	769.4	60.1	15.6	81	e.	13	5.8			10 s			0	0	cloudy	
Jacksboro, Texas	29.10	739.1	30.34	770.6	48	8.9	71	se.	4	1.8			10 ks			0	0	cloudy	
Jacksonville, Florida	30.23	767.8	30.28	769.1	45	7.2	53	w.	3	1.3		0	0			0	0	clear	
Keokuk, Iowa	29.77	756.1	30.47	773.9	21.0	— 6.1	76	e.	8	3.6		0	0			0	0	clear	
Key West, Florida	30.18	766.6	30.20	767.1	66.0	18.9	68	n.	24	10.7		0	4 k;hz		n.	0	0	fair	
Kittyhawk, North Carolina	30.21	767.3	30.23	767.8	31	— 0.6	68	nw.	20	8.9		0	9 ks;s		ne.	0	0	cloudy	
Knoxville, Tennessee	29.35	745.5	30.43	772.9	26.3	— 3.2	64	nw.	10	4.5		0	2 s		nw.	0	0	clear	
La Crosse, Wisconsin	29.63	752.6	30.47	773.9	5	—15.0	76	calm	0	0		0	0			0	0	clear	
La Mesilla, New Mexico	26.25	666.7	30.26	768.6	45.5	7.5	91	calm	0	0			10 s			0.03	0.8	cloudy	
Leavenworth, Kansas	29.41	747.0	30.36	771.1	33	0.6	78	se.	4	1.8		2 cs	0			0	0	clear	
Lewiston, Idaho	29.14	740.1	30.01	762.2	33	0.6	71	w.	12	5.4			10 s		calm	0	0	cloudy	
Little Rock, Arkansas	30.05	763.3	30.38	771.6	43	6.1	74	calm	0	0		3 cs	3 ks		n.	0	0	fair	
Los Angeles, California	29.67	753.6	30.07	763.8	47.3	8.5	77	ne.	1	0.4			10 s		calm	0	0	cloudy	
Louisville, Kentucky	29.91	759.7	30.50	774.7	25	— 3.9	73	n.	7	3.1		0	5 s		n.	0	0	fair	
Lynchburg, Virginia	29.59	751.6	30.31	769.9	27.0	— 2.8	64	nw.	10	4.5		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.43	747.5	30.52	775.2	13	—10.6	80	sw.	1	0.4		0	hz		calm	0	0	clear	
Marquette, Michigan	29.72	754.9	30.50	774.7	14	—10.0	80	w.	5	2.2			10 s		w.	0.30	7.6	cloudy	
Mason, Texas	28.58	725.9	30.31	769.9	53	11.7	61	calm	0	0			10 s		calm	0	0	cloudy	
Memphis, Tennessee	30.08	764.0	30.43	772.9	37	2.8	72	ne.	4	1.8		0	0			0	0	clear	
Milwaukee, Wisconsin	29.71	754.6	30.51	774.9	19	— 7.2	84	w.	2	0.9			10 s		w.	0	0	cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.37	771.4	30.41	772.4	44	6.7	68	ne.	6	2.7	.....	4 ck	0	w.	.....	0	0	fair	
Montgomery, Alabama	30.15	765.8	30.39	771.9	43	6.1	51	n.	2	0.9	.....	4 cs	0	n.	.....	0	0	fair	
Moorhead, Minnesota	29.20	741.7	30.30	769.6	15	—9.4	83	s.	16	7.2	.....	.....	10 s	.....	s.	0	0	cloudy	
Morgantown, W. Virginia	29.35	745.5	30.42	772.7	27.5	—2.5	72	nw.	2	0.9	.....	.....	10 s	.....	nw.	inap.	inap.	cloudy	
Mt. Washington, N. H.	23.51	597.1	30.13	765.3	4.0	—15.6	60	n.	30	13.4	.....	0	8 s	.....	n.	0	0	cloudy	
Nashville, Tennessee	29.91	759.7	30.47	773.9	26.5	—3.1	75	ne.	8	3.6	.....	0	0	.....	.....	0	0	clear	
New Haven, Connecticut	30.08	764.0	30.20	767.1	18	—7.8	67	n.	8	3.6	.....	4 c	0	sw.	.....	0	0	fair	
New London, Connecticut	30.13	765.3	30.18	766.6	22	—5.6	58	s.	4	1.8	.....	2 cs	0	calm	.....	0	0	clear	
New Orleans, Louisiana	30.31	769.9	30.37	771.4	50.0	10.0	52	ne.	11	4.9	.....	2 c	hz	nw.	.....	0	0	clear	
Newport, Rhode Island	30.10	764.5	30.15	765.8	23.0	—5.0	73	n.	13	5.8	.....	6 ck	3 ks	nw.	n.	0	0	cloudy	
New River, N. Carolina	.....	.....	.....	.....	29	—1.7	45	nw.	.....	.....	1	0	0	.....	.....	0	0	clear	
New Shoreham, Rhode I'd.	30.11	764.8	30.14	765.5	23.8	—4.6	61	n.	28	12.5	.....	0	0	.....	.....	0	0	clear	
New York, New York	30.05	763.3	30.24	768.1	23	—5.0	73	n.	8	3.6	.....	2 cs	0	.....	.....	inap.	inap.	clear	
Norfolk, Virginia	30.23	767.8	29.26	768.6	30	—1.1	56	n.	8	3.6	.....	2 ck	1 ks	w.	.....	0	0	clear	
North Platte, Nebraska	27.13	689.1	30.23	767.8	22.6	—5.2	74	nw.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Olympia, Washington T'y	29.90	759.4	29.94	760.5	32.5	0.3	94	s.	1	0.4	.....	1 cs	0	calm	.....	inap.	inap.	clear	
Omaha, Nebraska	29.05	737.9	30.32	770.1	28.0	—2.2	77	se.	8	3.6	.....	0	0	.....	.....	0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	30.00	762.0	30.02	762.5	—48.5	—44.7	74	wnw.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Oswego, New York	29.97	767.2	30.32	770.1	22.0	—5.6	80	ne.	12	5.4	.....	0	1 k	.....	n.	inap.	inap.	clear	
Palestine, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pensacola, Florida	30.37	771.4	30.40	772.1	44.2	6.8	51	n.	8	3.6	.....	0	3 s	.....	w.	0	0	clear	
Philadelphia, Pa.	30.16	766.1	30.27	768.8	24	—4.4	73	n.	13	5.8	.....	0	0	.....	.....	0.01	0.3	clear	
Pike's Peak, Colorado	17.69	449.3	30.41	772.4	10	—12.2	48	sw.	26	11.6	.....	0	1 s	.....	.....	0	0	clear	
Pioche, Nevada	24.07	611.4	30.23	767.8	25	—3.9	67	s.	2	0.9	.....	0	0	.....	.....	0	0	clear	
Pittsburg, Pennsylvania	29.54	750.3	30.40	772.1	27.0	—2.8	80	w.	8	3.6	.....	.....	10 n	.....	w.	inap.	inap.	light snow	
Port Eads, Louisiana	30.35	770.9	30.36	771.1	54.0	12.2	72	ne.	13	5.8	.....	0	hz	.....	.....	0	0	clear	
Port Huron, Michigan	29.73	755.1	30.46	773.7	23.6	—4.7	94	nw.	7	3.1	.....	.....	10 s	.....	calm	0.08	2.0	cloudy	
Portland, Maine	30.08	764.0	30.14	765.5	25.0	—3.9	68	n.	14	6.3	.....	.....	10 s	.....	n.	0	0	cloudy	
Portland, Oregon	29.87	758.7	29.94	760.5	34.9	1.6	89	calm	0	0	.....	0	4 s	.....	calm	0	0	fair	
Portsmouth, N. Carolina	.....	.....	.....	.....	33	0.6	60	n.	20	8.9	.....	0	3 k	.....	n.	0	0	clear	
Prescott, Arizona	24.79	629.7	30.15	765.8	28.1	—2.2	70	s.	3	1.3	.....	0	0	.....	.....	0	0	clear	
Provincetown, Mass.	30.00	763.5	30.09	764.3	27	—2.8	77	n.	13	5.8	.....	.....	10 s	.....	n.	0.05	1.3	cloudy	
Punta Rassa, Florida	30.23	767.8	30.24	768.1	52	11.1	52	n.	12	5.4	.....	0	hz	.....	.....	0	0	dense haze	
Red Bluff, California	29.55	750.6	29.93	760.2	48.2	9.0	92	se.	16	7.2	.....	.....	10 n	.....	.....	0.54	13.7	light rain	
Rio Grande City, Texas	30.02	762.5	30.27	768.8	58	14.4	93	e.	4	1.8	.....	.....	10 s	.....	calm	0.02	0.5	cloudy	
Rochester, New York	29.63	752.6	30.34	770.6	21	—6.1	84	nw.	1	0.4	.....	0	0	.....	.....	0.05	1.3	clear	
Roseburg, Oregon	29.30	745.7	29.93	760.2	40	4.4	89	nw.	3	1.3	.....	.....	10 n	.....	.....	0.11	2.8	light rain	
Sacramento, California	29.90	759.4	29.98	761.5	50.2	10.1	86	se.	10	4.5	.....	.....	10 n	.....	.....	0.12	3.0	light rain	
St. Louis, Missouri	29.88	758.9	30.52	775.2	23.2	—4.9	73	e.	8	3.6	.....	0	0	.....	.....	0	0	clear	
St. Paul, Minnesota	29.46	748.3	30.40	772.1	2.5	—16.4	81	se.	6	2.7	.....	2 c	0	.....	.....	0	0	clear	
St. Vincent, Minnesota	29.23	742.4	30.20	767.1	2	—16.7	100	s.	24	10.7	.....	0	2 s	.....	calm	0	0	clear	
Salt Lake City, Utah	25.69	652.5	30.25	768.3	23	—5.0	56	calm	0	0	.....	0	0	.....	.....	0	0	clear	
San Antonio, Texas	29.60	751.8	30.32	770.1	52.6	11.4	72	calm	0	0	.....	.....	10 s	.....	calm	0	0	cloudy	
San Diego, California	30.02	762.5	30.09	764.3	49.3	9.6	82	e.	6	2.7	.....	0	1 s	.....	.....	0	0	clear	
Sandusky, Ohio	29.72	754.9	30.44	773.2	28.8	—1.8	77	nw.	9	4.0	.....	0	5 s	.....	nw.	0.04	1.0	fair	
Sandy Hook, New Jersey	30.19	766.8	30.23	767.8	23.0	—5.0	73	n.	26	11.6	.....	0	0	.....	.....	0	0	clear	
San Francisco, California	29.89	759.2	29.96	761.0	52	11.1	90	se.	11	4.9	.....	.....	10 n	.....	s.	0.43	10.9	light rain	
Santa Fé, New Mexico	23.30	591.8	30.34	770.6	32	0.0	62	e.	1	0.4	.....	4 c	0	.....	.....	0	0	fair	
Savannah, Georgia	30.18	766.6	30.27	768.8	41	5.0	40	nw.	14	6.3	.....	0	0	.....	.....	0	0	clear	
Shreveport, Louisiana	30.13	765.3	30.38	771.6	50	10.0	58	e.	2	0.9	.....	.....	10 s	.....	e.	0	0	cloudy	
Silver City, New Mexico	24.30	618.7	30.21	767.3	40	4.4	86	nw.	2	0.9	.....	.....	10 n	.....	calm	0.10	2.5	light rain	
Sitka, Alaska	29.22	742.2	29.29	744.0	25.5	—3.6	86	e.	10	4.5	.....	5 k	2 s	e.	calm	0.21	5.3	fair	
Smithville, North Carolina	30.22	767.6	30.26	768.6	32	0.0	60	ne.	12	5.4	.....	0	0	.....	.....	0	0	clear	
Spokane Falls, Wash. Ter.	27.92	709.2	30.05	763.3	20.5	—6.4	93	calm	0	0	.....	.....	10 n	.....	.....	0.12	3.0	heavy snow	
Springfield, Illinois	29.79	756.7	30.52	775.2	26	—3.3	70	se.	4	1.8	.....	0	0	.....	.....	0	0	clear	
Springfield, Massachusetts	30.08	764.0	30.22	767.6	19.3	—7.1	80	n.	5	2.2	.....	9 cs	0	n.	.....	0	0	cloudy	
Springfield, Mo.	28.88	733.5	30.45	773.4	38.5	3.6	65	se.	8	3.6	.....	2 cs	0	.....	.....	0	0	clear	
Stockton, Texas	27.12	688.8	30.25	768.3	44.6	7.0	100	s.	8	3.6	.....	0	3 s	.....	s.	0	0	clear	
Thatcher's Island, Mass.	30.03	762.7	30.09	764.3	26.5	—3.1	84	n.	22	9.8	.....	5 k	0	nw.	.....	0	0	fair	
Toledo, Ohio	29.72	754.9	30.46	773.7	28	—2.2	67	w.	2	0.9	.....	.....	10 n	.....	w.	0.01	0.3	light snow	
Tucson, Arizona	27.66	702.6	30.14	765.5	53	11.7	86	e.	2	0.9	.....	.....	10 n	.....	.....	0.27	0.9	light rain	
Umatilla, Oregon	29.65	753.1	30.03	762.7	36.6	2.6	74	n.	6	2.7	.....	.....	10 s	.....	.....	0	0	cloudy	
Uvalde, Texas	29.27	743.4	30.27	768.8	56	13.3	69	se.	2	0.9	.....	.....	10 s	.....	se.	0	0	cloudy	
Vicksburg, Mississippi	30.14	765.5	30.41	772.4	46	7.8	47	e.	10	4.5	.....	8 k	hz	calm	.....	0	0	cloudy	
Visalia, California	29.60	751.8	29.98	761.5	40.5	4.7	82	se.	5	2.2	.....	0	3 s	.....	.....	0	0	clear	
Washington, D. C.	30.18	766.6	30.30	769.6	28	—2.2	77	nw.	7	3.1	.....	9 ck	0	nw.	.....	0	0	cloudy	
West Los Animas, Colorado	26.07	662.2	30.20	767.1	29	—1.7	80	nw.	6	2.7	.....	0	5 s	.....	w.	0	0	fair	
Wickenburg, Arizona	.....	.....	.....	.....	35.5	1.9	81	nw.	.....	.....	1	6 c	0	nw.	.....	0	0	fair	
Williamsport, Pa.	29.66	753.4	30.29	769.4	28	—2.2	80	nw.	6	2.7	.....	.....	10 n	.....	nw	inap.	inap.	light snow	
Wilmington, N. Carolina	30.21	767.3	30.27	768.8	34	1.1	60	n	7	3.1	.....	hz	sk	calm	calm	0	0	clear	
Winnemucca, Nevada	25.53	648.5	30.05	763.3	27	—2.8	77	ne.	12	5.4	.....	.....	10 s	.....	calm	0	0	cloudy	
Wood's Holl, Mass.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Yankton, Dakota	28.85	732.8	30.27	768.8	12	—11.1	80	ne.	6	2.7	.....	0	0	.....	.....	0	0	clear	
Yuma, Arizona	29.87	758.7	30.01	762.2	47.0	8.3	61	n.	2	0.9	.....	0	1 s	.....	.....	0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1	.....	.....	53.5	11.9	85	calm	0	0	.....	.....	10 ns	.....	.....	0	0	foggy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.06	763.5	30.07	763.8	77	25.0	85	e.	.....	.....	.....	.....	5 ks	.....	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.96	761.0	29.98	761.5	78	25.6	86	calm	0	0	.....	.....	10 ks	.....	calm	0.30	7.6	cloudy	J. I. Plume.
Guadeloupe, W. I.	29.98	761.5	30.00	762.0	71	21.7	86	e.	.....	.....	.....	2 c	0	.....	.....	0	0	clear	B. Bigar.
Havana, Cuba, W. I.	30.19	766.8	30.24	768.1	72	22.2	66	n.	6	2.7	.....	0	5 ks	.....	n.	0	0	fair	A. Van Caneghem.
Kingston, Jamaica, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Johnstone
Navassa, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	77	25.0	86	e.	.....	.....	2	4 c	3 s	e.	.....	0.350	8.9	.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.50	749.3	29.96	761.0	80	26.7	89	calm	.....	.....	0	.....	10 s	.....	calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	92	ne.	.....	.....	4	0	1 ks	.....	ne.	0	0	clear	Earl Flint.
Santiago de Cuba, W. I.	30.08	764.0	30.10	764.5	72	22.2	76	n.	2.4	1.1	.....	0	1 s	.....	.....	0	0	fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.08	764.0	30.14	765.5	—10.0	—23.3	78	s.	16	7.2	.....	5 k	4 s	s.	sw.	0	0	cloudy	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Gibraltar, Mediterranean	30.44	773.2	57	13.9	87	nne.			2		4	nne.						d. clouds	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S. Alert, N. 6° 03′, E. 67° 47′	29.90	759.4	81.5	27.5	78	nne.			4									d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.38	771.6	61	16.1	77	nnw.			1		1							blue sky	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 19° 09′, E. 39° 25′	29.92	760.0	82	27.8	74	nne.			1		2	n.						d. clouds	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.95	760.7	71	21.7	73	nw.			3–4		2	wnw.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S. 40° 33′, E. 50° 53′	30.03	762.7	55.2	12.9	98	se.			5–6		10					4	ese.	raining	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′, W. 61° 31′	30.06	763.5	77	25.0		calm			0		3	ne.						d. clouds	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.80	756.9	57	13.9	65	wnw.			3–4		7	wnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	29.98	761.5	71	21.7	90	n.			2–3		3					2	n.	d. clouds	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 12° 11′, E. 44° 23′	29.84	757.9	83	28.3		nnw.			2–3		5	nnw.				1	nnw.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 34° 51′, E. 18° 58′	29.93	760.2	71	21.7	80	wsw.			3		4					5	e.	d. clouds	Capt. C. A. G. Bridge.
H. M. S. Fawn, N. 13° 20′, E. 43° 30′	29.78	756.4	78	25.6	71	s.			7		0					5	s.	misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.40	772.1	42	5.6	83	calm			0		2							d. clouds	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 17° 10′, W. 82° 00′	29.98	761.5	71.5	21.9	78	ese.			3		7					2 2	se. s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	28.92	734.6	50	10.0	93	sw.			6		10							raining	Capt. L. F. Jones.
H. M. S. Inconstant, Singapore, Malay Pen.	29.94	760.5	76	24.4	95	calm			0		10							raining	Capt. E. H. Seymour.
H. M. S. Iris																			
H. M. S. Iron Duke, N. 22° 57′, E. 113° 24′	30.27	768.8	58	14.4	81	calm			0		0							blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham
H. M. S. Liffey, Coquimbo, Chili	29.91	759.7	63	17.2		ne.			1		8								Capt. J. T. R. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	30.24	768.1	62	16.7	83	sse.			1		2	nw.						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, Port Royal, Jamaica, W. I.	30.04	763.0	71.5	21.9	88	nne.			1		1							blue sky	Capt. E. Drummond.
H. M. S. Orontes, S. 27° 26′, E. 34° 30′	29.93	760.2	80.5	26.9	92	e.			2		3					3	ese.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 49° 39′, W. 13° 29′	29.84	757.9	52	11.1	100	se.			4		10					3	se.	misty	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, N. 4° 05′, E. 5° 50′	29.91	759.7	80	26.7	95	se.			1		10							d. clouds	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	29.71	754.6	70	21.1		s.			1		8							d. clouds	Capt. W. H Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id.	29.91	759.7	33	0.6	89	calm			0		10							overcast	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 4° 04′, E. 39° 43′	29.28	743.7	83	28.3	100	ene.			2–4		3	ene.						squally	Capt. M. Byles.
H. M. S. Thalia, N. 31° 50′, W. 17° 37′	30.12	765.0	68	20.0		ssw.			4–5		6					4	wnw.	d. clouds	
H. M. S. Triumph, S. 17° 07′, W. 81° 56′	30.00	762.0	71	21.7	80	se.			2		7	se.				2	se.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica W I.	30.08	764.0	72	22.2		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, N. 19° 54′, E. 68° 42′	30.06	763.5	76.5	24.7	45	ne.			3–4		0					3	ne	blue sky	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon																			
Quanza, Santiago, Cape Verd Ids	30.06	763.6	81.3	27.4	41	ne.			3		0					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 19° 35′, W. 84° 41′	30.13	765.2	73.9	23.3	96	n.			2		9							raining	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.37	771.4	45	7.2	76	ne.	9	4.0	.....	.....	5	.....	nw.	0	0	.....	.....	fair	
N. Yard, Portsmouth, N. H.	30.14	765.5	20	— 6.7	.....	nw.	5	2.2	.....	.....	9	.....	ne.	0	0	.....	.....	cloudy	
Naval Hospital.																			
Yokohama, Japan	30.17	766.3	41	5.0	39	calm	.....	.....	0	.....	1	.....	w.	0	0	.....	.....	clear	
Adams.																			
Callao, Peru	29.66	753.4	68	20.0	95	sse.	.....	.....	1	.....	10	.....	.....	0	0	gr'd	.....	cloudy	
Alaska.																			
Valparaiso, Chili	29.93	760.2	66	18.9	64	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert.																			
S. 2° 39′, E. 107° 22′*	29.78	756.4	81	27.2	87	nne.	.....	.....	2	.....	8	.....	n.	0	0	sm'h	.....	cloudy	
Alliance.																			
N. 33° 55′, W. 71° 30′	29.93	760.2	50	10.0	72	nw.	.....	.....	5	.....	8	.....	.....	light	light	.....	.....	cloudy	
Ashuelot.																			
Tientsin, China	30.47	773.9	33	0.6	89	se.	.....	.....	1–2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn.																			
Sandy Point, Patagonia	29.05	737.9	48	8.9	63	nnw.	4	1.8	.....	.....	8	.....	calm	2.40	61.0	sm'h	.....	fair	
Colorado.																			
New York, N. Y.	30.22	767.6	22	— 5.6	.....	n.	12	5.4	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Enterprise.																			
N. 34° 47′, W. 75° 08′*	30.17	766.3	41	5.0	82	nnw.	.....	.....	6	.....	8	.....	nw.	.....	.....	mod.	nw.	cloudy	
Essex.																			
N. 18° 57′, W. 21° 08′	30.17	766.3	70	21.1	90	e.	.....	.....	3	.....	2	.....	e.	.....	.....	sm'h	e.	clear	
Franklin.																			
Norfolk, Va	30.29	769.4	31	— 0.6	79	nnw.	18	8.0	.....	.....	2	.....	n.	0	0	.....	.....	fair	
Galena.																			
Villafranca, France	30.36	771.1	56	13.3	87	calm	.....	.....	0	.....	8	.....	.....	.....	.....	sm'h	.....	cloudy	
Independence.																			
N. Yard, Mare I'd, Cal	29.81	757.2	52	11.1	93	se.	2.4	1.1	.....	.....	10	.....	.....	0.50	12.7	.....	.....	light rain	
Kearsarge.																			
New Orleans, La	30.36	771.1	54	12.2	49	ene.	.....	.....	3	.....	5	.....	nw	.....	.....	.....	.....	fair	
Lackawanna.																			
Valparaiso, Chili*	29.90	759.4	63	17.2	100	calm	.....	.....	0	.....	2	.....	w.	.....	.....	.....	.....	clear	
Lancaster.																			
Alexandria, Egypt	30.12	765.0	59	15.0	65	nw.	.....	.....	4–5	.....	2	.....	nw.	.....	.....	mod.	wsw.	fair	
Marion.																			
S. 33° 55′, E. 18° 25′	29.67	753.6	69	20.6	85	wnw.	.....	.....	3	.....	2	.....	wnw.	.....	.....	sm'h	.....	clear	
Michigan.																			
Erie, Pa	30.29	769.4	26	— 3.3	100	n.	.....	.....	5	.....	8	.....	nw.	.....	.....	.....	.....	cloudy	
Minnesota.																			
Newport, R. I.	30.14	765.5	24	— 4.4	.....	n.	10	4.5	.....	.....	5	.....	n.	.....	.....	.....	.....	fair	
Monocacy.																			
Yokohama, Japan	30.41	772.4	39	3.9	82	wsw.	.....	.....	1	.....	5	.....	w.	.....	.....	.....	.....	fair	
Nipsic.																			
Cadiz, Spain	30.34	770.6	67	19.4	45	se.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear	
Onward.																			
Callao, Peru†	30.04	763.0	65	18.3	100	sse.	.....	.....	1	.....	10	.....	nnw.	.....	.....	long	w.	foggy	
Palos.																			
Hong Kong, China	30.28	769.1	58	14.4	82	calm	.....	.....	0	.....	8	.....	.....	.....	.....	.....	.....	cloudy	
Passaic.																			
Washington, D. C.	30.32	770.1	29	— 1.7	.....	nw.	.....	.....	4	.....	10	.....	nw.	.....	.....	.....	.....	cloudy	
Pensacola.																			
S. 29° 49′, W. 71° 40′	29.92	760.0	58	14.4	88	sse.	.....	.....	2	.....	10	.....	sse.	0	0	mod.	s.	cloudy	
Powhatan.																			
Fredericstaed, Santa Cruz.	30.10	764.5	76	24.4	82	ne.	.....	.....	1	.....	8	.....	ne.	.....	.....	.....	.....	cloudy	
Quinnebaug.																			
Alexandria, Egypt	30.13	765.3	58	14.4	64	nw.	.....	.....	6	.....	5	.....	nw.	.....	.....	sm'h	.....	fair	
Ranger.																			
N. 19° 17′, W. 104° 50′*	29.96	761.0	70	21.1	80	ne.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond.																			
N. 30° 49′, E. 146° 58′*	30.19	766.8	57	13.9	63	n.	.....	.....	6	.....	5	.....	w.	0	0	r'gh	nw.	fair	
Shenandoah.																			
S. 27° 18′, W. 24° 25′*	30.27	768.8	74	23.3	90	ese.	.....	.....	2	.....	8	.....	se.	.....	.....	sm'h	.....	fair	
St. Louis.																			
League Island, Pa	30.32	770.1	25	— 3.9	100	n.	18	8.0	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Swatara.																			
Yokohama, Japan*	30.16	766.1	44	6.7	76	calm	.....	.....	0	.....	2	.....	sw.	.....	.....	sm'h	.....	fair	
Tennessee.																			
Fort Monroe, Va	30.22	767.6	31	— 0.6	.....	nnw.	20	8.9	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Vandalia.																			
N. 18° 00′, W. 82° 32′*†	30.20	767.1	77	25.0	73	nne.	.....	.....	3	.....	2	.....	nne.	.....	.....	.....	.....	fair	
Wabash.																			
Boston, Mass.	30.16	766.1	20	— 6.7	.....	nw.	4	1.8	.....	.....	8	.....	nw.	0	0	.....	.....	misty	
Wachusetts.																			
Safety Bay, B. C.	29.76	755.9	34	1.1	.....	w.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	snowing	
Wyoming.																			
Port Royal, S. C.	30.23	767.8	40	4.4	56	nnw.	12	5.4	.....	.....	2	.....	calm	0	0	.....	.....	clear	
Yantic.																			
Belize, Central America*	30.14	765.5	77	25.0	86	ne.	.....	.....	2	.....	2	.....	ne.	.....	.....	.....	.....	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 43° 05′, W. 65° 23′	30.19	766.8	28	—2.2	.....	n.	6	.....	10	.....	ne.	0	0	4	n.	showery	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 47° 40′, W. 39° 50′*	29.13	739.9	59	15.0	.....	w.	1	.....	2	.....	ssw.	3 h'r	3h'r	mod.	n.	clear	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen. N. 45° 01′, W. 45° 05′*	29.05	737.9	44	6.7	.....	n.	1	.....	8	.....	wnw.	.....	.....	h'vy	con.	cloudy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Portland, Maine*	30.16	766.1	26	—3.3	.....	nw.	4	.....	2	.....	nnw.	0	0	.....	.....	clear	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 40° 30, W. 50° 18′*†	28.86	733.0	47	8.3	.....	wsw.	7	.....	8	.....	w.	1 h'r	1 h'r	hv'y	w.	cloudy	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	30.07	763.8	25	—3.9	100	nw.	3	.....	2	.....	nw.	.....	.....	.....	.....	clear	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 51° 24′, W. 16° 18′†	29.75	755.6	53	11.7	86	s.	4	.....	2?	.....	s.	light	light	sm'h	s.	overcast?	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†	29.98	761.5	42	5.6	91	w.	6	.....	5?	.....	sw.	.....	.....	.....	.....	cloudy?	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young, N. 55° 17′, W. 9° 00′*†	30.03	762.7	51	10.6	.....	s.	3	.....	5	.....	ssw.	.....	.....	mod.	ssw.	fine	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 17° 15′, W. 74° 40′*	30.13	765.3	79	26.1	.....	e.	1	.....	7	.....	sw.	0	0	mod.	ese.	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, Port Antonio, Jamaica, W.I*†	29.95	760.7	69	20.6	.....	calm	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 18° 40′, W. 74° 45′	.....	.....	.....	.....	.....	ne.	1	.....	.....	.....	.....	.....	.....	sm'h	ene.	clear	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce, N. 41° —′, W. 74° —	30.43	772.9	.....	.....	.....	nw.	4	.....	0	.....	.....	snow	sq'lls	sm'h	.....	clear	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 31° 43′, W. 31° 09′	30.36	771.1	70	21.1	.....	ese.	4	.....	5	.....	.....	.....	.....	.....	.....	blue sky	.....
Baroda, Capt. C. J. Russell, S. 26° 01′, W. 21° 37′	30.22	767.6	75.5	24.2	85	e.	4	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	.....
Caldew, Capt. W. Peterson, S. 30° 21′, W. 30° 43′	30.32	770.1	72	22.2	.....	ese.	6	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Cipero, Capt. W. N. Lalley, N. 27° 06′ W. 43° 24′	30.05	763.3	72.7	22.6	76	sw.	3	.....	4	.....	.....	.....	.....	2	wsw.	d. clouds	.....
S. City of Agra, Capt. Thos. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coppename. Capt. James Buchan, N. 17° 39′, W. 59° 16′	30.11	764.8	77	25.0	69	ene.	3	.....	3	.....	.....	.....	.....	.....	.....	blue sky	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, N. 9° 20′, E. 91° 55′	29.90	759.4	80.5	26.9	82	ene.	4	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. S. G. Jones, S. 35° 36′, W. 32° 03′	30.40	772.1	66.3	19.1	78	wnw.	3	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Hope, Capt. James Campbell, N. 10° 50′, W. 29° 26′	30.06	763.5	74.5	23.6	90	ne.	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Humboldt, Capt. A. W. Jeffery, N. 28° 35′, W. 66° 00′	30.00	762.0	68.2	20.1	60	nw.	6	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 7° 13′, W. 15° 36′	30.04	763.0	79.9	26.6	74	se.	3	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
May Hulse, Capt. H. Youlden, S. 42° 32′, W. 80° 55′	29.98	761.5	57	13.9	90	w.	6	.....	9	.....	.....	.....	.....	.....	.....	drizzling	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, S. 31° 00′, W. 50° 35′	30.13	765.3	78	25.6	90	ne.	5	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. John Smith, N. 41° 50′, W. 33° 12′	29.27	743.4	59.3	15.2	95	sw.	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry. S. 0° 03′, E. 86° 40′	29.83	757.7	83.5	28.6	75	n.	4	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. C. W. Pearson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Hudson River, N. Y*†	30.26	768.6	.....	.....	.....	nnw.	2	.....	1	.....	.....	0	0	.....	.....	clear	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman, N. 26° 33′, W. 85° 02′*†	30.28	769.1	69	20.6	.....	nne.	4	.....	1	.....	n.	0	0	mod.	n.	fine	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 24° 30′, W. 83° 00′*†	30.18	766.6	64	17.8	.....	n.	.....	.....	hz	.....	.....	.....	.....	sm'h	.....	hazy	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Stembridge, 3d offi
S. S. Gallia, Capt. W. H. P. Hains. N. 40° 52′, W. 59° 41′†	29.48	748.8	42	5.6	91	nw.	7	.....	10	.....	nw.	24 h'r	snow	high	nnw.	snowy	J. H. Mills, 3d officer.

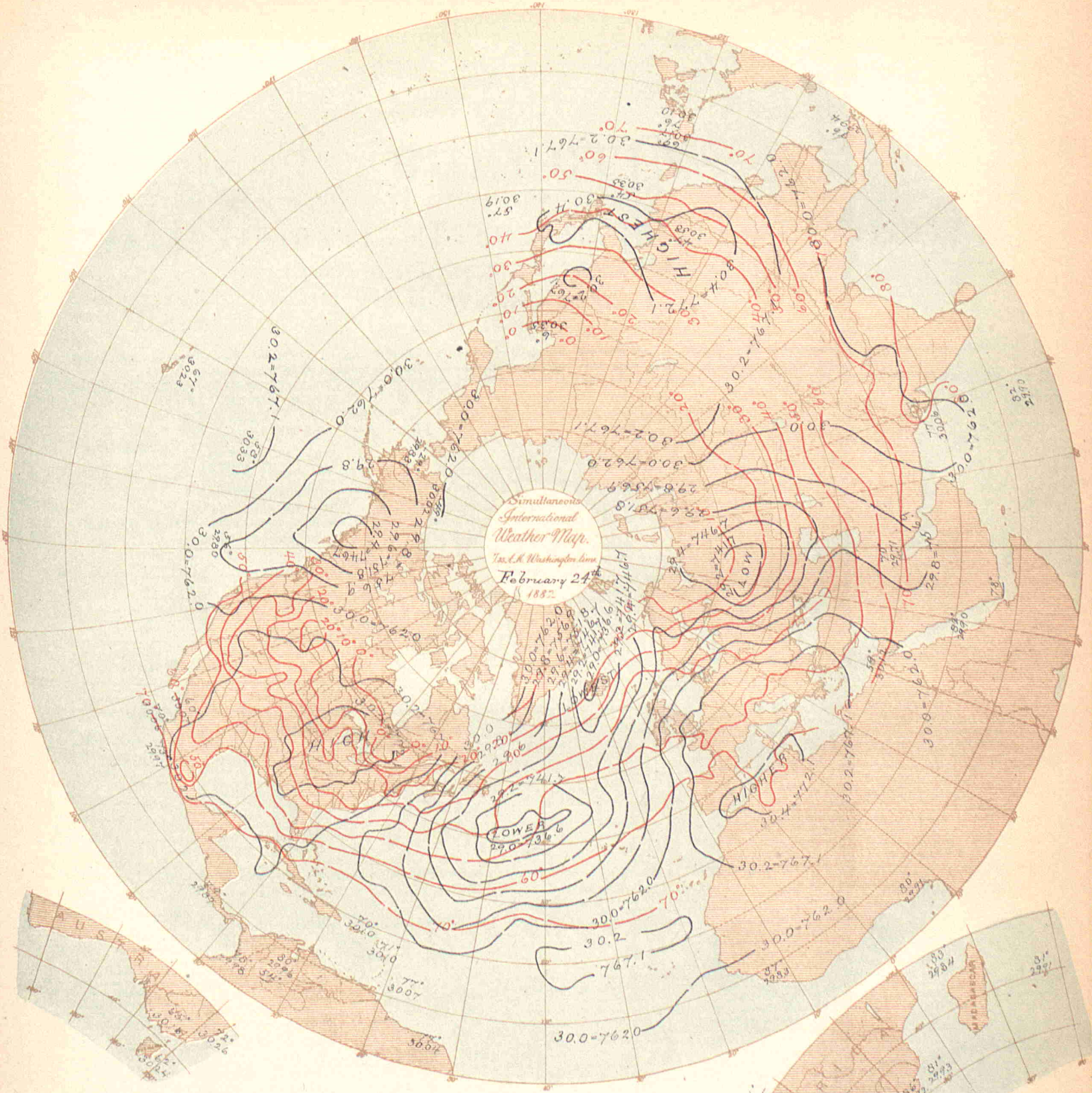
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt. Périer d'Hauterive, N. 49° 40′, W. 15° 55′*†	29.84	758.0	50.0	10.0		s.	4			n.	sse.	rain	rain		sse.	rainy	
S. S. St. Laurent, Capt. A. Sérvan,																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein,																	
S. S. Silesia, Capt. A. Albers, N. 45° 11′, W. 44° 11′*†	29.04	737.6	44.4	6.9		calm	0		8		wnw.	2 h'r	2 h'r	4-5	wnw.	raining	
S. S. Wieland, Capt. C. Heblch,																	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch. N. 40° 11′, W. 61° 30′	29.66	753.4				n.	6		10		n.	snow	&hail		n.		John Inch.
LAMPERT & HOLT'S. S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 9° —′, W. 34° —*†′	30.19	766.8	82	27.8		ese.	3		5?		ese.	0	0	sm'h		clear?	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, Nem York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 25° 31′, W. 85° 36′*†	30.35	770.9	65	18.3		nne.	4		0			0	0	mod.	n.	smoky	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 47° 27′, W. 40° 02′*†	29.08	738.6	53	11.7	86	wnw.	3		8		sw.	1 h'r	1 h'r	small	wnw.		A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, Havana, Cuba†*	30.31	769.9	78	25.6		nne.	2		0			0	0			clear	F. C. Miller, 2d offi.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom [man																	
S. S. City of Alexandria, Capt. L. F. Timmer- Campeche Roads, C. A.*†	30.36	771.1	78	25.6		ene.	3								e.	misty	
S. S. City of Washington, Capt. J. W. Rey- N. 19° 33′, W. 93° 40′*† [nolds	30.20	767.1	80	26.7		e.	3							sm'h		fine	
S. S. Elbe, Capt. W. Willigerod																	
S. S. Lessing, Capt. B. Voss,																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke,																	
S. S. P. Caland, Capt. E Deddes,																	
S. S. Schiedam, Capt. E. M. Chevalier N. 40° 19′, W. 71° 10′	30.10	764.5	34	1.1		nne.	5								ne.	fine	
S. S. Scythia, Capt. M. Murphy																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur, N. 51° 55′, E. 2° 22′*†	30.24	768.1	44.6	7.0		s.	3		10?		sw.	4 h'r	4 h'r		wsw.	fair?	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 22° 23′, W. 19° 59′*	30.23	767.8	84.9	29.4		ne.	1-2		0			0	0	sm'h	ne.	clear	G. H. Lose, 3d offi.
S. S. Leipzig, Capt. F. Pfeiffer, N. 47° 28′ W. 31° 44′	29.20	741.7	56.5	13.6	80	sse.	3		10?		sse.	6 h'r	light	mod.	se.	fair?	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 49° 58′, W. 17° 40 *	29.72	754.9	53.6	12.0		se.	5		9		se.	0	0	light	se.	covered	
S. S. Mosel, Capt. F. Hesse, N. 46° 00′, W. 38° 20′	29.05	737.9	54.5	12.5		calm	0		9		e.	7h'r	7h'r	r'gh	ese.	cloudy	J. Hesse.
S. S. Neckar, Capt. R. Bussius. N. 41° 33′, W. 64° 57′	29.85	758.2	29.3	—1.5		nnw.	6		10		nw.	6 h'r snow	rain &hail	r'gh	n; wnw.	squally	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	
S. S. Oder, Capt. Undeutsch,																	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, Baltimore, Md	30.33	770.4				nw.	4		5		nw.	0	0			fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch N. 44° 39′, W. 43° 52′*	28.95	735.3	55.0	12.8	87	wsw.	3-4		2		w.	1 h'r and	hail snow	long	wsw.	fair	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 27° 58′, E. 125° 05′†	30.35	770.9	64	17.8	83	ne.	2		5		ne.	0	0	light	ne.	fair	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 37° 10′, W. 149° 31′*†	30.33	770.4	58	14.4	87	wnw.	6		9?		w.			mod.	nw.	clear?	
S. S. Oceanic, Capt. J. Metcalfe, N. 45° 44′, W. 156° 50′..*	30.04	763.0	47	8.3	92	w.	5		8		w.			3	w.	foggy	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†	29.72	754.9				n.	3		2		nw.					clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Vineyard Sound, Mass.†	30.17	766.3	30	—1.1	59	nne.	4		10		ne.	snow	snow			snowy	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter.†	29.95	760.7	36	2.2	80	sse.	1	.....	8	.....	se.	.....	.....	.....	.....	fair	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer Seattle, Wash. Ter*†	29.96	761.0	35	1.7	80	calm	0	.....	.....	.....	.....	0	0	.....	.....	foggy	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d offi.
S. S. Columbia, Capt. Fred. Bolles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.87	758.7	36	2.2	90	calm	0	.....	2	.....	s.	.....	.....	.....	.....	hazy	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	29.92	760.0	51	10.6	93	se.	3	.....	10	.....	se.	.....	.....	sm'h	.....	rainy	.....
S. S. Geo. W. Elder, Capt. H. G. Morse, San Francisco, Cal†	29.94	760.5	48	8.9	.....	se.	5	.....	10	.....	se.	h'vy	h'vy	sm'h	.....	overcast	.....
S. S. Idaho, Capt. H. M. Hayward, Victoria, B. C†	29.37	746.0	38	3.3	71	se.	1	.....	2	.....	.....	.....	.....	.....	.....	clear	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 33° 24′, W. 118° 14′†	30.04	763.0	61	16.1	55	se.	5	.....	1	.....	sw.	.....	.....	sm'h	sw.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, N. 34° 22′, W. 118° 32′†	30.12	765.0	51	10.6	78	e.	1	.....	10	.....	se.	o	o	sm'h	.....	cloudy	.....
S. S. State of California, Capt. G. Debney, N. 41° 00′, W. 124° 30′†	29.81	757.2	45	7.2	100	nne.	4	.....	10	.....	.....	o	o	mod.	w.	overcast	.....
S. S. Victoria, Capt. W. E. Plummer, Nanaimo, Vancouver I'd†	29.86	758.5	37	2.8	90	calm	0	.....	2	.....	s.	.....	.....	.....	.....	clear	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. Honolulu, Sandwich Is'ds	30.23	767.8	67	19.4	79	e.	4	.....	8	.....	e.	o	o	.....	.....	cloudy	.....
S. S. City of New York, Capt. W. B. Cobb, N. 35° 30′, W. 130° 00′†	29.80	756.9	56	13.3	80	se.	5	.....	10	.....	.....	o	o	h'vy	se.	cloudy	W. H. Hawes, 2d offi.
S. S. City of Rio de Janeiro, Capt. Cavarly. N. 22° 22′, W. 106° 02′†	30.22	767.6	65	18.3	73	e.	2	.....	2	.....	e.	o	o	long	n.	clear	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, Sydney, N. S. W.†	30.26	768.6	72	22.2	75	s.	4	.....	8	.....	nw.	o	o	sm'h	.....	cloudy	E. Le Saik.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	30.30	769.6	64	17.8	73	e.	2	.....	0	.....	.....	o	o	.....	.....	clear	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 9° 24′, W. 85° 15′†	29.87	758.7	79	26.1	78	ene.	3	.....	1	.....	calm	o	o	mod.	ene.	clear	.....
S. S. Grenada. Capt. M. Connolley, N. 18° 02′, W. 102° 43′†	29.97	761.2	73	22.8	100	n.	1	.....	0	.....	.....	o	o	.....	.....	clear	.....
S. S. South Carolina, Capt. W. J. Russell, San Juan, Nicaragua†	30.02	762.5	76	24.4	72	nne.	6	.....	0	.....	.....	o	o	light	nne.	fine	A. W. Hart, 2d offi.
S. S. Zelandia, Capt. H. Webber, S. 34° 30′, E. 158° 29′	30.20	767.1	73	22.8	67	e.	3	.....	5	.....	e.	.....	.....	mod.	e.	fair	.....
QUEBEC S. S. CO. *E. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M. Faircloth. N. 24° 50′, W. 65° 55′†	30.08	764.0	71	21.7	.....	w.	5	.....	5	.....	w.	5 h'r	5 h'r	g'tl	w.	fine	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, Martinique, W. I.	.....	.....	.....	.....	.....	ene.	2	.....	0	.....	.....	o	o	sm'h	.....	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes, Flushing, Netherlands*†	30.28	769.1	53	11.7	.....	sw.	1	.....	10	.....	w.	o	o	.....	.....	foggy	.....
S. S. Nederland, Capt. J. Uberweg, N. 50° 15′, W. 35° 08′*†	29.96	761.0	53	11.7	.....	sse.	4	.....	10	.....	sse.	o	o	short	wnw.	overcast	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	30.29	769.4	51	10.6	72	s.	3	.....	10	.....	s.	o	o	.....	.....	cloudy	C. H. Grant, 2d offi.
S. S. Switzerland, Capt. J. C. Jamison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A. Beynon N. 45° 33′ W. 44° 00′*†	28.80	731.5	43	6.1	.....	ene.	4	.....	10	.....	e.	8 h'r	rain snow	cross	.....	raining	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, N. 40° 24′, W. 69° 39′*	29.86	758.4	32	0.0	.....	n.	6	.....	10	.....	nnw.	hail	shr's	mod	n.	overcast	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 46° 24′, W. 33° 01′*	29.01	736.8	58.1	14.5	87	sse.	4	.....	4	.....	se.	7 h'r	7 h'r	mod.	se.	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Brooklyn, N. Y.†	30.12	765.0	21.2	—6.0	.....	ne.	2	.....	4	.....	ne.	o	o	.....	.....	clear	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters, N. 43° 31′, W. 53° 11′*†	29.26	743.2	34	1.1	.....	nw.	4	.....	10	.....	nw.	3 h'r	light	h'v'y	sw.	misty	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th offi.
S. S. Celtic, Capt. Benjamin Gleadell, N. 50° 16′, W. 21° 40′*†	29.37	746.0	53	11.7	93	se.	4	.....	10	.....	s.	4 h'r	driz	mod.	s.	cloudy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, N. 40° 06′, W. 70° 16′*	30.07	763.8	32	0.0	.....	n.	4	.....	8	.....	n.	snow	snow	mod.	n.	squally	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill	Character.	Direction.		
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Cedar Keys, Florida†	30.36	771.1	46	7.8	54	n.	3		sk			0	0			smoky	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 23° 08′, W. 40° 13′*†	30.21	767.3	71	21.7		ssw.	1		1		sse.	0	0	sm'h	n	fair	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 18° 10′, W. 57° 00′.*†	30.12	765.0	76	24.4		ese.	2		3		se.	3 h'r	light	sm'h		squally	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 44° 57′, W. 36° 09′*†	29.00	736.6	57	13.9	81	s.	3		10		ssw.	1 h'r	h'vy	con.	sse.	threatening.	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. N. 24° 48′, W. 69° 52′*†	30.06	763.5	75	23.9		nw.	3		10		n.	0	0	mod.	sw. nw.	threatening.	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, S. 13° 46′ W. 34° 20′*†	30.05	763.3	85	29.4		se.	6		1		sse.	0	0	sm'h	se.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen, N. 31° 16′, W. 74° 44′†	30.09	764.3				nw.	4				nw.	0	0	high	nnw.	fair	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia., N. 37° 26′, W. 66° 10′*†	29.95	760.7				ne.	3					snow	&hail	mod.	nw.	cloudy	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 40° 17′, W. 53° 41′*†	29.12	739.6				nnw.	6				nnw.	0	0	high	nnw.		G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill.																	A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	30.16	766.1				wsw.	3		10		wnw.	0	0			overcast	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.,																	J. C. Andersen, Jr.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U. S. N., Washington, D. C†	30.32	770.1	30	—1.1		nw.	3		9		nw.	0	0			cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 19° 51′, W. 48° 14′			80	26.7		se.	1		0			0	0	sm'h		fine	
Bk. Gamaliel, Capt. D. J. Anthony, N. 34° 06′, W. 72° 54′*†	30.00	762.0				wnw.	7		3		nnw.	light	light	r'gh	wnw.	clear	
Bk. Geo. Booth, Capt. D. Williams, S. 12° 40′, W. 33° 40′*†	29.85	758.2	87	30.6		se.	3					sh'rs	sh'rs			squally	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 22° 05′, W. 38° 20′*†	30.30	769.6	76	24.4		calm	0							mod.	wnw.	clear	
Schr. Henry Denison, Capt. Jno. Fehring, N. 34° 07′, W. 70° 04′†	29.90	759.4				nw.	7		7		nw.	0	0	very high	nnw.	cloudy	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt, S. 34° 48′, E. 70° 12′*	30.09	764.3				ene.	3		2		ne.	0	0	cross	nne.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann, N. 38° 57′, W. 69° 21′*†	29.97	761.2				nne.	6		10		nne.	1 h'r	light snow	r'gh	ne.	squally	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,. N. 34° 33′, W. 65° 43′*†	29.80	756.9				wnw.	8		5		wnw.			long	nw.	showery	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte.. N. 25° 48′ W. 71° 13′*†	30.00	762.0				nnw.					nw.				nw.	clear	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen,																	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 19° 25′ W. 38° 37′*†	30.45	773.4	74	23.3	85	e.	2		5		e.			h'vy	nnw.		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, Farasina Strait, Austria†	30.24	768.1	55	12.8	73	sw.	2		0					sm'h		clear	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 36° 28′, W. 13° 18′*†	30.20	767.1				sw.			5		sw.	0	0				J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	30.21	767.3	40	4.4		nnw.	3		0			0	0			fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 34° 00′, W. 44° 38′*	30.20	767.1	73.4	23.0	91	nne.	3		2		n.			sm'h	sw.	blue sky	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 21° 28′. W. 41° 13′*†	30.19	766.8	75	23.9	85	ese.	1		2		se.	0	0	mod.	n.	clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert,																	
S. Wm. Woodbury Capt. H. T. Schmidt, N. 49° 51′, W. 5° 14′*†	29.97	761.2	56	13.3	80	s.	4				sse.			sm'h		cloudy	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton,. S. 23° 02′, W. 39° 45′*†	30.20	767.1				var.					nnw.			mod.	sw.	rainy	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 25, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.34	770.6	64.0	17.8	82	wsw.			4		0			0	0	clear	Moiroud.
Algiers			30.35	771.0	60.1	15.6	83	w.			2		0			0	0	clear	Nicolas.
La Calle			30.43	772.8	60.4	15.8	77	wnw.			1		1			0.118	3.0	very fair	Fonfréde.
Tunis			30.40	773.6															Jacques.
Sfax																			Gau.
Saida			30.40	772.1	66.2	19.0	36	sw.			1		0			0	0	clear	Dumas.
Tebessa			30.45	773.5	61.5	16.4	28	n.			1		0			0	0	clear	Derché.
Geriville					57.2	14.0	20	sw.			2		0			0	0	clear	Lonchamp.
Laghouat			30.55	776.0	60.8	16.0	27	sw.			1		0			0	0	clear	Herbin.
Biskra			30.52	775.3	66.2	19.0	45	n.			1		0			0	0	clear	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.82	757.4	29.91	759.7	65.8	18.8	88	ssw.	6	2.7			0			0	0	fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.72	755.0	30.28	769.1	55.4	13.0	41	sw.			2		8			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.40	746.7	30.18	766.5	48.9	9.4	63	nw.	7.4	3.3			8			0.055	1.4		Dr. Wierzbiski.
Eperies	29.34	745.3	30.25	768.3	43.3	6.3	74	calm			0		10 8		e.	0	0		Julius Mikolik.
Gratz	29.00	736.7	30.27	768.8	52.2	11.2	45	se.			2		3			0	0		Andreas Rospini.
Hermannstadt	28.86	733.1	30.33	770.4	48.6	9.2	45	nw.			2		1			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.84	732.6	30.22	767.7	45.3	7.4	74	calm			0		7			0	0	fair	The Staff.
Lemberg	29.17	740.8	30.18	766.6	42.8	6.0	72	nw.			2		10			0.220	5.6		Dr. T. Stanecki.
Pola	30.28	769.2	30.40	772.1	53.6	12.0	89	s.			1		10			0	0		I. R. Hydrographic Office
Szathmar	29.84	757.8	30.30	769.7	48.2	9.0	61	e.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	29.97	761.1	30.25	768.3	52.5	11.4	70	s.			1		8			0	0		Karl Stancel.
Trieste	30.30	769.7	30.41	772.3	52.2	11.2	66	calm			0		10			0	0		Rieder.
Vienna	29.51	749.5	30.24	768.0	49.6	9.8	63	calm			0		9			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.19	741.4	29.29	744.0	45.0	7.2	92	sse.	28	12.5			10			0.180	4.6	raining	W. Boswell.
Armagh, Observatory	28.91	734.3	29.16	740.7	51.9	11.1	94	s.	25	11.2			10					raining	S. Call.
Bidston, Liverpool Obs'y			30.44	773.2	52.0	11.1	86	se.	22	9.8			10					drizzling	John Hartnup.
Bolton, Sharples	28.94	735.1	29.47	748.5	50.7	10.4	84	s	24	10.7			10					raining	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.10	739.1	29.50	749.3	51.7	10.9	82	sw.			3		10			0.23	5.8	showery	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	82.0	27.8	72	ne.			2		3					overcast	Corpl. J. Surgenor, A. H. C.
Cardington			29.67	753.6	54.0	12.2	86	s.			2.0		9					raining	John McLaren.
Chatham, School M. E.	29.70	754.4	29.83	757.7	50.1	10.1	85	s.			4		10					foggy	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	29.38	746.2	29.61	752.1	53.9	12.2	90	ssw.			3		10					blue sky	The Staff.
Fort Napier, Natal	27.64	702.0	29.86	758.4	87.3	30.7	41	e.			2		0					blue sky	Pvt. E. K Anniss, A. H. C.
Free Town, Sierra Leone	29.60	751.8	29.81	757.2	89.0	31.7	66	nw.			1		3					raining	Sergt. John Robinson.
Galway, Queen's College			29.11	739.4				sw.			4		10			0.19	4.8	raining	J. O'Donoghue.
Gibraltar, Mediterranean	30.35	770.9	30.41	772.4	62.5	16.9	81	e.			2		3					blue sky	Cpl. O. Baldwin.
Glasgow, Observatory	29.04	737.6	29.25	742.9	49.7	9.8	85	s.			3		10					foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.62	752.3	29.79	756.7	52.7	11.5	83	s.			4		10					drizzling	The Staff.
Guernsey	29.54	750.3	29.84	757.9	51.5	10.8	93	ssw.			1		9					drizzling	A. Collenette, F. M. S.
Kew, Observatory	29.75	755.6	29.79	756.7	51.6	10.9	77	s.	24	10.7			10					threatening	The Staff.
Leicester, Museum	29.36	745.7	29.61	752.1	52.9	11.6	79	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.38	771.6	30.46	773.7	64.0	17.8	58	nw.			2		2					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.18	766.6	30.23	767.8	65.0	18.3	70	ne.			4		5					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.05	737.9	29.57	751.1	50.8	10.4	86	ssw.			5		10					squally	John Mac Emall.
Oxford, Radcliffe Obs'y	29.47	748.5	29.70	754.4	53.2	11.8	76	s.			6		10					drizzling	The Staff.
Plymouth	29.60	751.8	29.67	753.6	52.5	11.4	95	s.			5		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			29.13	739.9	46.2	7.9	91	sse	28	12.5			10					raining	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.36	771.1	30.43	772.9	49.4	9.7	71	sw.			1		3					d. clouds	W. H. Lyne.
Sheffield	29.26	743.2	29.54	750.3	52.9	11.6	99	sw.			3		10			0.05	1.3	overcast	W. F. Cooper.
Silloth Rectory	29.30	744.2	29.32	744.7	51.7	10.9	80	ssw.			6		10			0.720	18.3	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.57	751.1	50.9	10.5	82	s.	37	16.5			10					overcast	I. New.
Strathfield Turgiss	29.56	750.8	29.78	756.4	52.5	11.4	83	sw.			4-5		10					raining	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.50	749.3	29.55	750.6	57	13.9	93	sw.			7		10					raining	W. Newcombe.
Valencia, Observatory	29.20	741.7	29.22	742.2	52.6	11.4	89	s.	42	18.8			10			blank	blank	misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.09	764.3	30.12	765.0	67.0	19.4	90	w.	18.3	8.2		0	2 8			0.140	3.6	hazy	John Duthie.
Cape Town, C. G. H. Obs'y	30.14	765.5	30.18	766.6	79.8	26.6	39	ssw.	19	8.5		2	4			0	0		The Staff, for D Gill.
Worcester*†																			O. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.					4.5	—15.3		calm	0	0		0	0			0	0	clear	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.16	766.1	30.20	767.1	16	— 8.9	88	n.	9	4.0		0	0			0	0	clear	H. J. Cundall, C. E.
Chatham, N. B*	30.25	768.3	30.32	770.1	1	—17.2	100	calm	0	0		0	0			0	0	clear	G. A. Blair.
Cornwall, Ontario	30.22	767.6	30.44	773.2	2.0	—16.7	100	e.			1	0	0			0	0	clear	James Smith, M. A.
Dalhousie, N. B.	30.09	764.3	30.27	768.8	10.0	—12.2		w.			1	0	0			0	0	clear	H. A. Johnson.
Father Point, Quebec*	30.31	769.9	30.34	770.6	10	—12.2	91	wsw.	10	4.5			10 8		calm	0	0	cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.10	739.1	29.98	761.5	18	— 7.8	96	s.	14	6.3			10 n			0	0	cloudy	James Stewart.
Fredericton, N. B.	30.28	769.1	30.35	770.9	8.1	—13.3	96	w.	6	2.7		0	0			0	0	clear	Prof. Harrison.
Granton, Ontario	29.30	744.2	30.51	774.9	11.6	—11.3	88	calm	0	0		0	0			0	0	clear	James Grant.
Halifax, N. S*	30.07	763.8	30.21	767.3	20	— 6.7	84	nw.	8	3.6		0	0			0	0	clear	A. Allison.
Hamilton, Ontario	30.06	763 5	30.49	774.4	15.1	— 9.4	73	sw.			2	0	0			0	0	clear	Geo. Dickson, B. A.
Kingston, Ontario*	30.09	764.3	30.46	773.7	10	—12.2	83	e.	1	0.4		2 c	0	n.		0	c	hazy	A. P. Knight, M. A.
Little Glace Bay, N. S.	30.05	763.3	30.10	764.5	24.2	— 4.3	95	ne.			4	6 k	0	ne.		0	0	fair	C. H. Rigby.
Montreal, Quebec*	30.23	767.8	30.45	773.4	13	—10.6	70	w.	20	8.9		2 cs	0			0	0	clear	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.69	754.1	30.50	774.7	5	—15.0	76	e.	6	2.7		5 k	5 ks	w.	w.	0	0	cloudy	Rev. R. Mosley.
Peterboro, Ontario	29.69	754.1	30.51	774.9	16.6	— 8.6	83	calm			0	0	0			0	0	clear	J. Dixon, B. A.
Port Dover, Ontario	29.74	755 4	30.50	774.7	18	— 7.8	98	calm	0	0		0	0			0	0	clear	H. Morgan.
Port Stanley, Ontario	29.80	756.9	30.51	774.9	13	—10.6	100	w.	2	0.9		0	0			0	0	clear	M. Payne.
Quebec, Quebec*	30.08	764.0	30.43	772.9	9	—12.8	80	calm			0	0	0			0	0	clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.94	760.5	30.47	773.9	— 6	—21.1	83	calm	0	0		5 c	0	nw.		0	0	fair	W. H. McIntyre.
Saugeen, Ontario*	29.68	753.9	30.46	773.7	16	— 8.9	91	sw.	9	4.0			10 ks			0	0	cloudy	
St. Andrews, N .B.	30.26	768.6	30.31	769.9	15	— 9.4	86	nw.	3	1.3		0	0			0	0	clear	
St. John, N. B.	30.11	764.8	30.29	769.4	17.0	— 8.3	83	ne.	5	2.2		0	0			0	0	clear	G. Murdock, C. E.
St. Pierre, N. F.			29.80	756.9	23.0	— 5.0		n.			4					0	0		N. F. Land, Com't.
Stratford, Ontario	29.11	739.4	30.54	775.7	4.2	—15.4	92	calm	0	0		2 cs	0			0	0	clear	C. I. Macgregor, M. A.
Sydney, C. B*	29.98	761.5	30.05	763.3	22	— 5.6	87	n.	22	9.8		10 k	0	ne.		0	0	fair	T. C. Hill, C. E.
Toronto, Ontario*	30.10	764.5	30.52	775.2	15	— 9.4	83	nw.	4	1.8		0	0			0	0	clear	Magnetic Observatory.
Windsor, N. S.	30.11	764.8	30.21	767 3	20.0	— 6.7	100	n.	14	6.3		0	0			0	0	clear	Prof. W. R. Butler.
Woodstock, Ontario	29.30	744.2	30.49	774.4	6.7	—14.1	56	sw.	2	0.9		0	3 ks			0	0	fair	Prof. Wolverton
Yarmouth, N. S*	30.21	767.3	30.28	769.1	22	— 5.6	70	ne.	1	0.4		0	0			0	0	clear	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.51	749.5	29.77	756.1	27	— 2.8		ne.	0	0			10			0.60	15.2		John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.41	772.4	30.69	779.5	46.1	7.8	81	nw.			1		10			0	0		N. Titoushkin.
Sung-shu-chwang†	24.86	631.5			25.3	—3.7	91	calm			0		3 ks			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	30.52	775.3	30.55	775.9	42.8	6.0	77	ene.	4.5	2.0		10 ck	0	w.		0	0	covered	M. Marc Dechevrens,
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.90	759.5	29.95	760.7	43.0	6.1	79	sw.	18	8			10						Oversergent Fischer.
Fanöe	29.82	757.5	29.84	758.0	42.8	6.0	90	sw.			4		9						Overloerer Lauridsen.
Godthaab, Greenland	29.92	760.0	29.97	761.1	16.2	— 8.8	60	ene.			3		0						S. Kleinschmidt.
Stykkisholm, Iceland	29.52	749.8	29.56	750.9	10.9	—11.7		ne.			8		10					snowing	A. O. Thorlacius.
Thorshavn	28.98	736.0	29.01	736.9	35.6	2.0	96	ne.	11	5			3						Overloerer Bergh.
Vestervig	29.69	754.1	29.78	756.4	44.1	6.7	88	ssw.			6		6						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.55	750.6	30.21	767.4	53.2	11.8	69	sse.			1		kn			0	0		M. Labroue, Director.
Alençon, Normal School	29.50	749.2	30.05	763.2	52.7	11.5	93	s.			3		10 k		n.			raining	M. Nicot, Director.
Arras, Engineer School	29.67	753.5	29.93	760.1	54.1	12.3	17				6		k			0	0		M. Klein, Commandant.
Avignon, Normal School	30.32	770.0	30.39	772.0	57.2	14	70	se.			1		2		se.	0	0	slightly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.59	751.5	30.14	765.6	56.8	13.8	51	s.			1		10			0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.77	756.2	30.04	763.1	53.4	11.9	66	s.			1		5		sw.	0	0	cloudy	M. Frère Eugène Mari
Besançon, Normal School			30.20	767.0	50.0	10	94	ssw.			1	10 c	0	s.		0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	29.85	758.2	30.12	765.0	59.9	15.5	43	se.			1		10			0	0	covered	M. Rayet, Director.
Bourges, Normal School	29.56	750.8	30.10	764.6	64.0	17.8	32	s.			1		n		s.	0	0		M. Postel, Director.
Brest, Naval Observatory	29.60	751.7	29.84	757.9	55.0	12.8	90	sw.			4		10		sw.	0.020	0.5		M. de Kennaree, Dir.
Caen, Normal School	29.84	757.9	29.91	759.8	59.0	15	61	sse.			2		10			0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.74	755.5	30.09	764.3	54.3	12.4	72	s.			2		2	sse.	se.	0	0	slightly cl'dy	M. Jadot, Director.
Charleville, Normal School.	29.66	753.4	30.19	766.7	51.8	11	90	e.			1		10			0	0	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.80	731.6	30.13	765.3	66.6	19.2	32	s.			1		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.42	747.3	30.30	769.7	58.5	14.7	57	sw.			3		10		sw.	0	0	covered	M. de Villemontée, Dir.
Commercy, Normal School.	29.31	744.4	30.20	767.1	58.8	14.9	48	sw.			1	5 c		sw.	sw.	0.016	0.4	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.89	708.4	30.43	772.8	59.0	15	48	w.			1	cs	0			0.31	8.		M. Jeangirard, Director.
Gréasque, du. Rhone	29.30	744.1	30.44	773.2	53.1	11.7	61	s.			3		8		s.	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.52	749.7	30.33	770.4	55.2	12.9	52	wnw.			1	2 c	0			0	0	slightly cl'dy.	M. Ablard, Director.
Guéret, Normal School	28.55	725.2	30.15	765.8	53.2	11.8	69	sw.			2		n		sw.	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.62	752.3	29.89	759.2	54.5	12.5	90	s.			6		10		s.			light rain	M. Ollitrault, Director.
Lescar, Normal School	29.56	750.7	30.11	764.7	70.2	21.2	40	w.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.81	757.2	29.91	759.8	55.4	13.0	88	ssw.			9		10			0.008	0.2	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	29.19	741.5	30.26	768.5	55.4	13.0	41	s.			2	5 c	0	wsw.		0	0	fair	M. André, Director.
Mans, Normal School	29.72	755.0	30.03	762.8	56.3	13.5	51	sw.			3		2		w.	0	0	slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	30.11	764.9	30.39	771.8	58.8	14.9	61	se.			1		10		se.	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.04	636.1	29.89	759.1	46.8	8.2	51	wsw.	26.2	11.7			7		n.	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.24	768.1	30.37	771.5	51.1	10.6	84	ne.			2		10			0	0	covered	M. Galzin, Director.
Nancy, Normal School	29.39	746.6	30.17	766.4	57.2	14	53	ssw.			1	0	2 s			0	0	slightly cl'dy	M. Hasse, Director
Nantes, Observatory	29.87	758.8	30.04	763.0	60.4	15.8	60	s.			1-3		10 n		wsw.	0	0	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	30.25	768.3	30.36	771.1	55.6	13.1	74	se.	1.8	0.8			10		e.	0	0	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.38	543.0			27.0	— 2.8		sw.			3.4	1	1	n.	sw.	0	0	clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.29	743.9	30.39	771.8	53.2	11.8	74	s.			1		5 n	s.	s.	0	0	cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.30	642.7			45.7	7.6	52	sw.			4		8			0	0	¾ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.05	763.3	30.08	764.1	58.3	14.6	86	s.			2		10			0.094	2.4	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.82	757.3	30.03	762.8	57.2	14	65	ssw.			1		5		s.	0	0	cloudy	M. Monillot, Director.
Rodez, Normal School	28.06	712.7	30.21	767 2	57.2	14	40	e.			2		0			0	0	clear	M. Serger, Director.
Rouen, Normal School	29.97	761.1	30.01	762.3	53.6	12	71	s.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	29.78	756.4	29.94	760.4	54.3	12.4	69	w.			2		10		sw.	0.087	2.2	covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.90	759.5	30.07	763.7	57.4	14.1	55	s.			1		10			0	0	covered	M. Renou, Director.
Toulouse, Observatory	29.56	750.7	30.28	769.2	57.2	14.0	60	sse.			6		8		w.	0	0	very cloudy.	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.54	750.2	30.03	762.8	56.5	13.6	60	s.			3					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.79	756.6	30.08	764.0	54.5	12.5	68	s.			2		10			inap.	inap.	misty	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.35	745.6	30.21	767.4	48.4	9.1	60	s.			1	0	4 ks			0.020	0.5		Prof. Dr. Hoh.
Berlin	29.93	760.1	30.11	764.7	45.3	7.4	74	w.			1		7			0.008	0.2		Prof. Dr. Arndt.
Breslau	29.64	752.9	30.18	766.5	39.9	4.4	97	nw.			2		10			0.047	1.2	raining	Royal University Obs'y.
Carlsruhe	29.76	756.0	30.21	767.3	53.2	11.8	64	sw.			2		1	sw.		0	0	foggy	Albert Senz.
Cassel	29.37	746.0	30.08	764.1	51.4	10.8	74	s.			2	0	2 k		s.	0.039	1.0		Dr. H. Möhl.
Frankfort on the Main	29.80	756.8	30.16	766.1	55.2	12.9	63	ssw.			1		5			0	0		Physical Society.
Friedrichshafen	28.81	731.8	30.29	769.3	45.3	7.4	78	w.			2		6	n.		0	0		Wilhelm, Chief Tel.
Hamburg	29.97	761.3	30.07	763.7	46.4	8.0	73	sw.			4		1	w.		0	0	hazy	E. Preller.
Kiel	29.97	761.2	29.98	761.6	46.4	8.0	68	sw.			2		1			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.74	755.3	30.17	766.2	47.3	8.5	64	wsw.			1		0			0	0		H. Leppig, Asst.
Magdeburg	29.95	760.6	30.14	765.5	47.8	8.8	72	wsw.			2	0	1 k		nw.	0	0		Dr. Assmann.
Memel	29.96	761.0	30.01	762.2	37.0	2.8	89	wsw.			4		10					light fog	Issermann.
Munich	28.39	721.2	30.27	768.9	52.7	11.5	41	nw.			2		5	n.		0	0		Central Station.
Neufahrwasser	30.05	763.2	30.06	763.6	39.0	3.9	78	wsw.			2		10			0	0		A. Lothes.
Neustadt, Palatinate	29.68	753.9	30.21	767.4	53.2	11.8	71	calm			0		5	w.		0	0		Dicknether.
Stuttgart	29.23	742.4	30.12	765.1	56.3	13.5	58	n.			1		3	w.		0	0		Prof. Dr. Schoder.
Wustrow	30.02	762.4	30.04	763.1	41.4	5.2	84	ssw.			4	0	8 s			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	30.05	763.3	30.45	773.4	55.8	13.2		ne.			2.0		1 k			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.97	761.2	30.02	762.5	77.6	25.3	46	wsw.	22	9.8			3			0	0	d. clouds	
Deesa	29.48	748.7	29.95	760.6	87.8	31.0	19	ssw.	9.8	4.4			2	ene.		0	0	d. clouds	
Bombay	29.87	758.6	29.90	759.6	83.5	28.6	72	nnw.	13	5.8			0			0	0	blue sky	
Poona, Yarrowda.	28.66	712.7	29.89	759.1	89.0	31.7	14	e.	6	2.7			0			0	0	blue sky	
Belgaum	27.34	694.6	29.83	757.8	87.1	30.6	17	e.	7	3.1			0			0	0	blue sky	
Lahore	29.24	742.6	30.00	762.0	70.7	21.5	33	calm	1.7	0.8			6			0	0	d. clouds	
Roorkee	29.05	738.0	29.98	761.4	69.2	20.7	34	nw.	1.6	0.7			2			0	0		
Agra	29.45	748.0	30.02	762.5	76.2	24.6	19	w.	6.0	2.7			3		nw.	0	0		
Nagpur	28.94	735.0	29.98	761.5	83.4	28.6	23	calm	3.3	1.5			0			0	0	blue sky	
Jubbulpore	28.67	728.3	30.04	763.1	78.2	25.7	31	calm	3.3	1.5			0			0	0	blue sky	
Lucknow	29.59	751.6	29.98	761.4	75.2	24.0	32	w.	5.6	2.5			5	nw.		0	0	d. clouds	
Allahabad	29.67	753.6	29.99	761.7	72.8	22.7	29	nw.	3.9	1.7			0			0	0	blue sky	
Patna	29.78	756.4	29.97	761.3	72.3	22.4	25	w.	4.6	2.1			0			0	0	blue sky	
Hazaribagh	27.94	709.6	29.99	761.7	69.8	21.0	25	nw.	8.8	3.9			0			0	0	blue sky	
Cuttack	29.87	758.7	29.96	760.8	81.0	27.2	36	calm	0.6	0.3			0			0	0	blue sky	
Calcutta, Alipore	29.92	760.1	29.95	760.6	75.9	24.4	53	nnw.	3.0	1.3			1			0.22	5.6	d. clouds	
Dhubri	29.88	759.0	30.01	762.2	63.4	17.4	57	nnw.	5.7	2.6			0			0	0	blue sky	
Chittagong	29.85	758.2	29.94	760.6	72.6	22.6	44	nne.	3.9	1.7			0			0	0	blue sky	
Sibsagar	29.70	754.2	30.04	763.1	63.8	17.7	84	ne.	2.9	1.3			10	w.	w.	0.08	2.0	gloomy	
Jeypore	28.56	725.4	30.02	762.5	76.7	24.8	20	nne.	3.8	1.7			5	n.		0	0	d. clouds	
Zanzibar, Africa	29.79	756.7			87.1	30.6	67	ne.	9.2	4.1			3			0	0	d. clouds	
Trichinopoly	29.65	753.1			89.5	31.9	43	ese.	2	0.9			0			0	0	blue sky	
Bellary	28.44	722.4			91.3	32.9	17	e.	3.4	1.5			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.97	761.3	30.39	771.9	52.2	11.2	81	s.	0.7	0.3			4			0	0		Prof. Giovanni Clodig.
Milan	29.87	758.6	30.40	772.1	56.7	13.7	59	w.	3.1	1.4			8	wnw.		0	0		Prof. Schiaparelli.
Padua	30.29	769.3	30.40	772.2	46.2	7.9	93	calm	1.3	0.6			10	sw.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.45	748.0	30.37	771.5	50.2	10.1	64	sse.	1.3	0.6			5	e.		0	0		Prof. P. F. Denza.
Genoa	30.24	768.1	30.44	773.1	55.4	13.0	66	sw.	4.9	2.2			10	s.		0	0		Prof. G. M. Garibaldi.
Mondovi	28.41	721.7	30.36	771.2	49.8	9.9	63	w.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.34	770.6	30.39	771.9	56.5	13.6	56	wsw.	10.5	4.7			8			0	0		Prof. Luigi Guidi.
Florence	30.19	766.8	30.45	773.3	56.1	13.4	60	sw.			2		10	sw.		0	0		Prof. Costantino Pitter.
Leghorn	30.29	769.4	30.38	771.6	57.2	14.0	78	s.	1.3	0.6			10			0	0		Prof. P. Monte.
Rome	30.30	769.6	30.48	774.1	56.5	13.6	50	nnw.	0	0			10			0	0		Prof. P. S. Ferrari.
Lecce	30.17	766.3	30.43	772.9	62.2	16.8	42	wsw.	4.9	2.2			0			0	0		Prof. O. de Giorgi.
Cosenza	29.52	749.8	30.43	772.8	59.0	15.0	74	ese.	3.8	1.7			0			0	0		Prof. D. Conti.
Cagliari	30.24	768.0	30.43	773.0	56.7	13.7	56	se.			2		0			0	0		Prof. A. Pacinotti.
Palermo	30.24	768.0	30.49	774.4	59.0	15.0	62	ne.	4.3	1.9			0			0	0		Prof. G. Giacciatore.
Syracuse	30.38	771.7	30.43	772.9	58.6	14.8	68	s.	6.3	2.8			0			0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.92	760.0	30.45	773.5	57.2	14.0	67	sw.	0	0			8	nw.		0	0		Prof. T. Brioschi.
Stelvio	22.32	566.9			27.7	— 2.4	63	sw.			4		2			0	0	misty	Prof. P. F. Denza.
Valdobbia	22.38	568.3			31.6	— 0.2	66	n.			6		2			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.04	763.0	30.08	764.0	31.4	— 0.3	96	w.	20.4	9.1		0	6s			0.281	7.1	fair	
Hakodate	29.99	761.7	30.00	762.0	32.2	0.1	75	w.	21.0	9.4			10			0.172	4.4	covered	
Hiroshima, I. M. Obs'y †	30.25	768.3	30.26	768.6	44.9	7.2	65	nne.	1.2	0.5		5cs;ck	0			0	0	fair	K. Sasaki.
Kanazawa	30.17	766.3	30.28	769.1	37.1	2.8	90	s.	6.0	2.7			10 n		w.	0.340	8.6	light rain	S. Endo.
Kioto	30.10	764.5	30.28	769.1	43.3	6.3	84	n.	3.0	1.3		ck	9 s			0	0	cloudy	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.19	766.8	30.40	772.1	39.5	4.2	84	calm	0	0		0	0			0	0	clear	S. Takehayashi.
Niigata	30.17	766.3	30.21	767.3	38.4	3.6	81	nw.	7.7	3.4		10 ck	0			0.445	11.3	light snow	
Nobiru	30.09	764.3	30.11	764.8	37.7	3.2	76	w.	6.0	2.7			10 s;ks			0.005	0.1	cloudy	H. Midzushina.
Supporo					28.7	— 1.8	93	e.	4.2	1.9			10					snowing	
Tokei Obs'y, Yeddo	30.07	763.8	30.14	765.5	38.9	3.8	84	ene.	4.0	1.8		0	0			0	0	clear	The Staff.
Wakayama	30.23	767.8	30.28	769.1	47.1	8.4	83	calm	0	0		1 ck	1 ck	w.	w.	0	0	fair	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.47	621.5	30.22	767.6	54.5	12.5	74	nnw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.80	757.0	30.07	763.7	64.5	18.1	83	e.	0.9	0.4		1 cs	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.19	589.0	30.37	771.4	47.1	8.4	61	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.27	616.5	30.45	773.4	55.9	13.3	79	se.			4	1c	2 k	e.	se.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.03	610.4	30.15	765.8	48.7	9.3	55									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.47	596.1	30.43	772.9	42.1	5.6	76	nnw.	0.2	0.1		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.32	617.7	30.43	773.1	52.8	11.6	72	s.			1	1	0	w.		0	0	clear	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.63	574.9	30.31	770.0	54.8	13.0	53	wsw.	4.3	1.9		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.69	754.1	29.87	758.7	78.0	25.6	79	ssw.	6.5	2.9			10n;ks		ese.	0	0	overcast	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.98	761.5	29.98	761.5	49.1	9.5		s.			4					0	0		
Groningen	29.93	760.3	29.99	761.7	47.3	8.5		s.			5					0	0		
Helder	29.95	760.6	29.95	760.6	46.9	8.3		s.			4					0	0		
Hellevoetsluis	29.98	761.6	29.98	761.6	50.4	10.2	82	s.			3					0	0		
Utrecht	29.97	761.3	30.02	762.5	50.5	10.3	76	s.			2		8			0	0	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.43	747.6	29.50	749.2	45.0	7.2	80	s.	27	12			10			1.378	35.0		
Brono	28.82	732.0	28.86	733.0	41.4	5.2	84	sw.	36	16			10			0.504	12.8	raining	
Christiania	29.38	746.3	29.53	750.0	44.1	6.7	67	ssw.	11	5			9			0	0		
Gjæsvær	29.42	747.3	29.45	747.9	4.5	—15.3		ese.			6		10						
Lodingen	28.69	728.8	28.74	730.0	19.2	— 7.1	94	ese.			4		10			0.791	20.1	snowing	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					61.5	16.4	83	w.	18.6	8.3			5			0.134	3.4		Dr. J. A. Sampaio.
Campo Major	29.27	743.4	30.27	768.8	64.4	18.0	39	ssw.	29.3	13.1			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.24	768.0	30.32	770.2	66.2	19.0	79	sw.	4.9	2.2			1			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.91	759.6	30.27	768.8	62.8	17.1	77	ssw.	21.0	9.4			9			0	0		The Staff.
Ponta Delgada, Azores	29.80	756.8	29.87	758.6	64.8	18.2	84	wsw.	19.9	8.9			3			0.016	0.4		
Saint Paul de Loando	29.76	756.0	29.97	761.1	82.4	28.0	83	nnw.	0.7	0.3			5	e.		0	0		
Serra da Estrella	25.43	645.8	30.23	767.8	44.1	6.7	90	sse.	26.2	11.7			9	w.		0.004	0.1	rain & fog	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.40	721.4	29.52	749.8	25.2	— 3.8		sw.	7	3		0	8 k			0.020	0.5		Major K. Lasarew.
Archangel	29.73	755.1	29.75	755.6	— 4.7	—20.4	67	wnw.	4	2			0			0	0		Capt. Sselliwerstow.
Astrakhan	30.06	763.5	29.98	761.4	20.7	— 6.3	74	wnw.	34	15		0	8 ks			0.016	0.4		Capt. Wisganow.
Barnaul	29.43	747.4	29.94	760.5	33.3	0.7	73	calm	0	0			5			0.028	0.7		Meteorological Obs'y.
Dorpat	29.50	749.3	29.75	755.7	35.2	1.8	96	wsw.	9	4			10 n			0	0		Observatory.
Ekaterinburg	28.16	715.2	29.16	740.7	16.0	— 8.9	88	e.	4	2		c	3 s			0	0	light clouds.	Meteorological Obs'y.
Kasan	29.08	738.5	29.36	745.8	12.6	—10.8	80	wsw.	13	6			10					snowing	Observatory.
Kertch	30.35	770.8	30.37	771.3	40.5	4.7	57	w.	4	2		2 c	0			0.059	1.5		Lagorio & Satyrez.
Kieff	29.47	748.4	30.12	765.1	39.9	4.4	73	wsw.	4	2		c	10 ks			0	0		Observatory.
Lugan	29.81	757.1	30.02	762.5	35.6	2.0	57	wsw.	34	15			7			0	0		Meteorological Obs'y.
Moscow	29.20	741.7	29.71	754.7	17.2	— 8.2	62	n.	4	2		0	7 ks			0.004	0.1		Meteorological Obs'y.
Nikolaiev	30.30	769.7	30.37	771.5	44.6	7.0	43	sw.	9	4		0	0			0	0		Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.30	769.7	30.39	771.9	— 4.7	—20.4	82	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.40	772.2	30.54	775.8	32.5	0.3	50	sw.	4	2		0	0			0	0		Physical Observatory.
St. Petersburg	29.74	755.4	29.76	755.8	19.0	— 7.2	78	sse.	7	3			10 n			0	0		Central Physical Obs'y.
Tashkend, Laboratory	28.12	714.3	29.70	754.3	49.5	9.7	71	nne.	4	2			10			0	0		Teich, A. M.
Tiflis	28.85	732.9	30.35	770.8	34.9	1.6	50	nw.	31	14		0	4 k			0	0		Physical Observatory.
Vladivostok	30.28	769.2	30.35	770.9	12.6	—10.8	49	calm	0	0		0	0			0	0		
Warsaw	29.69	754.2	30.13	765.3	41.2	5.1	75	sw.	11	5			10 ks						Astronomical Obs'y.
Wilna	29.60	751.8	30.03	762.8	38.5	3.6	80	sw.	2	1			10			0	0	heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.90	759.5	30.21	767.2	25.3	— 3.7	62	e.	4	2			10			0	0		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restairig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.06	738.1	48	8.9	92	s.			4		10			0.2	5.	raining	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	30.20	767.0	30.31	769.8	59.4	15.2	68	sw.	3.8	1.7		2 c	0			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.08	764.1	30.14	765.6	68.5	20.3	61	s.	4.7	2.1		3	6	w.		0	0	almost cov.	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.26	692.5	30.25	768.3	54.3	12.4	35	s.	8.9	4.0			10			0	0	covered	Domingo Martin.
Madrid, Royal Obs'y	28.08	713.3	30.34	770.5	58.8	14.9	47	se.	2.9	1.3			10			0	0	covered	The Staff.
Murcia, Met. Obs'y	30.25	768.4	30.40	772.2	61.3	16.3	56	ssw.	1.1	0.5		4	3	ne.		0	0	cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.07	738.3	29.97	761.2	56.5	13.6	89	s.	31.1	13.9			10			0.197	5.0	raining	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.11	764.7	30.17	766.4	67.2	19.6	56	ne.	8.5	3.8		0	1 k		nne.	0	0	fair	Benito Vines, S. J.
Manilla, Philippine Islands	30.02	762.4	30.08	763.9	75.3	24.1	68	ne.	2.2	1.0		c	1 s			c	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.30	769.7	30.40	772.2	67.5	19.7	38	se.	2.1	0.9		3	2	s.	se.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	29.95	760.7	30.04	763.0	68.0	20.0	93	calm	0	0		2 c	3 k	sw.	sw.	0	0		E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	30.01	762.2	30.14	765.5	72.1	22.3	67	nnw.	6.3	2.8			10 ck		nnw.	0	0	covered	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.34	745.2	29.38	746.2	6.4	—14.2	100	se.			4		10			0.181	4.6		
Umea	29.23	742.5	29.28	743.8	30.2	— 1.0	96	sw.			2		10			0	0		
Hernosand	29.29	743.9	29.34	745.2	35.4	1.9	73	s.			2		5			0.094	2.4		
Stockholm	29.41	747.0	29.59	751.5	41.0	5.0	69	wsw.			4		3			0	0		
Wisby	29.74	755.3	29.80	756.8	39.6	4.2	74	w.			6		0			0	0		
Sub-Series.																			
Upsala	29.46	748.2	29.54	750.4	41.2	5.1	72	wsw.	17.0	7.6			10		wsw.	0.004	0.1		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.82	732.1	30.22	767.7	62.2	16.8	34	e.			2					0	0		The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.49	774.5	50.5	10.3	56	se.	6	2.5			5		n.	0	0		The Observatory.
Valona			30.45	773.3	60.1	15.6		w.			1		0			0	0	clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.28	769.0	58.1	14.5	53	n.			3	0	5 s;ks		n.	0	0		Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.45	773.4	30.54	775.7	16.8	— 8.4	67	ne.	5	2.2		0	0			0	0	clear	
Alpena, Michigan	29.71	754.6	30.42	772.7	24	— 4.4	87	sw.	6	2.7			10 s			0	0	cloudy	
Atlanta, Georgia	29.21	741.9	30.43	772.9	32.5	0.3	50	e.	10	4.5		8 k	0	calm		0	0	cloudy	
Atlantic City, New Jersey	30.46	773.7	30.47	773.9	22.8	— 5.1	73	n.	11	4.9		0	0			0	0	clear	
Augusta, Georgia	30.30	769.6	30.50	774.7	32.7	0.4	60	ne.	6	2.7		0	0			0	0	clear	
Baltimore, Maryland	30.47	773.9	30.52	775.2	29	— 1.7	67	n.	2	0.9		0	hz.			inap.	inap.	clear	
Barnegat, New Jersey	30.43	772.9	30.45	773.4	22.5	— 5.3	72	n.	20	8.9		0	0			0	0	clear	
Bismarck, Dakota	28.02	711.7	30.00	762.0	10	—12.2	80	ne.	2	0.9		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.14	689.3	30.10	764.5	33	0.6	71	ne.	4	1.8			10 s		calm	0.03	0.8	cloudy	
Boston, Massachusetts	30.24	768.1	30.40	772.1	19.0	— 7.2	70	nw.	12	5.4		0	hz.			0	0	clear	
Brownsville, Texas	30.09	764.3	30.14	765.5	71	21.7	94	s.	4	1.8		2 c	4 s			0	0	fair	
Buffalo, New York	29.71	754.6	30.51	774.9	22	— 5.6	78	sw.	2	0.9		0	0			0	0	clear	
Burlington, Vermont	30.18	766.6	30.49	774.4	6.3	—14.3	78	e.	1	0.4		0	0			inap.	inap.	clear	
Cairo, Illinois	30.03	762.7	30.45	773.4	35.0	1.7	73	se.	6	2.7		7 cs	0	w.		0	0	fair	
Campo, California	27.46	697.5	30.10	764.5	24.8	— 4.0	88	w.	3	1.3		0	0			0	0	clear	
Camp Thomas, Arizona	27.35	694.7	30.18	766.6	43.5	6.4	98	calm			0		fg.			0.07	1.8	dense fog	
Cape Henry, Virginia	30.44	773.2	30.46	773.7	29	— 1.7	67	n.	10	4.5		0	3 k			inap.	inap.	clear	
Cape May, New Jersey	30.43	772.9	30.46	773.7	25	— 3.9	64	nw.	16	7.2		0	0			0	0	clear	
Castroville, Texas	29.30	744.2	30.14	765.5	58	14.4	93	nw.	2	0.9			fg.			0.08	2.0	dense fog	
Cedar Keys, Florida	30.32	770.1	30.34	770.6	41	5.0	65	ne.	11	4.9		1 cs	sk.			0	0	clear	
Champaign, Illinois	29.52	749.8	30.38	771.6	28.5	— 1.9	79	se.	11	4.9		0	0			0	0	clear	
Charleston, S. Carolina	30.37	771.4	30.43	772.9	34	1.1	61	n.	11	4.9		0	0			0	0	clear	
Charlotte, N. Carolina	29.57	751.1	30.46	773.7	27.0	— 2.8	77	n.	6	2.7		0	sk.			0	0	clear	
Chattanooga, Tennessee	29.60	751.8	30.46	773.7	31.0	— 0.6	57	ne.	6	2.7		3 cs	0	calm		0	0	clear	
Cheyenne, Wyoming	24.02	610.1	30.27	768.8	39.2	4.0	43	w.	16	7.2		0	0			0	0	clear	
Chicago, Illinois	29.61	752.1	30.36	771.1	32.1	0.1	74	s.	6	2.7		0	1 s			0	0	clear	
Chincoteague, Virginia	30.44	773.2	30.46	773.7	26	— 3.3	51	n.	22	9.8		0	9 s		n.	0	0	cloudy	
Cincinnati, Ohio	29.81	757.2	30.50	774.7	30	— 1.1	67	e.	2	0.9		0	0			0	0	clear	
Cleveland, Ohio	29.75	755.6	30.54	775.7	22	— 5.6	87	w.	6	2.7		0	0			0	0	clear	
Coleman City, Texas	28.27	718.0	30.15	765.8	52	11.1	93	se.	3	1.3		0	8 s		se.	0	0	cloudy	
Columbus, Ohio	29.61	752.1	30.51	774.9	29	— 1.7	67	s.	4	1.8		0	0			0	0	clear	
Concho, Texas	28.19	716.0	30.21	767.3	50	10.0	80	w.	10	4.5			10 s			0	0	cloudy	
Davenport, Iowa	29.58	751.3	30.28	769.1	36	2.2	61	s.	7	3.1		4 cs	0	sw.		0	0	fair	
Dayton, Washington T'y	28.09	713.5	29.90	759.4	34	1.1	85	sw.	2	0.9			10 n			1.08	27.4	light rain	
Deadwood, Dakota	25.26	641.6	30.18	766.6	30	— 1.1	70	s.	3	1.3		0	0			0	0	clear	
Decatur, Texas					46	7.8	100	se.	14	6.3			fg.			0.32	8.1	dense fog	
Delaware Breakwater, Del.	30.44	773.2	30.46	773.7	28	— 2.2	88	n.	24	10.7		0	1 s			inap.	inap.	clear	
Denison, Texas	29.39	746.5	30.23	767.8	48.4	9.1	100	se.	10	4.5			10 n			0.49	12.4	light rain	
Denver, Colorado	24.77	629.1	30.29	769.4	34.0	1.1	44	se.	11	4.9		0	1 s		calm	0	0	clear	
Des Moines, Iowa	29.21	741.9	30.18	766.6	37	2.8	82	se.	4	1.8		0	5 s			0	0	fair	
Detroit, Michigan	29.74	755.4	30.50	774.7	35.0	1.7	79	w.	3	1.3		0	0			0	0	clear	
Dodge City, Kansas	27.38	695.4	30.12	765.0	32	0.0	100	w.	12	5.4			fg.			0	0	dense fog	
Dubuque, Iowa	29.49	749.0	30.25	768.3	33	0.6	71	s.	6	2.7		2 cs	8 ks	w.	s.	0	0	cloudy	
Duluth, Minnesota	29.35	745.5	30.11	764.8	30	— 1.1	77	se.	5	2.2			10 s		calm	0	0	cloudy	
Eagle Pass, Texas	29.37	746.0	30.21	767.3	56.1	13.4	93	calm	0	0			10 s			0	0	cloudy	
Eagle Rock, Idaho	25.31	642.9	30.21	767.3	30	— 1.1	80	sw.	10	4.5			10 s		w.	0	0	cloudy	
Eastport, Maine	30.24	768.1	30.31	769.9	19.5	— 6.9	70	nw.	13	5.8		0	0			0	0	clear	
El Paso, Texas	26.37	669.8	30.25	768.3	42	5.6	82	w.	3	1.3		0	0			0	0	clear	
Erie, Pennsylvania	29.74	755.4	30.51	774.9	26	— 3.3	76	s.	2	0.9			10 s			0	0	cloudy	
Escanaba, Michigan	29.57	751.1	30.29	769.4	29	— 1.7	88	s.	7	3.1			10 s		s.	inap.	inap.	cloudy	
Fort Apache, Arizona	25.12	638.0	30.22	767.6	32	0.0	74	e.	3	1.3			10 s		calm	0.33	8.4	cloudy	
Fort Assinnaboine, Montana	26.98	685.3	30.02	762.5	31	— 0.6	62	s.	7	3.1		0	0			0	0	clear	
Fort Bennett, Dakota	28.26	717.8	29.98	761.5	25	— 3.9	76	calm	0	0		0	0			0	0	clear	
Fort Benton, Montana	27.03	686.5	30.03	762.7	29	— 1.7	67	calm	0	0			9 ks		calm	0	0	cloudy	
Fort Buford, Dakota	27.83	706.9	30.01	762.2	21	— 6.1	61	sw.	2	0.9		0	0			0	0	clear	
Fort Custer, Montana	26.70	678.2	30.06	763.5	25	— 3.9	76	se.	6	2.7		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.27	641.8	30.23	767.8	43	6.1	86	s.	2	0.9			9 ks		s.	0	0	cloudy	
Fort Elliott, Texas	27.21	691.1	30.11	764.8	40	4.4	67	sw.	4	1.8		0	0			inap.	inap.	clear	
Fort Gibson, Indian T'y	29.62	752.3	30.22	767.6	45.5	7.5	93	se.	12	5.4			10 n			0.58	14.7	light rain	
Fort Grant, Arizona	25.32	643.1	30.18	766.6	40	7.8	58	ne.	8	3.6		7 cs	0			0.08	2.0	fair	
Fort Griffin, Texas	28.82	732.0	30.19	766.8	52	11.1	86	s.	3	1.3			10 s		sw.	0.03	0.8	cloudy	
Fort Keogh, Montana	27.35	694.7	30.03	762.7	20	— 6.7	73	sw.	1	0.4		0	3 k			0	0	clear	
Fort Macon, North Carolina	30.37	771.4	30.38	771.6	32	0.0	78	n.	20	8.9		hz.	2 k	calm	calm	0	0	clear	
Fort McKavett, Texas	27.93	709.4	30.31	769.9	50.4	10.2	80	sw.	8	3.6			10 s			inap.	inap.	cloudy	
Fort Missoula, Montana	26.58	675.1	30.01	762.2	31	— 0.6	88	ne.	5	2.2		0	5 n			0.07	1.8	light snow	
Fort St. Michaels, Alaska	30.09	764.3	30.13	765.3	—32	—25.6	100	n.	2	0.9		0	0			0	0	clear	
Fort Shaw, Montana	26.10	665.2	30.04	763.0	32	0.0	71	w.	3	1.3		0	0 s			0	0	fair	
Fort Sill, Indian Territory	28.86	733.0	30.17	766.3	48.5	9.2	95	s.	20	8.9			10 n			0.07	1.8	light rain	
Fort Stevenson, Dakota	27.96	710.2	29.98	761.5	11	—11.7	80	ne.	3	1.3		0	0			0	0	clear	
Fort Verde, Arizona					35.7	2.1	82	sw.			1	0	0			0	0	clear	
Fort Washakie, Wyoming	24.44	620.8			25.3	— 3.7	79	se.	6	2.7		0	0			0	0	clear	
Fredericksburg, Texas	28.36	720.3	30.16	766.1	55	12.8	100	calm	0	0			10 s			0.08	2.0	threatening	
Galveston, Texas	30.11	764.8	30.15	765.8	64	17.8	100	e.	6	2.7			10 n		s.	0.77	19.6	heavy rain	
Grand Haven, Michigan	29.68	753.9	30.39	771.9	27.0	— 2.8	88	se.	8	3.6			10 s		w.	0	0	cloudy	
Hatteras, North Carolina	30.35	770.9	30.37	771.4	36	2.2	69	ne.	28	12.5		0	9 k		ne.	0	0	cloudy	
Helena, Montana	25.61	650.5	30.01	762.2	39	3.9	73	sw.	12	5.4			10 s		sw.	0	0	cloudy	
Henrietta, Texas	29.19	741.4	30.24	768.1	48	8.9	100	s.	7	3.1			10 s			0.06	1.5	cloudy	
Huron, Dakota	28.48	723.4	30.00	762.0	20.2	— 6.6	73	se.	8	3.6			10 s			inap.	inap.	cloudy	
Indianapolis, Indiana	29.58	751.3	30.43	772.9	26	— 3.3	76	se.	4	1.8		0	0			0	0	clear	
Indianola, Texas	30.11	764.8	30.14	765.5	67.1	19.5	100	s.	4	1.8			10 n		s.	0.38	9.7	light rain	
Jacksboro, Texas	28.98	736.1	30.22	767.6	49	9.4	93	se.	7	3.1			10 s			0.02	0.5	cloudy	
Jacksonville, Florida	30.32	770.1	30.37	771.4	39	3.9	65	n.	8	3.6		2 cs	3 s		ne.	0	0	fair	
Keokuk, Iowa	29.58	751.3	30.28	769.1	33.5	0.8	68	se.	6	2.7		0	0			0	0	clear	
Key West, Florida	30.18	766.6	30.20	767.1	61.0	16.1	56	ne.	18	8.0		0	hz.			0	0	dense haze	
Kittyhawk, North Carolina	30.40	772.1	30.42	772.7	34	1.1	74	ne.	28	12.5			8 s		n.	0.05	1.3	cloudy	
Knoxville, Tennessee	29.37	746.0	30.45	773.4	25	— 3.9	73	ne.	8	3.6		0	sk.			0	0	clear	
La Crosse, Wisconsin	29.35	745.5	30.19	766.8	35	1.7	83	s.	5	2.2		0	7 s		s.	0	0	fair	
La Mesilla, New Mexico	26.22	666.0	30.23	767.8	39.3	4.1	87	calm	0	0		0	1 s			0	0	clear	
Leavenworth, Kansas	29.26	743.2	30.22	767.6	40	7.8	76	s.	8	3.6			10 s		s.	0	0	cloudy	
Lewiston, Idaho	29.09	738.9	29.96	761.0	34	1.1	88	calm	0	0			fg.			0.24	6.1	foggy	
Little Rock, Arkansas	29.98	761.5	30.31	769.9	48	8.9	86	sw	5	2.2			10 n			0.02	0.5	light rain	
Los Angeles, California	29.72	754.9	30.12	765.0	40.0	4.4	82	nw.	1	0.4		0	0			0	0	clear	
Louisville, Kentucky	29.82	757.4	30.41	772.4	31	— 0.6	78	e.	6	2.7		0	sk.			0	0	clear	
Lynchburg, Virginia	29.75	755.6	30.47	773.9	29.2	— 1.6	67	calm	0	0		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.21	741.9	30.30	769.0	33	0.6	78	s.	11	4.9			10 s		w.	0	0	cloudy	
Marquette, Michigan	29.45	748.0	30.23	767.8	26	— 3.3	76	sw.	10	4.5			10 s		sw.	0	0	cloudy	
Mason, Texas	28.47	723.1	30.20	767.1	54.4	12.4	96	calm	0	0			10 s		calm	0.05	1.3	cloudy	
Memphis, Tennessee	30.07	763.8	30.42	772.7	41	5.0	65	calm	0	0			10 s			0	0	cloudy	
Milwaukee, Wisconsin	29.54	750.3	30.34	770.6	29	— 1.7	77	s.	8	3.6		4 ck	0			0	0	fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.33	770.4	30.37	771.4	47.5	8.6	75	e.	5	2.2			10 s			0	0	cloudy	
Montgomery, Alabama	30.16	766.1	30.40	772.1	36	2.2	58	e.	5	2.2		3 cs	0			0	0	clear	
Moorhead, Minnesota	28.90	734.0	30.00	762.0	28	— 2.2	88	s.	6	2.7			10 s			0	0	cloudy	
Morgantown, W. Virginia	29.47	748.5	30.54	775.7	22.0	— 5.6	73	calm	0	0		0	0			inap.	inap.	clear	
Mt. Washington, N. H.	23.81	604.8	30.43	772.9	11.0	—11.7	50	ne.	15	6.7		0	1 s		ne.	0	0	clear	
Nashville, Tennessee	29.84	757.9	30.40	772.1	32.3	0.2	69	ne.	4	1.8		6 cs	0	w.		0	0	fair	
New Haven, Connecticut	30.33	770.4	30.45	773.4	19	— 7.2	70	n.	5	2.2		0	sk			0	0	clear	
New London, Connecticut	30.40	772.1	30.45	773.4	24	— 4.4	61	n.	7	3.1		0	0			0	0	clear	
New Orleans, Louisiana	30.27	768.8	30.33	770.4	54.0	12.2	96	e.	4	1.8			10 n			0.22	5.6	light rain	
Newport, Rhode Island	30.35	770.9	30.40	772.1	25.2	— 3.8	69	nw.	8	3.6		0	0			0	0	clear	
New River, N. Carolina					28	— 2.2	32	n.			1	0	0			0	0	clear	
New Shoreham, Rhode I'd.	30.37	771.4	30.40	772.1	27.0	— 2.8	64	n.	20	8.9		0	0			0	0	clear	
New York, New York	30.28	769.1	30.47	773.9	25	— 3.9	73	n.	7	3.1		0	0			0	0	clear	
Norfolk, Virginia	30.43	772.9	30.46	773.7	31	— 0.6	57	ne.	11	4.9		0	6 ks		e.	inap.	inap.	fair	
North Platte, Nebraska	27.06	687.3	30.16	766.1	27.6	— 2.4	70	calm	0	0		0	0			0	0	clear	
Olympia, Washington T'y	29.71	754.6	29.75	755.6	34.5	1.4	88	sw.	1	0.4			10 n		calm	inap.	inap.	light snow	
Omaha, Nebraska	28.88	733.5	30.15	765.8	39.8	4.3	76	s.	8	3.6		0	0			0	0	clear	
Ooglaamie, Pt. Barrow, Alas.	29.90	759.4	29.92	760.0	—53.0	—47.2	74	ssw.	6	2.7		0	0			0	0	clear	
Oswego, New York	30.12	765.0	30.47	773.9	16.0	— 8.9	83	s.	7	3.1		4 k	0	n.		0	0	fair	
Palestine, Texas																			
Pensacola, Florida	30.34	770.6	30.37	771.4	46.0	7.8	48	ne.	12	5.4		4 cs	hz			0	0	fair	
Philadelphia, Pa.	30.39	771.9	30.50	774.7	24.5	— 4.2	80	nw.	9	4.0		0	0			0	0	clear	
Pike's Peak, Colorado	17.74	450.6	30.46	773.7	8.5	—13.1	71	nw.	32	14.3		0	2 s			0	0	clear	
Pioche, Nevada	24.14	613.1	30.30	769.6	29	— 1.7	01	s.	3	1.3		0	0			0	0	clear	
Pittsburg, Pennsylvania	29.67	753.6	30.53	775.4	24.9	— 3.9	84	n.	2	0.9			fg			inap.	inap.	dense fog	
Port Eads, Louisiana	30.30	769.6	30.31	769.9	56.5	13.6	77	ne.	15	6.7			10 s			0	0	cloudy	
Port Huron, Michigan	29.76	755.9	30.49	774.4	21.0	— 6.1	85	sw.	1	0.4		0	sk			0	0	dense smoke	
Portland, Maine	30.33	770.4	30.38	771.6	24.0	— 4.4	61	nw.	10	4.5		0	0			0	0	clear	
Portland, Oregon	29.62	752.3	29.69	754.1	40.0	4.4	89	s.	2	0.9			10 n		s.	0.28	7.1	light rain	
Portsmouth, N. Carolina					36	2.2	53	n.	36	16.1			10 ks		n.	0	0	cloudy	
Prescott, Arizona	24.85	631.2	30.21	767.3	29	— 1.7	80	s.	2	0.9		0	0			0	0	clear	
Provincetown, Mass	30.33	770.4	30.36	771.1	30.5	— 0.8	68	n.	12	5.4		2 k	0	n.		0	0	clear	
Punta Rassa, Florida	30.22	767.6	30.23	767.8	51	10.6	59	ne.	20	8.9		1 c	hz	calm		0	0	clear	
Red Bluff, California	29.62	752.3	30.00	762.0	48.6	9.2	95	sw.	6	2.7		0	8 s		s.	0.67	17.0	cloudy	
Rio Grande City, Texas	29.90	759.4	30.15	765.8	61	16.1	39	nw.	4	1.8			10 n		calm	0.03	0.8	light rain	
Rochester, New York	29.77	756.1	30.48	774.2	16	— 8.9	83	sw.	5	2.2		1 cs	0			0	0	clear	
Roseburg, Oregon	29.22	742.2	29.79	756.7	42	5.6	93	calm	0	0		0	5 s		sw.	0.53	13.5	fair	
Sacramento, California	29.96	761.0	30.04	763.0	49.4	9.7	93	se.	4	1.8			8 s			0.45	11.4	cloudy	
St. Louis, Missouri	29.74	755.4	30.38	771.6	31.9	— 0.1	78	se.	9	4.0		2 c	0			0	0	clear	
St. Paul, Minnesota	29.15	740.4	30.09	764.3	35.0	1.7	72	se.	8	3.6			10 s		se.	0	0	cloudy	
St. Vincent, Minnesota	29.00	736.6	29.97	761.2	22	— 5.6	88	s.	16	7.2			10 s		calm	0	0	cloudy	
Salt Lake City, Utah	25.73	653.5	30.29	769.4	29	— 1.7	59	calm	0	0		0	0			0	0	clear	
San Antonio, Texas	29.43	747.5	30.15	765.8	58.6	14.8	93	calm	0	0			10 s		calm	0.04	1.0	cloudy	
San Diego, California	30.05	763.3	30.12	765.0	43.6	6.4	94	ne.	4	1.8		0	0			0	0	clear	
Sandusky, Ohio	29.78	756.4	30.50	774.7	26	— 3.3	76	sw.	7	3.1		0	0			0	0	clear	
Sandy Hook, New Jersey	30.42	772.7	30.46	773.7	25.0	— 3.9	74	n.	20	8.9		0	0			0	0	clear	
San Francisco, California	29.96	761.0	30.03	762.7	52	11.1	83	se.	7	3.1		0	7 s		se.	0.19	4.8	fair	
Santa Fé, New Mexico	23.30	591.8	30.34	770.6	28	— 2.2	80	n.	6	2.7		0	0			0	0	clear	
Savannah, Georgia	30.34	770.6	30.43	772.9	34	1.1	57	n.	9	4.0		0	hz			0	0	clear	
Shreveport, Louisiana	30.05	763.3	30.30	769.6	48	8.9	93	se.	8	3.6			10 n			0.74	18.8	heavy rain	
Silver City, New Mexico	24.35	618.5	30.20	767.1	39	3.9	70	nw.	6	2.7			10 s		nw.	0.16	4.1	cloudy	
Sitka, Alaska	28.66	728.0	28.73	729.7	38.1	3.4	82	e.	20	8.9			10 ks		e.	0	0	cloudy	
Smithville, North Carolina	30.38	771.6	30.42	772.7	28	— 2.2	64	calm	0	0		0	0			0	0	clear	
Spokane Falls, Wash. Ter.	27.87	707.9	30.00	762.0	25	— 3.9	76	e.	4	1.8			10 s			0.18	4.6	cloudy	
Springfield, Illinois	29.64	752.8	30.37	771.4	32.8	0.4	69	s.	11	4.9		0	hz			0	0	clear	
Springfield, Massachusetts	30.34	770.6	30.48	774.2	16.0	— 8.9	83	calm	0	0		0	fg			0	0	clear	
Springfield, Mo.	28.77	730.7	30.34	770.6	45	7.2	88	s.	9	4.0			10 n			inap.	inap.	light rain	
Stockton, Texas	27.09	688.1	30.22	767.6	44.2	6.8	93	calm	0	0		0	8 s		calm	0	0	cloudy	
Thatcher's Island, Mass.	30.32	770.1	30.38	771.6	27.0	— 2.8	82	nw.	16	7.2		0	0			0	0	clear	
Toledo, Ohio	29.74	755.4	30.48	774.2	28	— 2.2	70	sw.	1	0.4		0	0			inap.	inap.	clear	
Tucson, Arizona	27.66	702.6	30.14	765.5	48	8.9	93	se.	2	0.9			10 s			0.19	4.8	cloudy	
Umatilla, Oregon	29.50	749.3	29.88	758.9	34.5	1.4	83	ne.	2	0.9			10 n			0.15	3.8	light rain	
Uvalde, Texas	29.14	740.1	30.14	765.5	59	15.0	93	calm	0	0			fg			0.13	3.3	dense fog	
Vicksburg, Mississippi	30.08	764.0	30.35	770.9	49	9.4	71	e.	1	0.4			10 s		calm	0.02	0.5	threatening	
Visalia, California	29.66	753.4	30.04	763.0	43.7	6.5	82	s.	3	1.3		0	4 ks			0	0	fair	
Washington, D. C.	30.39	771.9	30.51	774.9	25.5	— 3.6	82	n.	3	1.3		0	hz.			inap.	inap.	clear	
West Los Animas, Colorado	26.05	661.7	30.18	766.6	18	— 7.8	70	nw.	6	2.7		0	0			0	0	clear	
Wickenburg, Arizona					38.0	3.3	96	w.			1	7 c	0	w.		0	0	fair	
Williamsport, Pa.	29.88	758.9	30.51	774.9	22	— 5.6	87	nw.	2	0.9		0	hz.			0	0	clear	
Wilmington, N. Carolina	30.37	771.4	30.43	772.9	31	— 0.6	57	n.	8	3.6		0	sk		calm	0	0	clear	
Winnemucca, Nevada	25.60	650.2	30.12	765.0	32	0.0	81	ne.	7	3.1			10 s		calm	0	0	cloudy	
Wood's Holl, Mass.																			
Yankton, Dakota	28.64	727.4	30.06	763.5	20	— 6.7	70	e.	5	2.2			10 s			0	0	cloudy	
Yuma, Arizona	29.91	759.7	30.07	763.8	50.2	10.1	76	se.	1	0.4		0	2 s			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.07	560.6			52.0	11.1	76	calm	0	0		3 k	1 s	sw.		0	0	fair	Joaquin Gomez.
Bridgetown, Barbados, W. I.	30.08	764.0	30.09	764.3	77	25.0	90	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	30.01	762.2	30.03	762.7	78	25.6	90	s.	2	0.9			10 ks		s.	0.30	7.6	threatening	J. I. Plume.
Guadeloupe, W. I.	29.95	760.7	29.97	761.2	72	22.2	86	e.				1 k	0			0	0	clear	B. Bigar.
Havana, Cuba, W. I.	30.18	766.6	30.23	767.8	69	20.6	61	ne.	3.6	1.6		0	1 ks		calm	0	0	clear	A. Van Caneghem.
Kingston, Jamaica, W. I.																			Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.06	763.5	30.06	763.5	76	24.4	91	e.			1	5 p	4 s	e.		0.450	11.4	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.52	749.8	29.98	761.5	80	26.7	85	calm			0		10 s		calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua																			Earl Flint.
Santiago de Cuba, W. I.	30.05	763.3	30.08	764.0	74	23.3	72	n.	3.6	1.6		0	3 ks		ne.	0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.70	754.4	29.75	755.6	4.0	—15.6	87	sw.	13	5.8		4 k	3 s	s.	sw.	0.05	1.3	cloudy	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Gibraltar, Mediterranean	30.43	772.9	60	15.6	94	calm			0		0							blue sky	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S. Alert, N. 4° 57′, E. 65° 05′	29.86	758.4	82	27.8	77	nne.			3		6							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.50	774.7	62	16.7	71	nne.			1		6							d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 20° 16′, E. 38° 30′	30.04	763.0	75	23.9	56	nnw.			5-6		3	nnw.				5	n.	misty	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.15	765.8	68	20.0	79	w.			1-3		2	s.						d. clouds	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S. 39° 22′, E. 51° 37′	30.16	766.1	61.5	16.4	91	ese.			6		10					6	e.	misty	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′, W. 61° 31′	30.09	764.3	78	25.6		se.			1		2	ene.						d. clouds	Capt. C. Domville.
H. M. Dock Yard, Bermuda, W. I.	29.84	757.9	55	12.8	68	wnw.			1-2		7	wnw.						squally	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	30.02	762.5	76.5	24.7	89	n.			1		0					1	n.	blue sky	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 12° 11′, E. 44° 25′	29.82	757.4	85	29.4		calm			0		6							d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 36° 50′, E. 22° 55′	29.81	757.2	69	20.6	79	w.			5-6		8					6	nw; sw.	showery	Capt. C. A. G. Bridge.
H. M. S. Fawn, N. 13° 20′, E. 43° 30′	29.92	760.0	78.5	25.8	80	s.			1		1							misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.25	768.3	48.5	9.2	89	w.			1		6							showery	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 18° 20′, W. 82° 50′	30.02	762.5	70.5	21.4	77	ese.			3-4		9					2 3	ese. s.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.43	747.5	53	11.7	66	wsw.			6		4							squally	Capt. L. F. Jones.
H. M. S. Inconstant, Singapore, Malay Pen.	29.93	760.2	78	25.6	90	n.			2		10							showery	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′ E. 113° 24′	30.25	768.3	64	17.8	78	calm			0		0							blue sky	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.92	760.0	62	16.7		n.			2		6								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.87	758.7	73	22.8	95	se.			1		2	nw.						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, Port Royal, Jamaica, W. I.	30.01	762.2	72	22.2	88	nne.			1		1							blue sky	Capt. E. Drummond.
H. M. S. Orontes, S. 25° 20′, E. 37° 10′	29.84	757.9	79.5	26.4	92	ese.			5		3					5	ese.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican, N. 49° 45′, W. 9° 56′	29.28	743.7	53.5	11.9	100	ssw.			6		10					7	ssw.	misty	Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, N. 4° 00′, E. 7° 19′	29.96	761.0	83	28.3	95	calm			0		10	calm						hazy	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.10	764.5	63	17.2		nw.			2		0							blue sky	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	29.64	752.8	40	4.4	82	se.			1		6							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 4° 04′, E. 39° 43′	29.25	742.9	84	28.9	96	ne.			3-4		3	ene.						d. clouds	Capt. E. T. Church.
H. M. S. Thalia, N. 30° 20′, W. 18° 37′	30.38	771.6	70	21.1		ssw.			1		4					3	nw.	d. clouds	
H. M. S. Triumph, S. 18° 21′, W. 82° 54′	30.05	763.3	70	21.1	79	se.			2		7	e.				2	se.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 1° 38′, E. 102° 50′	29.93	760.2	80	26.7	95	n.			2		1							blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	30.07	763.8	72	22.2		n.			1		3							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, N. 19° 20′ E. 70° 41′	29.89	759.2	78.5	25.8	69	ne.			3		0					3	ne.	misty	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, St. Vincent, Cape Verd Id.	30.39	771.8	74.3	23.5	71	ne			4		0					2	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 20° 13′, W. 84° 41′	30.12	765.1	70.5	21.4	92	nne.			3		4							misty	Capt. A. L. Broberg.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.34	770.6	49	9.4	85	ne.	11	4.9	.....	.....	10	.....	ne.	0	0	.....	.....	misty	
N. Yard, Portsmouth, N. H.	30.41	772.4	17	— 8.3	.....	nw.	8	3.6	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Naval Hospital, Yokohama, Japan	30.01	762.2	42	5.6	70	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear	
Adams, Callao, Peru	29.75	755.6	68	20.0	95	sse.	.....	.....	1	.....	10	.....	.....	0	0	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	29.82	757.4	71	21.7	49	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert, N. 0° 05′, E. 108° 22′*	29.80	756.9	79	26.1	91	wnw.	.....	.....	4	.....	10	.....	calm	.....	.....	long	wnw'	misty	
Alliance, N. 31° 55′, W. 69° 35′	29.94	760.5	53	11.7	80	ne.	.....	.....	2	.....	10	.....	nne.	mod.	mod.	sm'h	n.	raining	
Ashuelot, Tientsin, China	30.65	778.5	27	— 2.8	100	sse.	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, Sandy Point, Patagonia	29.43	747.5	49	9.4	85	w.	10	4.5	.....	.....	10	.....	nw.	0.05	1.3	sm'h	.....	cloudy	
Colorado, New York, N. Y.	30.43	772.9	23	— 5.0	72	wnw.	5	2.2	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Enterprise, N. 33° 12′, W. 77° 43′*	30.33	770.4	48	8.9	85	n.	.....	.....	6	.....	10	.....	n.	.....	.....	mod.	n.	cloudy	
Essex, N. 16° 20′, W. 21° 33′	30.16	766.1	75	23.9	81	ne.	.....	.....	4	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Franklin, Norfolk, Va	30.51	774.9	33	0.6	70	nne.	10	4.5	.....	.....	8	.....	ne.	0	0	.....	.....	cloudy	
Galena, Villafranca, France	30.41	772.4	57	13.9	81	ssw.	.....	.....	1	.....	8	.....	.....	.....	.....	sm'h	.....	cloudy	
Independence, N. Yard, Mare I'd, Cal	29.91	759.7	50	10.0	93	calm	0	0	.....	.....	2	.....	se.	0	0	.....	.....	fair	
Kearsarge, New Orleans, La	30.35	770.9	55	12.8	74	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	rainy	
Lackawanna, Valparaiso, Chili*	29.80	756.9	63	17.2	100	calm	.....	.....	0	.....	2	.....	w.	.....	.....	.....	.....	clear	
Lancaster, Alexandria, Egypt	30.26	768.6	61	16.1	61	nnw.	.....	.....	3	.....	10	.....	calm	.....	.....	mod.	wsw.	cloudy	
Marion, S. 33° 54′, E. 18° 24′	29.92	760.0	68	20.0	79	sw.	.....	.....	3	.....	5	.....	w.	light	light	sm'h	.....	fair	
Michigan, Erie, Pa	30.43	772.9	25	— 3.9	77	sw.	.....	.....	3	.....	8	.....	w.	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I	30.39	771.9	26	— 3.3	.....	n.	10	4.5	.....	.....	0	.....	.....	.....	.....	.....	.....	fair	
Monocacy, Yokohama, Japan	30.16	766.1	45	7.2	76	nnw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Nipsic, N. 36° 59′, W. 8° 45′	30.33	770.4	62	16.7	88	ssw.	.....	.....	4	.....	10	.....	ssw.	.....	.....	long	sw.	cloudy	
Onward, Callao, Peru†	30.07	763.8	66	18.9	100	se.	.....	.....	2	.....	10	.....	nnw.	.....	.....	long	w.	foggy	
Palos, Hong Kong, China	30.27	768.8	60	15.6	82	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Passaic, Washington, D. C.	30.50	774.7	24	— 4.4	.....	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	clear	
Pensacola, Coquimbo, Chili	29.96	761.0	60	15.6	94	calm	0	0	.....	.....	0	.....	.....	0	0	sm'h	.....	clear	
Powhatan, Fredericstaed, Santa Cruz	30.07	763.8	75	23.9	81	ene.	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	fair	
Quinnebaug, Alexandria, Egypt	30.32	770.1	61	16.1	61	nw.	.....	.....	4	.....	5	.....	nw.	.....	.....	sm'h	.....	fair	
Ranger, N. 19° 14′, W. 104° 43′*	29.89	759.2	71	21.7	80	n.	.....	.....	1	.....	0	.....	.....	0	0	sm'h	.....	clear	
Richmond, N. 31° 30′, E. 144° 29′*	30.20	767.1	58	14.4	64	sw.	.....	.....	2	.....	5	.....	sw.	0	0	long	nnw.	fair	
Shenandoah, S. 25° 41′, W. 24° 39′*	30.30	769.6	79	26.1	82	e.	.....	.....	2	.....	8	.....	e.	.....	.....	sm'h	.....	fair	
St. Louis, League Island, Pa	30.70	779.8	22	— 5.6	100	n.	10	4.5	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Swatara, Yokohama, Japan*	29.94	760.5	48	8.9	78	nw.	.....	.....	1	.....	0	.....	.....	.....	.....	sm'h	.....	hazy	
Tennessee, Fort Monroe, Va	30.43	772.9	33	0.6	80	nne.	16	7.2	.....	.....	2	.....	nne.	0	0	light	.....	fair	
Vandalia, N. 19° 14′, W. 84° 49′*†	30.25	768.3	74	23.3	72	nne.	.....	.....	4	.....	2	.....	ne.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass.	30.38	771.6	20	— 6.7	.....	n.	6	2.7	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Wachusetts, McLaughlin Bay, B. C.	29.03	737.3	41	5.0	91	se.	.....	.....	5	.....	10	.....	se.	.....	.....	.....	.....	squally	
Wyoming, Port Royal, S. C.	30.44	773.2	34	1.1	79	n.	14	6.3	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Yantic, Belize, Central America*	30.10	764.5	76	24.4	86	ene.	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland																	
S. S. Circassian, Capt. W. H. Smith, Halifax, N. S.	30.44	773.2	20	— 6.7	.....	nw.	5	.....	0	.....	.....	0	0	.....	.....	blue sky	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 50° 00′, W. 34° 03′*	29.03	737.3	52	11.1	.....	ssw.	3	.....	3	.....	ssw.	2 h'r	2 h'r	long	ne.	clear	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, N. 43° 54′, W. 50° 39′*	29.53	750.0	30	—1.1	.....	wnw.	6	.....	10	.....	wnw.	.....	.....	h'vy	nnw.	light snow	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Portland, Maine*	30.39	771.9	25	—3.9	.....	nw.	3	.....	0	.....	.....	0	0	.....	.....	clear	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 40° 33′, W. 55° 05′*†	29.58	751.3	42	5.6	.....	nw.	6	.....	4	.....	nnw.	0	0	mod.	nnw.	squally	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn.	30.36	771.1	29	—1.7	78	nnw.	3	.....	2	.....	nnw.	.....	.....	.....	.....	clear	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 49′, 25° W. 24° 16′†	28.96	735.6	55	12.8	87	wsw.	5	.....	5?	.....	sw.	light	light	sm'h	s.	cloudy?	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†	29.80	756.9	45	7.2	?	wnw.	6	.....	10	.....	wnw.	.....	.....	.....	.....	overcast	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Young.
S. S. Galatia, Capt. J. D. Allison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Daw, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, N. 12° 50′, W. 75° 15′*	30.09	764.3	78	25.6	.....	ene.	3	.....	6	.....	e.	0	0	mod.	ene.	hazy	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 19° 27′, W. 75° 00′*†	30.02	762.5	72	22.2	.....	ene.	3	.....	5	.....	ene.	½ h'r	light	.....	e.	fine	W. H. Bennett.
S. S. Arden, Capt. F. de Echevarrieta, N. 21° 20′, W. 74° 15′	.....	.....	.....	.....	.....	n.	2	.....	.....	.....	.....	.....	.....	sm'h	n.	clear	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Halifax, N. S†	30.11	764.8	.....	.....	.....	n.	.....	.....	0	.....	.....	0	0	.....	.....	clear	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 28° 22′, W. 30° 30′	30.20	767.1	74	23.3	.....	e.	5	.....	10	.....	.....	.....	.....	.....	.....	drizzling	.....
Baroda, Capt. C. J. Russell, S. 29° 52′, W. 22° 22′	30.32	770.1	71.7	22.1	90	ese.	4	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Bk. Caldew, Capt. W. Peterson S. 26° 59′, W. 29° 05′	30.26	768.6	75.1	23.9	.....	n.	4	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
S. S. Cipero, Capt. W. N. Lailey N. 29° 34′, W. 40° 38	30.13	765.3	74	23.3	76	sw.	4	.....	1	.....	.....	.....	.....	3	sw.	blue sky	.....
S. City of Agra, Capt. Thos. Young	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coppename, Capt. James Buchan N. 18° 28′, W. 58° 58′	30.10	764.5	77.5	25.3	65	se.	2	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, N. 11° 43′, E. 91° 14′	29.91	759.7	82	27.8	83	e.	3-4	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hope, Capt. James Campbell N. 8° 00′, W. 29° 10′	30.04	763.0	78	25.6	90	ne.	4	.....	2	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Humboldt, Capt. A. W. Jeffery, N. 31° 00′, W. 67° 40′	29.94	760.5	56	13.3	75	nnw.	7	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 6° 00′, W. 17° 18′	30.06	763.5	82.6	28.1	79	se.	3	.....	3	.....	.....	.....	.....	.....	.....	misty	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 39° 58′, W. 78° 28′	30.12	765.0	61.5	16.4	88	nw.	3	.....	9	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, S. 28° 50′, W. 48° 34′	30.11	764.8	78	25.6	95	ne.	2	.....	5	.....	.....	.....	.....	.....	.....	showery	.....
Naiad, Capt. J. Smith,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry. N. 0° 34′, E. 87° 42′	29.87	758.7	82	27.8	83	wsw.	2	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. J. W. Pearson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Hudson River, N.Y.*†	30.40	772.1	.....	.....	.....	ne.	3	.....	0	.....	.....	0	0	.....	.....	clear	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 26° 55′, W. 79° 48′*†	30.30	769.6	62	16.7	.....	nw.	.....	.....	10	.....	n.	.....	.....	r'gh	n.	cloudy	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Stembridge, 3d offi.
S. S. Gallia, Capt. W. H. P. Hains, N. 41° 26′, W. 52° 22′†	29.62	752.3	44	6.7	84	n.	6	.....	8	.....	n.	snow	snow	mod.	nw.	.....	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt. Périer d'Hauterive, N. 49° 42′, W. 9° 06′*†.	29.69	754.0	50.0	10.0		sw.	5		n		ssw.	rain	rain	h'vy	ssw.	rainy	
S. S. St. Laurent, Capt. A. Sérvan,																	A. Servan.
HAMBURG-AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein, N. 49° 49′, W. 2° 40′.			56	13.3		sw.	6		10		sw.	4 h'r	light	r'gh	sw.		
S. S. Silesia, Capt. A. Albers. N. 43° 37′, W. 49° 28′*†.	29.46	748.3				w.	6		10		wnw.	0	0	5	wnw.	overcast	
S. S. Wieland, Capt. C. Hebich,																	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch N. 40° 52′, W. 56° 00′.	29.85	758.2				n.	6		8?		n.	snow	&hail		n.	clear.?	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, S. 4° —′, W. 31° —′*†.	30.19	766.8	82	27.8		ese.	3		4		ese.	0	0	sm'h		clear	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 27° 21′ W. 90° 03′*†.	30.33	770.4	63	17.2		ne.	3		5		w.	0	0	mod.	nne.	hazy	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 46° 29′, W. 44° 34′*†.	29.00	736.6	39	3.9	100	w.	6		haze		w.	1 h'r	1 h'r		n.	foggy	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, Havana, Cuba, W. I*†.	30.29	769.4	73	22.8		nne.	1		0			0	0			clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Alisa, Capt. J. W. Sansom, [man																	
S. S. City of Alexandria, Capt. L. F. Timmer- Frontera Roads, C. A.*†. [nolds	30.28	769.1	75	23.9		nne.	3								e.	d. clouds	
S. S. City of Washington, Capt. J. W. Rey- N. 21° 20′, W. 89° 50′*†.	30.30	769.6	79	26.1		ene.	3								sw.	fine	
S. S. Elbe, Capt. W. Willigerod.																	
S. S. Lessing, Capt. B. Voss.																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick,																	
S. S. Olbers, Capt. J. Clarke.																	
S. S. P. Caland, Capt. E. Deddes,																	
S. S. Schiedam, Capt. E. M. Chevalier, N. 39° 54′, W. 67° 08′.	30.19	766.8	36	2.2		n.	5								nne.	snowy	
S. S. Scythia, Capt. M. Murphy.																	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur, N. 50° 08′, W. 3° 39′*†.	29.76	755.9	48.2	9.0		ssw.	6		10		sw.	10 h'r	10 h'r	r'gh	wsw.	overcast	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 18° 54′, W. 22° 26′*.	30.25	768.3	78.1	25.6		n.	3		0			0	0	sm'h	ne.	clear	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer, N. 48° 14′, W. 25° 26′.	29.04	737.6	55	12.8	87	sw.	5		2		wsw.	5 h'r	light	mod.	s; wsw.	fair	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 49° 30′, W. 25° 50′*.	28.97	735.8	53.6	12.0		w.	4		5		w.	0	0	mod.	w.	fine	
S. S. Mosel, Capt. F. Hesse, N. 48° 30′, W. 30° 51′.	28.93	734.8	56.8	13.8		sw.	5		2		sw.	6 h'r	6 h'r	mod.	wsw.	clear	J. Hesse.
S. S. Neckar, Capt. R. Bussius, N. 40° 18′, W. 72° 10′.	30.43	772.9	33.1	0.6		nnw.	4		3		nnw.	8 h'r and	snow hail	light	n.	clear	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	Moutz & Kohlenbeck.
S. S. Oder, Capt. C. Undeutsch,																	Hattensaur & Raetz.
S. S. Ohio, Capt. Gustave Meyer, N. 37° 15′, W. 74° 06′.	30.41	772.4				ne.	5		8		ne.	½ h'r	snow	long	n.	cloudy	
S. S. Strassburg, Capt. O. Heimbruch, N. 43° 36′, W. 48° 18′*.	29.40	746.7	38.0	3.3	96	wnw.	7		8		wnw.	2 h'r and	rain snow	h'vy	wnw.	covered	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 25° 31′, E. 120° 45′†.	30.34	770.6	65	18.3	78	nne.	5		5		ne.	0	0	mod.	ne.	fair	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 36° 56′, W. 154° 14′†*.	30.30	769.6	60	15.6	70	w.	6		7		w.			mod.	nw.	cloudy	
S. S. Oceanic, Capt. J. Metcalfe, N. 45° 03′, W. 150° 00′*.	29.77	756.1	43	6.1	75	w.	6		6		nw.			6	wnw.	fine	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, New York, N. Y*†.	29.96	761.0				n.	2		0							clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Nantucket Shoals, Mass†.	30.37	771.4	36	2.2	70	n.	3		1		n.	snow	snow	r'gh	ne.	clear	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	29.62	752.3	39	3.9	71	se.	1	.....	10	.....	se.	.....	.....	.....	.....	rain & snow	E W. Holmes.
S. S. Willametta, Capt. L. Meyer, Strait of Fuca.*†	29.43	747.5	40	4.4	82	ese.	3	.....	8	.....	se.	.....	.....	.....	.....	raining	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Portland, Oregon†	29.65	753.1	39	3.9	91	calm	0	.....	10	.....	.....	.....	.....	.....	.....	heavy rain	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, San Francisco, Cal†	29.99	761.7	50	10.0	78	se.	2	.....	10	.....	se.	.....	.....	sm'h	.....	cloudy	.....
S. S. G. W. Elder, Capt. H. G. Morse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Idaho, Capt. H. M. Hayward, Seattle, Wash. Ter†	29.46	748.3	42	5.6	100	calm	0	.....	5†	.....	.....	.....	.....	.....	.....	overcast?	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 34° 26′, W. 120° 28′†	30.02	762.5	55	12.8	76	se.	5	.....	.....	.....	se.	.....	.....	r'gh	se.	clear	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace, N. 35° 12′, W. 120° 52′†	30.11	764.8	50	10.0	86	e.	2	.....	10	.....	se.	0	0	mod.	se.	fair	.....
S. S. State of California, Capt. G. Debney, N. 46° 10′, W. 124° 10′†	29.53	750.0	42	5.6	91	nne.	4	.....	10	.....	s.	.....	.....	sm'h	w.	showery	.....
S. S. Victoria, Capt. W. E. Plummer, N. 48° 32′, W. 123° 18′†	29.59	751 5	42	5.6	83	se.	3	.....	10	.....	.....	.....	.....	mod.	w.	raining	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 18° 01′, W. 159° 31′	30.10	764.5	71	21.7	76	ene.	5	.....	2	.....	e.	2 h'r	light	long	ne.	clear	.....
S. S. City of New York, Capt. W. B. Cobb, N. 37° —′, W. 124° 30′†	29.85	758.2	52	11.1	86	se.	5	.....	10	.....	.....	0	0	hv'y	se.	cloudy	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 20° 15′, W. 105° 41′†	30.22	767.6	74	23.3	76	ne.	2	.....	0	.....	.....	0	0	long	ne.	clear	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, Sydney, N. S. W†	30.17	766.3	76	24.4	72	calm	0	.....	0	.....	.....	0	0	sm'h	.....	clear	E. Le Saik.
S. S. City of Tokio, Com. J. Maury.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, N. 7° 12′, W. 81° 40′†	29.92	760.0	80	26.7	74	ene.	6	.....	3	.....	calm	0	0	r'gh	ene.	clear	.....
S. S. Granada, Capt. M. Connolley, N. 19° 39′, W. 105° 15′†	29.95	760.7	76	24.4	?	var.	1	.....	0	.....	.....	0	0	light	nw.	hazy	.....
S. S. South Carolina, Capt. W. J. Russell, Corinto, Nicaragua†	29.99	761.7	78	25.6	80	ne.	2	.....	hz.	.....	.....	0	0	sm'h	.....	hazy	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, S. 33° 53′, E. 165° 05′	30.10	764.5	69	20.6	75	ne.	4	.....	10	.....	n.	.....	.....	mod.	ne.	fair	.....
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth N. 21° 11′, W. 66° 20′†	30.09	764.3	74	23.3	.....	sw.	4	.....	2	.....	.....	2 h'r	2 h'r	sm'h	.....	fine	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, St. Lucia, W. I.	.....	.....	.....	.....	.....	ne.	2	.....	5	.....	.....	0	0	sm'h	.....	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes Flushing, Netherlands*†	30.03	762.7	52	11.1	.....	ssw	1	.....	2	.....	w.	0	0	.....	.....	fair	.....
S. S. Nederland, Capt J. Ueberweg, N. 49° 08′, W. 41° 43′*†	29.58	751.3	50	10.0	.....	nnw.	6	.....	10	.....	.....	driz.	driz.	cross	n.	misty	Albrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	30.13	765.3	59	15.0	76	s.	3	.....	10	.....	s.	0	0	.....	.....	cloudy	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Vaderland, Capt. W. A Beynon, N. 47° 03′, W. 38° 10′*†	28.66	728.0	50	10.0	.....	wsw.	6	.....	8	.....	sw.	0	0	high	w.	cloudy	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, Off New York, N. Y.*	30.26	768.6	22	—5.6	.....	n.	4	.....	0	.....	.....	0	0	.....	.....	clear	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis. N. 47° 49′, W. 27° 30′*	28.86	733.0	61.0	16.1	88	sw.	4	.....	7	.....	ssw.	5 h'r	5 h'r	sm'h	nw.	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Brooklyn, N. Y.†	30.38	771.6	27.5	—2.5	.....	ne.	2	.....	2	.....	ne.	0	0	.....	.....	clear	J. T. Eberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters. N. 43° 03′, W. 59° 41′*†	30.10	764.5	31	—0.6	.....	ne.	4	.....	10	.....	ne.	2 h'r	snow sleet	mod.	ne.	cloudy	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell N. 51° 09′, W. 13° 09′†*	29.05	737.9	52	11.1	100	ssw.	3	.....	8	.....	s.	12 h'r	driz.	mod.	ssw.	misty	B. Gleadell
S. S. Germanic, Capt. C. W. Kennedy. N. 51° 12′, W. 14° 26′*†	29.28	743.7	53	11.7	.....	sw.	4	.....	8	.....	sw.	shr's	sh'rs	sm'h	s.	d. clouds	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, Off Staten Island, N. Y*	30.25	768.3	33	0.6	.....	sw.	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Schr. Addie Fuller, Capt. J. Jorgensen. Cedar Keys, Florida†.	30.39	771.9	42.5	5.8	75	ne.	3	0	0			0	0			clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 22° 45′, W. 39° 25′*†	30.27	768.8	75	23.9		se.	1		1		ese.	0	0	sm'h	nnw.	clear	C. Bailey.
Bk. Alpha, Capt. O. Grönn N. 18° 30′, W. 58° 20′*†	30.08	764.0	78	25.6		sse.	2		2		s.	0	0	sm'h		fair	Ole Grönn.
Schr. Annie M. Law, Capt. F. S. Crosby, N. 44° 27′ W. 35° 15′*†	29.05	737.9	53	11.7	79	wsw.	6		7		w.	0	0	high	wsw.	squally	C. McCarthy.
Schr. Annie R. Lewis, Capt. L. L. Lewis, N. 25° 30′, W. 69° 53′*†	29.98	761.5	72	22.2		nnw.	4		5		nw.	sh'rs	sh'rs	r'gh	nw.	threatening	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, S. 15° 50′, W. 35° 40′*†	30.10	764.5	87	30.6		se.	4		1		sse.	0	0	sm'h	se.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen, N. 30° 55′, W. 71° 30′†	30.05	763.3				nnw.	6					0	0	high	nnw.	squally	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia, N. 36° 20′, W. 62° 33′*†	29.98	761.5				n.	4		6			snow	&hail	mod.	nnw.	cloudy	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 39° 22′, W. 56° 07′*†	29.72	754.9				n.	4				n.	0	0	mod.	n.		G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill, S. 57° 40′ W. 68° 50′†	29.10	739.1				w.	6		2		w.	12 h'r	12 h'r	cross	wsw.		A. J. Pettengill.
S. Enoch Train, Capt. H. D. Chapman, Bremerhaven, Germany*	30.06	763.5				sw.	2		0			0	0			clear	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.																	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner U.S.N, Washington, D. C†	30.48	774.2	33	0.6		calm	0		0			0	0			clear	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 20° 07′, W. 49° 17′			75	23.9		se.	1		2		se.	0	0	sm'h		fair	
Bk. Gamaliel, Capt. D. J. Anthony, N. 33° 28′, W. 74° 16′*†	30.02	762.5				nnw.	8		5		nnw.	light	hail	high	nw.		
Bk. Geo. Booth, Capt. D. Williams, S. 15° 30′, W. 33° 30′*†	29.85	758.2	87	30.6		ese.	3					0	0			squally	D. Williams.
Bk. Granville, Capt. R. Bonney N. 21° 35′, W. 37° 50′*†	30.39	771.9	77	25.0		ese.	1					0	0	mod.	nnw.	clear	
Schr. Henry Denison, Capt. Jno. Fehring N. 32° 48′, W. 68° 38′†	29.96	761.0				nne.	6		5		ne.	sh'rs	sh'rs	r'gh	ne.	fair	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 35° 33′. E. 72° 20′*	30.06	763.5				nne.	2		2		n.	2 h'r	light	mod.	nne.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann, N. 37° 19′, W. 66° 31′						ne.	3		10		ne.	0	0	long	ne.	clearing	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith, N. 34° 22′, W. 64° 28′*†	29.90	759 4				ne.	1		8			sh's	sh's	long	n.	cloudy	A. Smith.
Schr. Moravian, Capt. Geo T. L. Compte N. 22° 53′, W. 71° 06′*†	30.46	773.7				n.					ne.			h'vy	n.	clear	G. T. Le Compte.
Bk. New York, Capt. J. E. Sorensen,																	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 18° 40′, W. 40° 33′*†	30.50	774.7	74.5	23.6	90	ese.	5		2		ese.			hv'y	n.		E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, N. 44° 43′, E. 14° 07′†	30.30	769.6	60	15.6	76	ese.	2		5		w.			sm'h		fair	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 37° 18′, W. 11° 00′*†	30.30	769.6				wsw.			0			0	0			clear	J. Connolly.
Schr. S. B. Hubbard, Moorhead City, N. C.*†	30.39	771.9	32	0.0		nnw.	3		5		n.	0	0			fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 35° 06′, W. 46° 02′*	30.16	766.1	73.4	23.0	96	nw.	2		4		n.			sm'h	nw.	d. clouds	H. N. T. Sumner.
Bk. Sunbeam, Capt. Joseph Hand, N. 21° 21′, W. 42° 07′*†	30.26	768.6	78	25.6	86	e.	4		2		e.	0	0	mod.	e.	clear	J. Green.
Bg. Wauburn, Capt. I. W. Covert,																	
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 50° 17′, W. 1° 00′*†	29.67	753.6	54	12.2	60	s.	6				wsw.			sm'h		cloudy	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton, S. 23° 51′, W. 40° 38′*†	30.10	764.5				nw. wnw.					wnw.			mod.	se.		N. P. Dutton.

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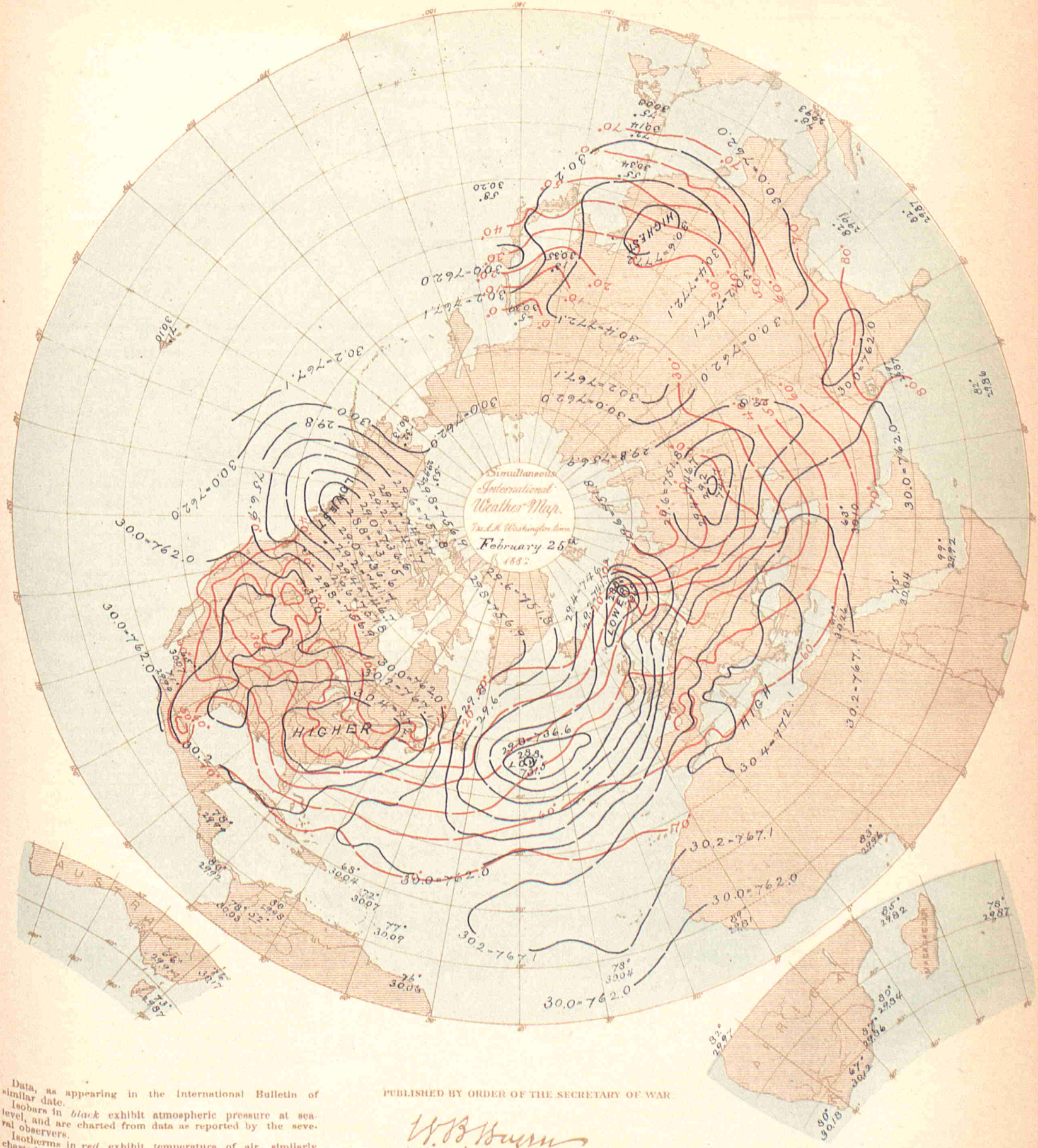
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co Boston

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 26, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.28	769.1	71.6	22.0	80	sw.			2		0			0	0	clear	Moiroud.
Algiers			30.21	767.2	73.4	23.0	38	w.			2		0			0	0	clear	Nicolas.
La Calle			30.17	766.2	66.9	19.4	75	nw.			4		7			0.256	6.5	very cloudy.	Fonfrède.
Tunis			30.24	768.0															Jacques.
Sfax																			Gau.
Saida			30.34	770.7	63.0	17.2	36	nw.			3		1			inap.	inap.	very fair	Dumas.
Tebessa			30.32	770.2	63.3	17.4	19	nw.			4		1			0	0	very fair	Derché.
Geriville					59.4	15.2	17	w.			2		3			0	0	pretty fair	Louchamp.
Laghouat			30.43	773.0	59.0	15.0	32	sw.			1		0			0	0	clear	Herbin.
Biskra			30.38	771.7	69.4	20.8	29	s.			3		3			c	0	pretty fair	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.77	756.1	29.86	758.4	63.0	17.2	80	w.	14	6.3			10			0.13	3.3	showery	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.52	749.9	30.08	763.9	55.4	13.0	48	sw.			6		8			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	29.14	740.1	29.91	759.6	51.1	10.6	70	sw.	0.7	0.3			1			0	0		Dr. Wierzbiski.
Eperies	29.13	739.9	30.03	762.7	43.7	6.5	85	s.			3	4 cs	0			0.047	1.2		Julius Mikolik.
Gratz	28.70	728.9	29.95	760.7	53.6	12.0	50	s.			2		3			0	0		Andreas Rosplini.
Hermannstadt	28.65	727.7	30.09	764.2	55.6	13.1	45	nw.			4		2			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.50	723.8	29.84	758.0	47.8	8.8	76	calm			0		5			0	0	fair	The Staff.
Lemberg	28.97	735.7	29.97	761.1	46.8	8.2	70	s.			1		1			0	0		Dr. T. Stanecki.
Pola	30.07	763.8	30.19	766.7	55.2	12.9	83	ssw.			2		6			0	0		I. R. Hydrographic Office.
Szathmar	29.60	751.7	30.06	763.6	51.4	10.8	58	sw.			1		4			0	0		Joseph Midlinszky, S. J.
Szegedin	29.78	756.4	30.06	763.5	55.8	13.2	71	sw.			4		0			0	0		Karl Stancel.
Trieste	30.10	764.6	30.21	767.2	51.1	10.6	83	calm			0		10			0	0		Rieder.
Vienna	29.20	741.7	29.92	759.9	52.2	11.2	57	se.			2		1			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	28.72	729.5	28.81	731.8	51.1	10.6	80	ssw.	14	6.3			6			0.350	8.9	d clouds	W. Boswell.
Armagh, Observatory	28.61	726.7	28.86	733.0	51.9	11.1	80	s.	11	4.9									S. Call.
Bidston, Liverpool Obs'y			28.91	734.3	50.5	10.3	97	se.	7	3.1			10					raining	John Hartnup.
Bolton, Sharples	28.39	721.1	28.90	734.0	49.7	9.8	96	sse.					10					raining	Thomas Mackereth [A.S.
Bradford, Yorkshire																0.82	20.8		J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.06	763.5	30.09	764.3	81.0	27.2	70	ne.			2		3					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			29.00	736.6	54.0	12.2	86	sw.			6-0		10					overcast	John McLaren.
Chatham, School M. E.	29.04	737.6	29.17	740.9	54.3	12.4	80	sw.			5		7			blank	blank	d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	28.90	734.0	29.12	739.6	50.0	10.0	89	wsw.			6		10					rain & fog	The Staff.
Fort Napier, Natal	27.67	702.8	29.89	759.2	79.2	26.2	61	calm			0		3					blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	87.0	30.6	69	nw.			1		3					d. clouds	Sergt. John Robinson.
Galway, Queen's College			28.77	730.7				wsw.			2		10			0.33	8.4	gloomy	J. O'Donaghue.
Gibraltar, Mediterranean	30.30	769.6	30.36	771.1	63.5	17.5	81	w.			3		9					gloomy	Cpl. O. Baldwin.
Glasgow, Observatory	28.59	726.2	28.79	731.3	51.8	11.0	83	sw.			4		10					foggy	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	28.95	735.3	29.12	739.6	54.2	12.3	79	ssw.			5		9					overcast	The Staff.
Guernsey	28.95	735.3	29.24	742.7	51.0	10.6	93	wsw.			2		10					squally	A. Collenette, F. M. S.
Kew, Observatory	29.08	738.6	29.11	739.4	54.5	12.5	75	ssw.	34	15.2			8					threatening.	The Staff.
Leicester, Museum	28.69	728.7	28.93	734.8	51.4	10.8	78	sw.			5		10					drizzling	J. C. Smith.
Malta, Mediterranean	30.39	771.9	30.46	773.7	60.0	15.6	66	sw.			2		2					blue sky	Corpl. A. King, A. H. C
Nassau, Bahamas	30.24	768.1	30.28	769.1	67.5	19.7	87	ne.			1		7					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.42	721.9	28.94	735.1	46.8	8.2	94	sw.			3		10					raining	John Mac Email.
Oxford, Radcliffe Obs'y	28.81	731.8	29.04	737.6	51.3	10.7	87	s.			7		10					raining	The Staff.
Plymouth	29.04	737.6	29.11	739.4	53.0	11.7	90	sw.			6		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			28.88	733.5	39.2	4.0	97	ne.	40	17.9			10					showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.17	766.3	30.24	768.1	50.0	10.0	50	s.			1		2					blue sky	W. H. Lyne.
Sheffield	28.63	727.2	28.90	734.0	51.0	10.6	98	s.			1		10			0.44	11.2	raining	W. F. Cooper.
Silloth Rectory	28.86	733.0	28.89	733.8	49.0	9.4	94	sw.			4		10			0.325	8.3	misty	Rev. F. Redford, M. A.
Stonyhurst, Observatory			28.95	735.3	51.0	10.6	89	ssw.	6	2.7			10					overcast	I. New.
Straitfield Turgiss	28.90	734.0	29.12	739.6	53.1	11.7	83	sw.			3-5		10					raining	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.06	738.1	29.11	739.4	54	12.2	79	sw.			8		8					gloomy	W. Newcombe.
Valencia, Observatory	28.88	733.5	28.91	734.3	51.6	10.9	84	s.	28	12.5			10			blank	blank	d. clouds	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.17	766.3	30.20	767.1	67.0	19.4	83	wsw.	29.2	13.0		0	1 s			0	0	light haze	John Duthie.
Cape Town, C. G. H. Obs'y	30.08	764.0	30.12	765.0	79.2	26.2	42	s.	33	14.8		0	0			0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.20	767.1	30.25	768.3	10	—12.2	100	s.	2	0.9		0	0			0	0	clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.18	766.6	30.24	768.1	4	—15.6	100	nw.	2	0.9		0	0			0	0	clear	G. A. Blair.
Cornwall, Ontario	30.02	762.5	30.22	767.6	27.6	— 2.4	84	w.			1		10 n			inap.	inap.	cloudy	James Smith, M. A.
Dalhousie, N. B.	30.06	763.5	30.24	768.1	15.0	— 9.4		w.			1	0	5 s			0	0	fair	H. A. Johnson.
Father Point, Quebec*	30.15	765.8	30.17	766.3	18	— 7.8	96	sw.	12	5.4			10 s		calm	0	0	threatening.	J. McWilliams.
Fort Garry, Manitoba*	29.20	741.7	30.12	765.0	4	—15.6	96	s.	7	3.1		0	0			0	0	clear	James Stewart.
Fredericton, N. B.	30.23	767.8	30.30	769.6	— 1.9	—18.8	100	calm	0	0		1 cs	0			0	0	clear	Prof. Harrison.
Granton, Ontario	29.08	738.6	30.25	768.3	25.2	— 3.8	97	se.			2		10 n			0	0	cloudy	James Grant.
Halifax, N. S*	30.18	766.6	30.32	770.1	8	—13.3	100	calm	0	0		0	hz			0	0	hazy	A. Allison.
Hamilton, Ontario	29.81	757.2	30.22	767.6	29.7	— 1.3	72	ne.			2	10 ck	0	ne.		0	0	cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.90	759.4	30.26	768.6	30	— 1.1	92	s.	11	4.9			10 ks		nw.	0	0	cloudy	A. P. Knight, M. A.
Little Glace Bay, N. S.	30.22	767.6	30.26	768.6	10.0	—12.2	79	w.			1	3 ck	0	w.		0	0	fair	C. H. Rigby.
Montreal, Quebec*	30.04	763.0	30.26	768.6	21	— 6.1	87	w.	13	5.8			10 n			inap.	inap.	light snow	C. H. McLeod, C. E
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.45	748.0	30.19	766.8	25	— 3.9	88	se.	7	3.1		2 k	5 ks	se.	se.	0	0	fair	Rev. R. Mosley.
Peterboro, Ontario	29.46	748.3	30.25	768.3	32.7	0.4	90	calm			0	0	0			0	0	clear	J. Dixon, B. A.
Port Dover, Ontario	29.54	750.3	30.27	768.8	30	— 1.1	89	s.	7	3.1			10 n			0	0	cloudy	H. Morgan.
Port Stanley, Ontario	29.57	751.1	30.26	768.6	28	— 2.2	96	se.	3	1.3			10 ks		sw.	0	0	cloudy	M. Payne.
Quebec, Quebec*	29.83	757.7	30.18	766.6	14	—10.0	91	nw.			1		8 n		nw.	0	0	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.66	753.4	30.14	765.5	25	— 3.9	88	calm	0	0			8 ks		w.	0	0	cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.43	747.5	30.18	766.6	26	— 3.3	100	s.	7	3.1		10 cs	0			0	0	cloudy	
St. Andrews, N. B.	30.24	768.1	30.29	769.4	17	— 8.3	95	wnw.	1	0.4		0	0			0	0	clear	
St. John, N. B.	30.10	764.5	30.28	769.1	15.0	— 9.4	100	sw.	1	0.4		0	0			0	0	clear	G. Murdock, C. E.
St. Pierre, N. F.			30.12	765.0	23.7	— 4.6		nw.			2					0	0		N. F. Land, Com't.
Stratford, Ontario	28.88	733.5	30.24	768.1	24.0	— 4.4	94	sw.	2	0.9			10 s			0	0	cloudy	C. I. Macgregor, M. A.
Sydney, C. B*	30.22	767.6	30.29	769.4	6	—14.4	100	calm	0	0		0	0			0	0	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.86	758.4	30.26	768.6	27	— 2.8	92	sw.	5	2.2		5 cs	5 ks			0	0	cloudy	Magnetic Observatory.
Windsor, N. S.	30.18	766.6	30.28	769.1	5.0	—15.0	100	w.	1	0.4		0	0			0	0	clear	Prof. W. R. Butler.
Woodstock, Ontario	29.16	740.7	30.29	769.4	23.6	— 4.7	75	se.	6	2.7		2 c	6 ks	w.		0	0	cloudy	Prof. Wolverton
Yarmouth, N. S*	30.26	768.6	30.33	770.4	22	— 5.6	87	calm	0	0		8 cs	hz	w.		0	0	hazy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.98	761.5	30.25	768.3	25	— 3.9		nw.	1	0.4			10			0.40	10.2	fair	John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.26	768.6	30.55	776.0	46.7	8.2	73	n.			2		10			0	0		N. Titoushkin.
Sung-shu-chwang†	24.61	625.1			33.6	0.9	75	calm			0		10			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	30.46	773.7	30.48	774.3	39.6	4.2	75	ene.	3.8	1.7		10 ck	0	w.		0	0	covered	M. Marc Dechevrens,
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.28	743.6	29.32	744.8	48.7	9.3	84	sw.	22	10			10					raining	Oversergent Fischer.
Fanöe	29.17	740.8	29.19	741.3	44.4	6.9	94	sw.			6		10					raining	Overloerer Lauridsen.
Godthaab, Greenland	29.78	756.5	29.83	757.6	21.6	— 5.8	77	s.			4		9						S. Kleinschmidt.
Stykkisholm, Iceland	29.73	755.2	29.78	756.3	9.3	—12.6		ne.			7		8						A. O. Thorlacius.
Thorshavn	29.21	742.0	29.25	742.9	32.7	0.4	52	ne.	29	13			5						Overloerer Bergh.
Vestervig	28.97	735.7	29.06	738.0	45.5	7.5	96	ssw.			7		10						Loearer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.16	740.7	29.82	757.3	49.6	9.8	95	s.			1		8		w.	0.071	1.8	raining	M. Labroue, Director.
Alençon, Normal School	28.91	734.3	29.46	748.3	51.8	11	93	s.			4		10 n		n.	0.08	2.	raining	M. Nicot, Director.
Arras, Engineer School	29.10	739.1	29.35	745.4	55.0	12.8	73	sw.			8		10 n			0	0	covered	M. Klein, Commandant.
Avignon, Normal School	29.86	758.4	29.94	760.4	61.7	16.5	41	se.			2		10		s.	0	0	covered	M. Giraud, Director.
Bar-sur-Seine	29.05	737.8	29.60	751.9	52.0	11.1	68	s.			1		10		sw.	0	0	covered	M. Saillard, Director.
Beauvais, Normal School	29.17	740.8	29.43	747.5	54.9	12.7	70	ssw.			3		10		sw.	0.020	0.5	covered	M. Frère Eugène Mari
Besançon, Normal School			29.65	753.2	59.4	15.2	96	sw.			1		10 n		s.	0	0	covered	M. Gobin, Director.
Bordeaux, Observatory	29.45	747.9	29.71	754.5	53.2	11.8	90	sw.			2		10		w.	0.012	0.3	raining	M. Rayet, Director.
Bourges, Normal School	29.06	738.1	29.60	751.7	64.8	18.2	32	s.			4		10 kn		s.			raining	M. Postel, Director.
Brest, Naval Observatory	29.11	739.4	29.35	745.5	56.5	13.6	84	sw.			4		8		sw.	0.165	4.2		M. de Kennaree, Dir.
Caen, Normal School	29.24	742.7	29.31	744.5	58.6	14.8	80	s.			1		10			0.008	0.2	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.21	741.9	29.52	749.9	54.3	12.4	90	s.			4		8		nw.	w.	0	0	very cloudy	M. Jadot, Director.
Charleville, Normal School	29.07	738.3	29.58	751.2	53.2	11.8	63	s.			4		8				0	0	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.37	720.6	29.69	754.1	61.2	16.2	40	s.			4		8			sw.	0	0	¾ covered	M. Allnard, Director.
Cluny, Normal School	28.79	731.1	29.60	751.7	53.8	12.1	52	s.			4		10			sw.	0	0	covered	M. de Villemontée, Dir.
Commercy, Normal School.	28.80	731.4	29.65	753.2	50.5	10.3	64	s.			4	c	5 n		s.	s.	0	0	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.54	699.4	30.10	764.6	48.2	9	55	w.			1	0	5 n			sw.	0.28	7.		M. Jeanginard, Director.
Grénsque, du. Rhone	28.91	734.2	30.03	762.8	57.0	13.9	42	se.			4		8			se.	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.09	738.9	29.84	757.9	63.7	17.6	12	ssw.			6		ckn		wsw.	s.	0	0		M. Ablard, Director.
Guéret, Normal School	28.09	713.6	29.67	753.7	50.0	10	82	sw.			8		n			sw.	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.06	738.0	29.32	744.8	52.7	11.5	85	sw.			3		8			sw.	0.04	1.	raining	M. Ollitrault, Director.
Lescar, Normal School	29.24	742.7	29.80	756.8	65.1	18.4	42	wsw.			5						0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.31	744.4	29.41	747.0	53.4	13.0	88	sw.			9		10				0.354	9.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.74	730.1	29.83	757.6	56.7	13.7	38	s.			6		10			ssw.	0	0	covered	M. André, Director.
Mans, Normal School	29.17	740.9	29.47	748.6	52.7	11.5	86	ssw.			4		10			ssw.	0.031	0.8	covered	M. Piboen, Director.
Marseille, Observatory	29.77	756.2	30.04	763.1	59.2	15.1	64	se.			4		10			se.	0.165	4.2	raining	M. Stephan, Director.
Montlouis l'Instituteur	24.69	627.1	29.53	750.1	43.2	6.2	76	sw.	28.0	12.5			6			nw.	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.76	755.8	29.89	759.1	57.2	14	82	se.			3		5			se.	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	28.87	733.2	29.65	753.0	51.8	11	61	ssw.			3		8 kn			ssw.	0	0	very cloudy.	M. Hasse, Director
Nantes, Observatory	29.34	745.2	29.50	749.3	54.3	12.4	86	sw.			3–4		10			sw.	0.465	11.8	rainy	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	29.71	754.7	29.82	757.5	60.3	15.7	61	se.	11.2	5.0			10	wsw.	wsw.		0	0	covered	Dr. Fines, Director.
Pic-du-Midi, Summit	21.06	534.8			26.8	—3.0		sw.			4–5				sw.		0.020	0.5		Gen'l de Nansouty, Dir.
Privas, Normal School	28.85	732.8	29.92	760.0	55.0	12.8	55	s.			4		5	s.	s.		0	0	cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.87	631.8			39.7	4.3	81	ssw.			6		10		sw.		0	0	covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.62	752.4	29.65	753.2	56.7	13.7	95	sw.			6		10				0.134	3.4	covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.32	744.6	29.53	750.0	55.8	13.2	86	w.			4		5		w.		0.35	9.	cloudy	M. Mouillot, Director.
Rodez, Normal School	27.61	701.3	29.75	755.6	49.3	9.6	74	se.			4		0				0	0	clear	M. Serger, Director.
Rouen, Normal School	29.35	745.4	29.39	746.6	54.7	12.6	72	ssw.			1		10				0.291	7.4	covered	M. Platrier, Director.
Saint Lô, Normal School	29.18	741.2	29.34	745.2	52.0	11.1	93						5				0.059	1.5	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.32	744.6	29.48	748.8	54.0	12.2	74	ssw.			4		10		sw.		0.004	0.1	covered	M. Renou, Director.
Toulouse, Observatory	29.11	739.5	29.84	757.8	57.2	14.0	66	se.			2		10		w.		0	0	covered	M. Bailland, Director.
Tours																			M. de Tastes.
Versailles, Observatory	28.98	736.0	29.47	748.5	53.2	11.8	78	sw.			6						0.083	2.1	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.20	741.6	29.49	749.0	54.9	12.7	72	ssw.			4		10		ssw.	inap.	inap.	sprinkling	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.83	732.2	29.67	753.6	55.4	13.0	40	sw.			2	0	6 k		sw.	0	0		Prof. Dr. Hoh.
Berlin	29.34	745.2	29.51	749.6	59.0	15.0	49	s.			3		8			0	0		Prof. Dr. Arndt.
Breslau	29.28	743.6	29.80	757.0	55.6	13.1	52	ssw.			2		8			0	0		Royal University Obs'y.
Carlsruhe	29.25	743.0	29.68	753.8	62.2	16.8	33	sw.			4		10	sw.		0.370	9.4		Albert Senz.
Cassel	28.78	731.1	29.50	749.2	56.8	13.8	64	sw.			6	0	5 k		sw.	0.039	1.0		Dr. H. Möhl.
Frankfort on the Main	29.28	743.7	29.63	752.7	57.2	14.0	48	sw.			2		9			0	0		Physical Society.
Friedrichshafen	28.39	721.2	29.82	757.5	52.2	11.2	67	wsw.			2		8	sw.		0	0		Wilhelm, Chief Tel.
Hamburg	29.32	744.7	29.41	747.1	56.3	13.5	64	ssw.			7		7	sw.		0	0		E. Preller.
Kiel	29.31	744.5	29.33	744.9	54.5	12.5	67	ssw.			4		9			0.083	2.1		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.24	742.7	29.65	753.2	57.0	13.9	54	s.			5		9	sw.		0	0		H. Lepplg, Asst.
Magdeburg	29.41	746.9	29.59	751.6	56.1	13.4	59	s.			3		10 ks		w.	0	0		Dr. Assmann.
Memel	29.54	750.4	30.59	751.6	41.0	5.0	81	s.			5		10 s						Issermann.
Munich	27.99	711.0	29.84	758.0	59.5	15.3	33	sw.			1		6	w.		0	0		Central Station.
Neufahrwasser	29.55	750.6	29.57	751.0	52.7	11.5	00	ssw.			4		10	sw.		0	0		A. Lothes.
Neustadt, Palatinate	29.15	740.3	29.67	753.5	58.1	14.5	57	s.			2		8	s.		0.299	7.6	light rain	Dicknether.
Stuttgart	28.78	730.9	29.65	753.1	59.9	15.5	40	sw.			7		9	w.		0.091	2.3		Prof. Dr. Schoder.
Wustrow	29.37	745.9	29.39	746.5	54.7	12.6	63	s.			5		10 s			0	0		Profs. Brandes & Reimer
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.93	760.2	30.32	770.2	58.6	14.8		sw.			1.0		1 k			0	0		Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.95	760.6	30.00	761.9	75.8	24.3	76	wsw.	26	11.6			0			0	0	blue sky	
Deesa	29.43	747.6	29.90	759.5	89.7	32.1	21	ssw.	11.8	5.3			0			0	0	blue sky	
Bombay	29.85	758.2	29.89	759.2	86.4	30.2	60	wnw.	13	5.8			0			0	0	blue sky	
Poona, Yarrowda	28.04	712.3	29.85	758.3	92.8	33.8	17	sse.	2	0.9			0			0	0	blue sky	
Belgaum	27.36	694.9	29.84	758.0	87.8	31.0	21	s.	3	1.3			1	sw.		0	0	d. clouds	
Lahore	29.18	741.1	29.93	760.3	74.3	23.5	36	e.	1.3	0.6			5			0	0	d. clouds	
Roorkee	29.03	737.3	29.94	760.4	75.0	24.2	41	sw.	1.4	0.6			7			0	0		
Agra	29.40	746.7	29.97	761.2	79.2	26.2	25	w.	2.3	1.0						0	0		
Nagpur	28.90	734.0	29.93	760.3	86.4	30.2	20	ne.	3	1.3			0			0	0	blue sky	
Jubbulpore	28.69	728.7	30.06	763.4	79.8	26.6	49	calm	1.5	0.7			0			0	0	blue sky	
Lucknow	29.61	752.1	29.99	761.8	75.2	24.0	25	calm	3.6	1.6			0			0	0	blue sky	
Allahabad	29.67	753.5	29.98	761.6	75.8	24.3	27	calm	1.5	0.7			0			0	0	blue sky	
Patna	29.82	757.3	30.01	762.2	72.5	22.5	39	nw.	3.4	1.5			0			0	0	blue sky	
Hazaribagh	27.89	708.5	29.92	759.9	76.3	24.6	18	nw.	4.4	2.0			0			0	0	blue sky	
Cuttack	29.88	759.0	29.97	761.2	82.6	28.1	28	nne.	0.5	0.2			1			0	0	blue sky	
Calcutta, Allpore	29.98	761.4	30.00	761.9	75.5	24.2	40	wnw.	5.0	2.2			0			0	0	blue sky	
Dhubri	29.89	759.1	30.01	762.3	70.5	21.4	53	calm	5.7	2.6			0			0	0	blue sky	
Chittagong	29.90	759.5	30.00	761.9	72.8	22.7	46	wnw.	1.8	0.8			0			0	0	blue sky	
Sibsagar	29.70	754.4	30.05	763.2	67.6	19.8	71	ne.	2.9	1.3			2			0	0	blue sky	
Jeypore	28.49	723.7	29.93	760.3	82.9	28.3	20	ssw.	3.5	1.6			0			0	0	blue sky	
Zanzibar, Africa	29.80	756.9			87.1	30.6	62	nnw.	7.3	3.3			5			0	0	d. clouds	
Trichinopoly	29.68	753.9			89.6	32.0	36	ese.	2	0.9			0			0	0	blue sky	
Bellary	28.39	721.1			92.5	33.6	14	se.	3.7	1.7			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.78	756.4	30.20	767.0	46.6	8.1	92	calm	0	0			10			0	0		Prof. Giovanni Clodig.
Milan	29.63	752.6	30.16	766.1	51.8	11.0	75	se.	8.1	3.6			10	wsw.		0.075	1.9		Prof. Schiaparelli.
Padua	30.08	763.9	30.19	766.8	52.7	11.5	71	se.	0.7	0.3			10	wsw.		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.17	741.0	30.10	764.5	48.0	8.9	80	ne.	0	0			9	n.		0.126	3.2		Prof. P. F. Denza.
Genoa	30.03	762.7	30.22	767.7	55.9	13.3	64	s.	6.3	2.8			10	s.		0.004	0.1		Prof. G. M. Garibaldi.
Mondovi	28.17	715.4	30.11	764.9	48.0	8.9	74	n.			2		6			0	0		Prof. D. O. Bruno.
Pesaro	30.14	765.5	30.19	766.8	58.5	14.7	46	sw.	15.0	6.7			2			0	0		Prof. Luigi Guidi.
Florence	29.97	761.2	30.22	767.7	59.0	15.0	55	ssw.			2		10	s.		0	0		Prof. Costantino Pitter.
Leghorn	30.10	764.4	30.18	766.6	57.7	14.3	69	s.	3.1	1.4			10	se.		0	0		Prof. P. Monte.
Rome	30.15	765.7	30.32	770.2	56.8	13.8	52	sse.	9.4	4.2			10	s.		0	0		Prof. P. S. Ferrari.
Lecce	30.05	763.3	30.31	769.9	62.6	17.0	56	wnw.	9.4	4.2			3			0	0		Prof. C. de Giorgi.
Cosenza	29.43	747.4	30.33	770.4	60.4	15.8	75	sse.	3.1	1.4			0			0	0		Prof. D. Conti.
Cagliari	30.05	763.3	30.25	768.3	59.5	15.3	80	se.			4		6	w.		0	0		Prof. A. Pacinotti.
Palermo	30.11	764.9	30.37	771.3	57.2	14.0	63	nne.	4.9	2.2			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.28	769.1	30.33	770.3	60.4	15.8	70	e.	9.4	4.2			0			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.81	757.1	30.34	770.7	55.6	13.1	70	sw.	2.5	1.1			9	w.		0	0	covered	Prof. T. Brioschi.
Stelvio	22.04	559.8			25.3	— 3.7	89	w.			6		10			0.114	2.9	covered	Prof. P. F. Denza.
Valdobbia	22.13	562.1			27.7	— 2.4	72	n.			2		10			0	0		Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.10	764.5	30.14	765.5	21.0	— 6.1	91	wsw.	21.1	9.4			10 n			0.068	1.7	snowing	
Hakodate	30.00	762.0	30.01	762.2	20.2	— 6.6	57	wnw.	26.3	11.8			10		w.	0.173	4.4	overcast	
Hiroshima, I. M. Obs'y	30.25	768.3	30.27	768.8	40.9	4.9	68	nne.	0.5	0.2		ck	2 s			0	0	clear	K. Sasaki.
Kanazawa	30.25	768.3	30.30	771.1	33.7	0.9	78	w.	1.7	0.8		ck	10 s; ks			0.060	1.5	overcast	S. Endo.
Kioto	30.13	765.3	30.31	769.9	35.6	2.0	78	nw.	0.4	0.2		ck	7 s			0	0	fair	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.11	764.8	30.32	770.1	42.4	5.8	76	nw.	2.5	1.1		0	0			0	0	clear	S. Takehayashi.
Niigata	30.25	768.3	30.28	769.1	33.2	0.7	66	wnw.	13.9	6.2		7 ck	0	w.		0.030	0.8	cloudy	
Nobiru	30.16	766.0	30.18	766.6	29.5	— 1.4	98	wnw.	12.8	5.7		0	2 s			0	0	fair	H. Midzushima.
Supporo					16.2	— 8.8	82	se.	3.6	1.6			5			0.216	5.5		
Tokei Obs'y, Yeddo	30.10	764.5	30.17	766.3	39.7	4.3	47	nw.	9.7	4.3		ck	7 s; ks		wsw.	0	0	fair	The Staff.
Wakayama	30.22	767.6	30.27	768.8	29.6	3.9	74	ne.	4.6	2.1		10 ck	0	wnw.		0	0	cloudy	Y. Kuwamuea.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.49	621.9	30.23	767.9	35.2	12.9	79	n.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.79	756.6	30.05	763.3	65.0	18.3	81	e.	0	0		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.19	589.0	30.36	771.1	47.8	8.8	48	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.25	616.0	30.41	776.6	56.3	13.5	75	sse.			3	1 c	2 k	e.	e.	0	0	clear	M. Tena, M. D.
Pabellon, Aguascalientes	24.02	610.1	30.14	765.5	48.7	9.3	57									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.48	596.3	30.41	772.4	43.7	6.5	73	calm	0	0		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.31	617.5	30.42	772.8	53.4	11.9	57	e.			1	0	0			0	0	fine	G. Barrosta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.64	575.0	30.33	770.5	55.8	13.2	49	n.	4.9	2.1		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.64	752.8	29.83	757.7	80.2	26.8	77	sw.	6.0	2.7	.....	0	8 n;k	.....	.....	0.07	1.8	cloudy.....	Oliver & Figor.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.30	744.1	29.30	744.1	51.1	10.6	.....	ssw.	.....	.....	6	.....	.....	.....	.....	0	0	.....	
Groningen	29.24	742.7	29.30	744.1	53.1	11.7	.....	s.	.....	.....	5	.....	.....	.....	.....	0.051	1.3	.....	
Helder	29.25	743.0	29.25	743.0	48.9	9.4	.....	ssw.	.....	.....	5	.....	.....	.....	.....	0.055	1.4	.....	
Hellevoetsluis	29.29	744.0	29.29	744.0	52.2	11.2	79	ssw.	.....	.....	5	.....	.....	.....	.....	0	0	.....	
Utrecht	29.30	744.2	29.35	745.4	53.8	12.1	72	s.	.....	.....	5	.....	8	.....	.....	0.091	2.3	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	28.65	727.7	28.71	729.3	45.0	7.2	98	s.	16	7	.....	.....	10	.....	.....	.....	.....	raining.....	
Brono	28.87	733.2	28.91	734.2	27.0	— 2.8	53	nnw.	18	8	.....	.....	8	.....	.....	0	0	.....	
Christiania	28.60	726.5	28.75	730.2	41.5	5.3	97	s.	13	6	.....	.....	10	.....	.....	0.004	0.1	.....	
Gjæsvær	28.98	736.0	29.00	736.6	13.2	—10.4	.....	ne.	.....	.....	7	.....	10	.....	.....	.....	.....	.....	
Lodingen	28.91	734.4	28.96	735.6	15.3	— 9.3	81	e.	.....	.....	6	.....	5	.....	.....	0	0	.....	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	60.4	15.8	85	w.	10.5	4.7	.....	.....	5	.....	.....	0.079	2.0	.....	Dr. J. A. Sampaio.
Campo Major	29.11	739.3	30.11	764.7	60.1	15.6	96	sw.	32.2	14.4	.....	.....	10	.....	.....	0.488	12.4	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.35	771.0	30.45	773.3	66.6	19.2	77	wsw.	6.9	3.1	.....	.....	0	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory.	29.82	757.5	30.18	766.6	59.7	15.4	98	wsw.	23.0	10 3	.....	.....	10	.....	.....	1.193	30.3	.....	The Staff.
Ponta Delgada, Azores	30.09	764.3	30.16	766.1	64.4	18.0	84	wsw.	11.2	5.0	.....	.....	3	.....	.....	0.020	0.5	.....	
Saint Paul de Loando	29.74	755.5	29.94	760.5	82.8	28.2	79	w.	1.3	0.6	.....	.....	4	ssw.	.....	0.134	3.4	.....	
Serra da Estrella	25.25	641.3	30.06	763.6	40.1	4.5	100	w.	39.1	17.5	.....	.....	10	.....	.....	4.933	125.3	raining.....	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.70	728.9	29.85	758.2	13.5	—10.3	.....	sw.	27	12	.....	4 ck	0	.....	.....	0.008	0.2	.....	Major K. Lasarew.
Archangel	28.73?	729.7?	28.75?	730.2?	28.0	— 2.2	98	ssw.	22	10	.....	.....	10	.....	.....	0.374	9.5	.....	Capt. Sseliwerstow.
Astrakhan	30.51	774.9	30.43	772.8	21.7	— 5.7	55	w.	4	2	.....	0	6 k;s	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	29.26	743.3	29.78	756.4	32.0	0.0	72	w.	2	1	.....	.....	10	.....	.....	0	0	light clouds	Meteorological Obs'y.
Dorpat	29.13	739.9	29.37	746.1	40.5	4.7	73	ssw.	18	8	.....	.....	10 n	.....	.....	0.146	3.7	.....	Observatory.
Ekaterinburg	28.72	729.6	29.74	755.4	19.0	— 7.2	61	wnw.	13	6	.....	2 cs;c	0	.....	.....	0	0	light clouds	Meteorological Obs'y.
Kasan	29.76	755.9	30.06	763.4	9.7	—12.4	61	sw.	9	4	.....	.....	2	.....	.....	0	0	light clouds	Observatory.
Kertch	30.31	769.9	30.33	770.4	43.7	6.5	71	sse.	4	2	.....	4 c	0	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	29.39	746.4	30.04	763.0	41.9	5.5	79	sw.	4	2	.....	c;ck	8 ks;k	.....	.....	0	0	.....	Observatory.
Lugan	30.04	763.0	30.25	768.3	39.6	4.2	74	ssw.	9	4	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Moscow	29.29	743.9	29.78	756.4	35.2	1.8	73	ssw.	7.8	3.5	.....	.....	10 s	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	30.13	765.2	30.20	767.0	44.2	6.8	77	ssw.	22	10	.....	cs	6 n	.....	.....	0	0	light clouds	Capt. Kurdakow.
Nikolaievsk, on the Amoor.	30.28	769.0	30.36	771.2	— 4.0	—20.0	79	nw.	4	2	.....	.....	10	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	30.28	769.2	30.43	772.8	32.9	0.5	52	calm	0	0	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.24	742.8	29.26	743.2	38.1	3.4	75	ssw.	29	13	.....	.....	10 n	.....	.....	0.094	2.4	light rain....	Central Physical Obs'y.
Tashkend, Laboratory	28.85	732.8	30.53	775.5	30.2	— 1.0	76	ne.	7	3	.....	.....	0	.....	.....	0.720	18.3	.....	Teich, A. M.
Tiflis	28.95	735.3	30.41	772.4	46.6	8.1	18	nw.	13	6	.....	0	0	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	30.40	772.1	30.47	773.8	7.0	—13.9	49	n.	2	1	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.40	746.7	29.82	757.5	49.5	9.7	70	s	13	6	.....	7cs;ck	0	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.39	746.5	29.82	757.5	36.7	2.6	82	s.	9	4	.....	.....	10	.....	.....	0	0	.....	Berg, Assistant.
Yeniseisk	29.71	754.5	30.01	763.2	26.6	— 3.0	53	e.	11	5	.....	.....	1	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restairig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	28.83	732.3	44	6.7	75	ne.	.....	.....	6	5	5	ne.	.....	0.1	3.	d. clouds.....	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	29.86	758.4	29.97	761.1	58.6	14.8	75	sw.	3.8	1.7	.....	.....	9	.....	.....	0.020	0.5	.....	Antonio Rave, Director
Bilbao, Met. Obs'y	29.78	756.3	29.84	757.8	59.0	15.0	80	sw.	9.6	4.3	.....	.....	10	.....	.....	0.098	2.5	covered.....	Prof. Manuel de Naveran'
Burgos, Met. Obs'y	26.93	683.9	29.89	759.1	53.6	12.0	68	sw.	21.0	9.4	.....	1	6	ne.	.....	0.461	11.7	cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.78	705.6	30.03	762.7	52.9	11.6	96	nw.	23.0	10.3	.....	.....	10	.....	.....	0.362	9.2	rainy.....	The Staff.
Murcia, Met. Obs'y	30.00	762.1	30.15	765.9	53.4	11.9	37	n.	1.8	0.8	.....	5	5	.....	.....	0.008	0.2	.....	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.87	733.4	29.77	756.1	55.4	13.0	76	sw.	18.1	8.1	.....	.....	10	.....	.....	1.866	47.4	raining.....	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	30.14	765.5	30.21	767.2	62.8	17.1	76	calm	0	0	.....	0	0	.....	.....	0	0	clear.....	Benito Vines, S. J.
Manilla, Philippine Islands	29.98	761.4	30.03	762.8	73.8	23.2	66	n.	3.3	1.5	.....	0	1 s	.....	.....	0	0	clear.....	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.27	768.9	30.37	771.4	60.4	15.8	91	sw.	9.8	4.4	.....	.....	10	.....	sw.	0.010	0.3	light rain....	Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.06	763.4	30.15	765.7	72.3	22.4	97	calm	0	0	.....	4 cs	6 kn	sw.	sw.	0.008	0.2	cloudy	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.97	761.2	30.11	764.8	70.6	21.4	73	nw.	6.0	2.7	.....	0	3 ck	.....	e.	0	0	fair.....	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	28.77	730.8	28.81	731.8	14.7	— 9.6	81	n.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Umea	28.65	727.7	28.70	729.0	36.7	2.6	93	ne.	.....	.....	2	.....	10	.....	.....	0.047	1.2	.....	
Hernosand	28.65	727.7	28.70	729.0	43.3	6.3	72	ssw.	.....	.....	2	.....	8	.....	.....	0	0	.....	
Stockholm	28.84	732.6	29.02	737.1	43.5	6.4	91	sw.	.....	.....	4	.....	10	.....	.....	0	0	.....	
Wisby	29.16	740.7	29.22	742.2	44.6	7.0	82	sw.	.....	.....	7	.....	7	.....	.....	0	0	.....	
SUB-SERIES.																			
Upsala	28.84	732.6	28.93	734.8	45.0	7.2	95	ssw.	21.3	9.5	.....	.....	10	.....	sw.	0.114	2.9	raining.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.38	720.8	29.78	756.4	63.3	17.4	22	sw.	.....	.....	4	.....	.....	.....	.....	0.150	3.8	covered.....	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.30	769.5	52.2	11.2	43	sw	8	3.5	.....	.....	1	.....	sw.	0	0	.....	The Observatory.
Valona	.....	.....	30.34	770.7	60.1	15.6	.....	w.	.....	.....	1	.....	0	.....	.....	0	0	clear.....	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.30	769.6	59.9	15.5	60	wnw.	.....	.....	1	0	1 k	.....	.....	0	0	.....	Prof. C. V. A. van Dyck

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.30	769.6	30.39	771.9	22	— 5.6	80	se.	1	0.4			10 s			0	0	cloudy	
Alpena, Michigan	29.44	747.8	30.15	765.8	32	0.0	88	s.	4	1.8			10 n			inap.	inap.	light rain	
Atlanta, Georgia	29.18	741.2	30.40	772.1	39.2	4.0	50	e.	7	3.1			10 s		calm	0	0	cloudy	
Atlantic City, New Jersey	30.41	772.4	30.42	772.7	31.2	— 0.4	78	sw.	4	1.8		9 cs	0			0	0	cloudy	
Augusta, Georgia	30.26	768.6	30.46	773.7	36.4	2.4	79	e.	1	0.4		10 c	sk.			0	0	cloudy	
Baltimore, Maryland	30.39	771.9	30.44	773.2	30	— 1.1	77	calm	0	0		hz.	hz.			0	0	dense haze	
Barnegat, New Jersey	30.41	772.4	30.43	772.9	29.0	— 1.7	84	w.	6	2.7		10 cs	0			0	0	cloudy	
Bismarck, Dakota	28.02	711.7	30.00	762.0	28	— 2.2	77	e.	8	3.6		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	26.90	683.2	29.86	758.4	34	1.1	81	e.	4	1.8			10 s		calm	0.07	1.8	cloudy	
Boston, Massachusetts	30.16	766.1	30.32	770.1	21.0	— 6.1	70	w.	12	5.4		0	3 s;hz			0	0	clear	
Brownsville, Texas	29.97	761.2	30.02	762.5	72	22.2	97	s.	8	3.6		0	9 s		s.	0	0	cloudy	
Buffalo, New York	29.51	749.5	30.31	769.9	30.6	— 0.8	69	s.	9	4.0			10 s			0	0	cloudy	
Burlington, Vermont	30.00	762.0	30.31	769.9	18.7	— 7.4	81	s.	3	1.3			10 s		w.	0	0	cloudy	
Cairo, Illinois	29.86	758.4	30.28	769.1	46.0	7.8	70	se.	6	2.7			10 s		se.	inap.	inap.	threatening.	
Campo, California	27.45	697.2	30.09	764.3	45	7.2	93	sw.	4	1.8			10 n		sw.	0.34	8.6	light rain	
Camp Thomas, Arizona	27.30	693.4	30.13	765.3	44.5	6.9	95	calm			0	0	4 ks		w.	0	0	fair	
Cape Henry, Virginia	30.46	773.7	30.48	774.2	30	— 1.1	77	sw.	1	0.4		6 ck	0	sw.		0	0	fair	
Cape May, New Jersey	30.41	772.4	30.44	773.2	37	2.8	72	sw.	20	8.9		1 cs	2 ks			0	0	clear	
Castroville, Texas	29.24	742.7	30.08	764.0	61	16.1	93	calm	0	0			fg.			0	0	dense fog	
Cedar Keys, Florida	30.30	769.6	30.32	770.1	49	9.4	77	ne.	8	3.6		0	sk.			0	0	clear	
Champaign, Illinois	29.33	745.0	30.20	767.1	38.0	3.3	85	s.	8	3.6			10 s		s.	0.03	0.8	cloudy	
Charleston, S. Carolina	30.34	770.6	30.40	772.1	42	5.6	74	ne.	10	4.5		0	0			0	0	clear	
Charlotte, N. Carolina	29.51	749.5	30.40	772.1	32.0	0.0	68	se.	2	0.9		10ck;cs	fg.			0	0	cloudy	
Chattanooga, Tennessee	29.52	749.8	30.38	771.6	39.5	4.2	58	e.	4	1.8		10 cs	sk.	sw.	calm	0	0	cloudy	
Cheyenne, Wyoming	23.90	607.0	30.15	765.8	25.7	— 3.5	59	nw.	4	1.8		0	0			0	0	clear	
Chicago, Illinois	29.40	746.7	30.15	765.8	39.7	4.3	93	sw.	8	3.6			10 n			0.07	1.8	light rain	
Chincoteague, Virginia	30.44	773.2	30.46	773.7	31.5	— 0.3	85	sw.	4	1.8		4 c	6 s	w.		0	0	cloudy	
Cincinnati, Ohio	29.61	752.1	30.30	769.6	37.1	2.8	61	se.	3	1.3		0	4 s			0	0	fair	
Cleveland, Ohio	29.52	749.8	30.31	769.9	29.8	— 1.2	82	se.	7	3.1		4 c	2 s			0	0	fair	
Coleman City, Texas	28.22	716.8	30.10	764.5	56	13.3	93	calm	0	0			fg.			0	0	dense fog	
Columbus, Ohio	29.41	747.0	30.31	769.9	32	0.0	68	s.	3	1.3		0	0			0	0	clear	
Concho, Texas	28.11	714.0	30.13	765.3	57	13.9	93	calm	0	0			10 s		s.	0	0	cloudy	
Davenport, Iowa	29.42	747.3	30.12	765.0	43	6.1	83	sw.	4	1.8			10n;fg		calm	0.06	1.5	light rain	
Dayton, Washington T'y	27.81	706.4	29.62	752.3	46.2	7.9	67	s.	12	5.4			10 s		sw.	0.02	0.5	threatening.	
Deadwood, Dakota	25.15	638.8	30.07	763.8	46	7.8	38	sw.	16	7.2		0	0			0	0	clear	
Decatur, Texas					50	10.0	93	s.	7	3.1			fg.			0	0	dense fog	
Delaware Breakwater, Del.	30.42	772.7	30.44	773.2	30	— 1.1	88	sw.	14	6.3		8 c;cs	0	w.		0	0	cloudy	
Denison, Texas	29.28	743.7	30.12	765.0	50.0	10.0	100	se.	7	3.1			10 n			0.05	1.3	light rain	
Denver, Colorado	24.62	625.3	30.14	765.5	33.0	0.6	50	s.	3	1.3		0	0			0	0	clear	
Des Moines, Iowa	29.15	740.4	30.12	765.0	38	3.3	82	nw.	3	1.3			10 s		nw.	0.01	0.3	cloudy	
Detroit, Michigan	29.49	749.0	30.24	768.1	40.0	4.4	82	s.	8	3.6			10 s		sw.	0	0	cloudy	
Dodge City, Kansas	27.40	695.9	30.14	765.5	42	5.6	100	s.	3	1.3			fg			0	0	dense fog	
Dubuque, Iowa	29.35	745.5	30.11	764.8	40.2	4.6	89	s.	2	0.9			10 s		calm	0.06	1.5	cloudy	
Duluth, Minnesota	29.35	745.5	30.11	764.8	32	0.0	78	w.	5	2.2			10 s		calm	0	0	cloudy	
Eagle Pass, Texas	29.26	743.2	30.10	764.5	63.2	17.3	93	calm	0	0			10 s			0	0	cloudy	
Eagle Rock, Idaho	25.20	640.1	30.10	764.5	20	— 6.7	76	n.	7	3.1			10 s		sw.	0	0	cloudy	
Eastport, Maine	30.23	767.8	30.30	769.6	21.5	— 5.8	78	sw.	5	2.2		4 c	0			0	0	fair	
El Paso, Texas	26.34	669.0	30.22	767.6	47	8.3	77	w.	6	2.7		0	0			0	0	clear	
Erie, Pennsylvania	29.53	750.0	30.30	769.6	31	— 0.6	88	s.	4	1.8		10 cs	0			0	0	cloudy	
Escanaba, Michigan	29.37	746.0	30.09	764.3	35	1.7	89	s.	3	1.3			10 s			0	0	cloudy	
Fort Apache, Arizona	25.06	636.5	30.16	766.1	46	7.8	86	s.	2	0.9			10 s		calm	0.03	0.8	cloudy	
Fort Assinnaboine, Montana	26.71	678.4	29.75	755.6	46	7.8	43	sw.	13	5.8		0	1 s		sw.	0	0	clear	
Fort Bennett, Dakota	28.28	718.3	30.01	762.2	35	1.7	72	se.	6	2.7		0	0			0	0	clear	
Fort Benton, Montana	26.78	680.2	29.78	756.4	42	5.6	67	sw.	14	6.3			10 s		calm	0	0	cloudy	
Fort Buford, Dakota	27.74	704.6	29.92	760.0	32	0.0	62	e.	3	1.3		0	0			0	0	clear	
Fort Custer, Montana	26.55	674.4	29.91	759.7	36	2.2	92	calm	0	0		0	8 s		calm	0	0	cloudy	
Fort Davis, Texas	25.23	640.8	30.19	766.8	48	8.9	86	n.	2	0.9			10 ks		s.	0	0	cloudy	
Fort Elliott, Texas	27.22	691.4	30.12	765.0	40	4.4	50	se.	8	3.6			10 s		se.	0	0	cloudy	
Fort Gibson, Indian T'y	29.53	750.0	30.13	765.3	48.4	9.1	93	se.	6	2.7			10 s		se.	0.04	1.0	cloudy	
Fort Grant, Arizona	25.26	641.6	30.12	765.0	47	8.3	86	se.	2	0.9		0	3 s			0	0	clear	
Fort Griffin, Texas	28.73	729.7	30.10	764.5	56	13.3	93	e.	2	0.9		10 cs	0	calm		0	0	cloudy	
Fort Keogh, Montana	27.18	690.4	29.86	758.4	39	3.9	64	se.	6	2.7		0	0			0	0	clear	
Fort Macon, North Carolina	30.44	773.2	30.45	773.4	36	2.2	89	n.	13	5.8		hz.	hz.	calm	calm	0	0	light haze	
Fort McKavett, Texas	27.81	706.4	30.19	766.8	46.2	7.9	71	sw.	9	4.0		2 cs	0			0	0	clear	
Fort Missoula, Montana	26.31	668.3	29.74	755.4	30	— 1.1	81	sw.	2	0.9		0	5 ks			0	0	fair	
Fort St. Michaels, Alaska	29.05	753.1	29.69	754.1	—30	—34.4	100	ne.	4	1.8		0	0			0	0	clear	
Fort Shaw, Montana	25.94	658.9	29.79	756.7	44	6.7	56	sw.	24	10.7		1 cs	0			0	0	clear	
Fort Sill, Indian Territory	28.82	732.0	30.13	765.3	49.2	9.6	95	se.	6	2.7			10 n			0.13	3.3	light rain	
Fort Stevenson, Dakota	27.96	710.2	29.98	761.5	26	— 3.3	88	e.	6	2.7		0	0			0	0	clear	
Fort Verde, Arizona					50	10.0	74	se.			1		10 s		se.	0	0	threatening.	
Fort Washakie, Wyoming	24.27	616.4			25.8	— 3.4	89	ne.	2	0.9		0	6 s			0	0	fair	
Fredericksburg, Texas	28.30	718.8	30.10	764.5	60	15.6	93	calm	0	0			fg.			0	0	dense fog	
Galveston, Texas	30.03	762.7	30.07	763.8	62	16.7	94	ne.	2	0.9			fg.			1.32	33.5	dense fog	
Grand Haven, Michigan	29.43	747.5	30.14	765.5	38.5	3.6	82	s.	16	7.2			10 s			0.07	1.8	cloudy	
Hatteras, North Carolina	30.44	773.2	30.46	773.7	40	4.4	73	ne.	12	5.4		3 c	hz.	n.		0	0	clear	
Helena, Montana	25.44	646.2	29.84	757.9	42	5.6	52	sw.	12	5.4		0	7 s		sw.	0	0	fair	
Henrietta, Texas	29.06	738.1	30.11	764.8	51	10.6	100	se.	12	5.4			10 s			0.05	1.3	cloudy	
Huron, Dakota	28.62	726.9	30.14	765.5	18	— 7.8	61	se.	7	3.1		0	0			0	0	clear	
Indianapolis, Indiana	29.40	746.7	30.26	768.6	36	2.2	75	se.	4	1.8		5 cs	5 s	sw.	se.	0	0	cloudy	
Indianola, Texas	30.02	762.5	30.05	763.3	67.2	19.6	100	sw.	11	4.9		0	8 s		sw.	0.05	1.3	cloudy	
Jacksboro, Texas	28.87	733.3	30.11	764.8	51	10.6	100	se.	11	4.9			fg.			0	0	dense fog	
Jacksonville, Florida	30.31	769.9	30.36	771.1	51	10.6	72	n.	6	2.7		2 cs	3 s			0	0	fair	
Keokuk, Iowa	29.43	747.5	30.13	765.3	43.0	6.1	96	sw.	5	2.2			fg.			0	0	dense fog	
Key West, Florida	30.20	767.1	30.24	768.1	64.8	18.2	75	ne.	13	5.8		0	2 s		ne.	0	0	clear	
Kittyhawk, North Carolina	30.45	773.4	30.47	773.9	32	0.0	88	nw.	5	2.2		2 c	0			0	0	clear	
Knoxville, Tennessee	29.33	745.0	30.41	772.4	30.4	— 0.9	92	ne.	3	1.3		4 cs	2 s	w.		0	0	fair	
La Crosse, Wisconsin	29.25	742.9	30.09	764.3	41	5.0	82	s.	2	0.9			fg.			0	0	dense fog	
La Mesilla, New Mexico	26.20	665.5	30.21	767.3	37.5	3.1	71	calm	0	0			10 s			0	0	cloudy	
Leavenworth, Kansas	29.21	741.9	30.16	766.1	46	7.8	83	calm	0	0			10 s			inap.	inap.	cloudy	
Lewiston, Idaho	28.76	730.5	29.63	752.6	38.2	3.4	70	se.	1	0.4			10 s		calm	0	0	cloudy	
Little Rock, Arkansas	29.87	758.7	30.20	767.1	48	8.9	93	se.	2	0.9			10 s			0.19	4.8	cloudy	
Los Angeles, California	29.69	754.1	30.09	764.3	47.2	8.4	93	e.	21	9.4			10 n			0.49	12.4	light rain	
Louisville, Kentucky	29.67	753.6	30.26	768.6	40	4.4	82	se.	1	0.4			10 s			0	0	cloudy	
Lynchburg, Virginia	29.67	753.6	30.39	771.9	28.7	— 1.8	74	calm	0	0		0	0			0	0	clear	
Mackinac City, Michigan																			
Madison, Wisconsin	29.05	737.9	30.14	765.5	38	3.3	89	s.	5	2.2			fg.		calm	0.08	2.0	dense fog	
Marquette, Michigan	29.28	743.7	30.06	763.5	39	3.9	73	sw.	6	2.7			10 s		sw.	inap.	inap.	cloudy	
Mason, Texas	28.40	721.3	30.13	765.3	60	15.6	87	s.	1	0.4			10 n		s.	0.01	0.3	light rain	
Memphis, Tennessee	29.91	759.7	30.26	768.6	45	7.2	76	se.	1	0.4			10 s			inap.	inap.	cloudy	
Milwaukee, Wisconsin	29.32	744.7	30.12	765.0	38	3.3	82	sw.	7	3.1			10 s			0.16	4.1	cloudy	

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.21	767.3	30.25	768.3	49.5	9.7	44	e.	8	3.6			10 s			0.11	2.8	cloudy	
Montgomery, Alabama	30.09	764.3	30.33	770.4	46.2	7.9	51	e.	5	2.2			10 s; hs			0	0	cloudy	
Moorhead, Minnesota	29.00	736.6	30.10	764.5	15	— 9.4	83	calm	0	0			10 s			0	0	cloudy	
Morgantown, W. Virginia	29.32	744.7	30.39	771.9	27.3	— 2.6	74	calm	0	0		0	fg			0	0	clear	
Mt. Washington, N. H.	23.75	603.2	30.37	771.4	11.0	—11.7	55	nw.	38	17.0			10 s		nw.	0	0	cloudy	
Nashville, Tennessee	29.75	755.6	30.31	769.9	44.7	7.1	50	se.	3	1.3		10 ck	0	w.		0	0	cloudy	
New Haven, Connecticut	30.27	768.8	30.39	771.9	25	— 3.9	88	calm	0	0		10 c	sk			0	0	cloudy	
New London, Connecticut	30.37	771.4	30.42	772.7	28	— 2.2	64	calm	0	0		4 cs	0	calm		0	0	fair	
New Orleans, Louisiana	30.10	764.5	30.16	766.1	60.0	15.6	93	se.	13	5.8			10 n			1.04	26.4	light rain	
Newport, Rhode Island	30.33	770.4	30.38	771.6	30.8	— 0.7	82	sw.	13	5.8		6 cs	0	calm		0	0	fair	
New River, N. Carolina					29	— 1.7	77	ne.			1	0	hz			0	0	clear	
New Shoreham, Rhode I'd.	30.34	770.6	30.38	771.6	33.8	1.0	71	sw.	12	5.4		6 cs	0	sw.		0	0	fair	
New York, New York	30.23	767.8	30.42	772.7	28	— 2.2	88	sw.	6	2.7		2 cs	2 s			0	0	fair	
Norfolk, Virginia	30.44	773.2	30.48	774.2	32	0.0	78	calm	0	0		4cs;hz	hz			0	0	dense haze	
North Platte, Nebraska	27.06	687.3	30.16	766.1	37.6	3.1	54	calm	0	0		0	0			0	0	clear	
Olympia, Washington T'y	29.47	748.5	29.51	749.5	40.5	4.7	82	calm	0	0			10 s		calm	1.14	29.0	cloudy	
Omaha, Nebraska	28.90	734.0	30.17	766.3	29.8	— 1.2	88	calm	0	0			fg			0	0	dense fog	
Ooglaamie, Pt. Barrow, Alas.	29.66	753.4	29.68	753.9	—40.0	—40.0	76	s.	9	4.0		0	0			0	0	clear	
Oswego, New York	29.94	760.5	30.29	769.4	26.0	— 3.3	76	s.	8	3.6		8 ck	0	w.		0	0	cloudy	
Palestine, Texas																			
Pensacola, Florida	30.24	768.1	30.28	769.1	49.4	9.7	79	ne.	11	4.9			10 s			0.08	2.0	cloudy	
Philadelphia, Pa.	30.32	770.1	30.43	772.9	32	0.0	78	sw.	4	1.8		10 cs	0	sw.		0	0	cloudy	
Pike's Peak, Colorado	17.57	446.3	30.29	769.4	9.5	—12.5	87	sw.	25	11.2		0	0			0	0	clear	
Pioche, Nevada	23.92	607.6	30.08	764.0	33	0.6	92	s.	6	2.7			10 ks		s.	0	0	cloudy	
Pittsburg, Pennsylvania	29.48	748.8	30.34	770.6	28.9	— 1.7	80	ne.	1	0.4		0	fg			0	0	clear	
Port Eads, Louisiana	30.17	766.3	30.18	766.6	60.5	15.8	100	se.	6	2.7			10 n			1.35	34.3	heavy rain	
Port Huron, Michigan	29.50	749.3	30.23	767.8	30.5	— 0.8	84	s.	10	4.5		10 cs	0	calm		0	0	cloudy	
Portland, Maine	30.26	768.6	30.31	769.9	22.0	— 5.6	80	calm	0	0		4 c	5 s	calm	calm	0	0	cloudy	
Portland, Oregon	29.50	749.3	29.57	751.1	43.2	6.2	93	s.	4	1.8			10 n		s.	1.60	40.6	light rain	
Portsmouth, N. Carolina					40	4.4	73	ne.	15	6.7		3 c	hz.	n.	calm	0	0	clear	
Prescott, Arizona	24.77	629.1	30.13	765.3	41	5.0	86	s.	12	5.4			10 s		s.	inap.	inap.	cloudy	
Provincetown, Mass.	30.32	770.1	30.35	770.9	30	— 1.1	77	sw.	7	3.1		3 cs	4 s	sw.	calm	0	0	fair	
Punta Rassa, Florida	30.25	768.3	30.26	768.6	56	13.3	62	ne.	10	4.5		7 ck	0	n.		0	0	fair	
Red Bluff, California	29.34	745.2	29.72	754.9	49.0	9.4	96	se.	12	5.4			10 n			0.21	5.3	light rain	
Rio Grande City, Texas	29.81	757.2	30.06	763.5	66	18.9	93	calm	0	0			fg		calm	0.02	0.5	light fog	
Rochester, New York	29.59	751.6	30.30	769.6	28	— 2.2	77	sw.	12	5.4		10 cs	0			0	0	cloudy	
Roseburg, Oregon	29.09	738.9	29.66	753.4	43	6.1	93	calm	0	0			10 n		sw.	0.28	7.1	light rain	
Sacramento, California	29.71	754.6	29.79	756.7	50.4	10.2	93	se.	22	9.8			10 n			0.26	6.6	light rain	
St. Louis, Missouri	29.58	751.3	30.22	767.6	45.0	7.2	76	s.	9	4.0			10 s			inap.	inap.	cloudy	
St. Paul, Minnesota	29.15	740.4	30.09	764.3	38.0	3.3	89	calm	0	0			10 s			0	0	cloudy	
St. Vincent, Minnesota	29.11	739.4	30.08	764.0	4	—15.6	100	se.	5	2.2		0	4 s		calm	0	0	fair	
Salt Lake City, Utah	25.48	647.2	30.04	763.0	39	3.9	59	se.	4	1.8			10 s			0	0	threatening	
San Antonio, Texas	29.38	746.2	30.10	764.5	58.6	14.8	100	nw.	4	1.8			10 s; fg		calm	0	0	cloudy	
San Diego, California	30.00	762.0	30.07	763.8	54.5	12.5	88	s.	11	4.9		0	5 s		s.	0.71	18.0	fair	
Sandusky, Ohio	29.53	750.0	30.25	768.3	34	1.1	79	s.	14	6.3			10 s			0	0	cloudy	
Sandy Hook, New Jersey	30.38	771.6	30.42	772.7	30.0	— 1.1	78	sw.	11	4.9		8 c	0	calm		0	0	cloudy	
San Francisco, California	29.73	755.1	29.80	756.9	51	10.6	93	se.	12	5.4			10 n		s.	0.26	6.6	light rain	
Santa Fé, New Mexico	23.22	589.8	30.26	768.6	29.4	— 1.4	79	se.	2	0.9		3 c	0			0	0	clear	
Savannah, Georgia	30.31	769.9	30.40	772.1	41.5	5.3	69	n.	5	2.2		6 ck	0	s.		0	0	fair	
Shreveport, Louisiana	29.90	759.4	30.16	766.1	50	10.0	100	e.	4	1.8			fg			0.09	2.3	dense fog	
Silver City, New Mexico	24.31	617.5	30.16	766.1	35	1.7	69	w.	1	0.4		0	0			0	0	clear	
Sitka, Alaska	28.72	729.5	28.79	731.3	37.1	2.8	85	e.	10	4.5			10 n		e.	0.41	10.4	sleeting	
Smithville, North Carolina	30.42	772.7	30.46	773.7	32	0.0	88	ne.	5	2.2		0	0			0	0	clear	
Spokane Falls, Wash. Ter.	27.51	698.7	29.64	752.8	42	5.6	76	se.	5	2.2			10 n			0.44	11.2	light rain	
Springfield, Illinois	29.46	748.3	30.19	766.8	43	6.1	74	s.	6	2.7			10 n		s.	0.01	0.3	light rain	
Springfield, Massachusetts	30.25	768.3	30.39	771.9	22.2	— 5.4	70	calm	0	0		10 c	fg			0	0	cloudy	
Springfield, Mo.	28.70	729.0	30.27	768.8	45	7.2	83	s.	3	1.3			10 n			0.04	1.0	light rain	
Stockton, Texas	27.08	687.8	30.21	767.3	45.0	7.2	93	calm	0	0			10 s		e.	0	0	cloudy	
Thatcher's Island, Mass.	30.28	769.1	30.34	770.6	32.5	0.3	72	sw.	8	3.6		0	0			0	0	clear	
Toledo, Ohio	29.51	749.5	30.25	768.3	35.3	1.8	74	s.	7	3.1			10 ks		sw.	0	0	cloudy	
Tucson, Arizona	27.64	702.0	30.12	765.0	50	10.0	80	se.	3	1.3		0	1 s			0	0	clear	
Umatilla, Oregon	29.24	742.7	29.62	752.3	35.5	1.9	94	calm	0	0			10 s		w.	0.03	0.8	cloudy	
Uvalde, Texas	29.07	738.4	30.07	763.8	61	16.1	100	e.	3	1.3			fg			0	0	dense fog	
Vicksburg, Mississippi	29.94	760.5	30.21	767.3	48	8.9	86	e.	3	1.3			fg			0.19	4.8	dense fog	
Visalia, California	29.50	749.3	29.88	758.9	53	11.7	66	sw.	3	1.3			10 s			0.01	0.3	cloudy	
Washington, D. C.	30.30	769.6	30.42	772.7	29	— 1.7	77	s.	4	1.8		6 c	0	w.		0	0	fair	
West Los Animas, Colorado	25.96	659.4	30.10	764.5	27	— 2.8	67	w.	3	1.3		0	0			0	0	clear	
Wickenburg, Arizona					49.0	9.4	96	calm			0	8 ck	0	w.		0	0	cloudy	
Williamsport, Pa.	29.74	755.4	30.37	771.4	26.5	— 3.1	90	calm	0	0		hz	4 s		calm	0	0	fair	
Wilmington, N. Carolina	30.39	771.9	30.45	773.4	35	1.7	79	e.	1	0.4		hz	0	calm		0	0	dense haze	
Winnemucca, Nevada	25.34	643.6	29.86	758.4	33	0.6	74	ne.	3	1.3			10 ks		sw.	0	0	cloudy	
Wood's Holl, Mass.																			
Yankton, Dakota	28.75	730.2	30.17	766.3	24	— 4.4	73	calm	0	0		0	0			0	0	clear	
Yuma, Arizona	29.88	758.9	30.03	762.7	55.7	13.2	73	n.	1	0.4		0	4 s		se.	0	0	fair	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561.3			53.0	11.7	79	se.	1	0.4		8 c; cs	1 ks			0	0	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.13	765.3	30.14	765.5	77	25.0	90	e.				5 ck	5 ks	ne.	ne.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	30.08	764.0	30.10	764.5	78	25.6	95	se.	4	1.8			10 n		se.	0.25	6.3	raining	J. I. Plume.
Guadeloupe, W. I.	30.04	763.0	30.06	763.5	74	23.3	90	e.				9 k	0			0	0	cloudy	B. Bigar.
Havana, Cuba, W. I.	30.20	767.1	30.25	768.3	69	20.6	66	se.	1.2	0.5		0	2 ks		calm	0	0	fair	A. Van Cangheem.
Kingston, Jamaica, W. I.																			Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.11	764.8	30.11	764.8	77	25.0	91	e.			2		8 ps	e.	e.	0.070	1.8	cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.57	751.1	30.03	762.7	81	27.2	72	e.			2		10 ks		e.	3.62	91.9	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua																			Earl Flint.
Santiago de Cuba, W. I.	30.14	765.5	30.16	766.1	71	21.7	67	n.	7.2	3.2		3 cs	3 s	nw.	n.	0	0	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.51	749.5	29.56	750.8	—18.0	—27.8	88	sw.	11	4.9		2 c	0	w.		0	0	fair	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Gibraltar, Mediterranean	30.39	771.9	61.5	16.4	91	ssw.			3-5		4	ssw.				2	ssw.	squally	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S Alert, N. 4° 10′, E. 63° 30′	29.90	759.4	82.5	28.1	78	nnw.			2-3		4							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.46	773.7	61.5	16.4	72	ssw.			2		5	ssw.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 22° 22′, E. 37° 28′	30.09	764.3	76	24.4	52	n.			5-6		1	n.				5	n.	blue sky	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.07	763.8	72.5	22.5	69	ese.			3-4		0							blue sky	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S 46° 17′, E. 51° 34′	30.12	765.0	62	16.7	94	e.			1-2		10					4	sse.	drizzling	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′, W. 61° 31′	30.13	765.3	79	26.1		calm			0		3	ene.						d. clouds	Capt. C Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.14	765.5	54	12.2	73	nnw.			2-3		6	nnw.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	30.02	762.5	75	23.9	76	nnw.			1		0					1	n.	blue sky	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 12° 11′, E. 44° 25′	29.81	757.2	85	29.4		nnw.			1-2		6	nw.				1	nnw.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt C. A. G. Bridge.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.22	767.6	44	6.7	84	n.			1-3		4	e.				1	e.	squally	Capt. R. F. Moskyn.
H. M S. Gannet, S. 19° 30′, W. 84° 00′	30.09	764.3	71	21.7	73	ese.			4		9					2 3	se. ssw.	d. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 41′, W. 57° 51′	29.58	751.3	54	12.2	79	n.			3		10							overcast	Capt. L. F. Jones.
H. M. S. Inconstant, Singapore, Malay Pen.	29.91	759.7	77	25.0	95	ne.			2		10							raining	Capt. C. O. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 57′, E. 113° 24′	30.19	766.8	62	16.7	88	sse.			1-2		3	s.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.96	761.0	63	17.2		w.			2		8								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.95	760.7	65	18.3	94	se.			3		8	nw.						showery	Capt. J. E. Erskine.
H. M. S. Northampton, Port Royal, Jamaica, W. I.	30.07	763.8	74	23.3	85	n.			1		7							d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 22° 28′, E. 39° 48′	29.78	756.4	80.5	26.9	92	se.			5		6	ese.				4	se.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, Fernando Po, Lower Guinea	29.98	761.5	86	30.0	91	wnw.			1		10	calm						hazy	Capt. A. Littleton.
H. M. S. Ready, Bassorah, Asiatic Turkey	30.16	766.1	64	17.8		nw.			2		0							blue sky	Capt. W. H. Edwards.
H. M S. Rocket, Esquimalt, Vancouver Id	29.41	747.0	38	3.3	90	calm			0		8							d. clouds	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 4° 04′, E. 39° 43′	29.39	746.5	84	28.9	91	ne.			3-4		3	ne.						d. clouds	Capt. E. T. Church.
H. M. S. Thalia, N. 28° 13′, E. 19° 50′	30.45	773.4	69	20.6		ese.			3		0					4	wnw.	blue sky	
H. M. S Triumph, S. 19° 29′, W. 84° 00′	30.11	764.8	71	21.7	71	se.			3		8	ese.				4	se.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 4° 08′, E. 100° 18′	29.90	759.4	81	27.2	95	nnw.			1		8	calm						d. clouds	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.10	764.5	74	23.3		n.			1		2							d. clouds	Com. W. S. Brown.
H. M. S. Woodlark, N. 18° 40′, E. 72° 35′	29.89	759.2	85.5	29.7	55	wsw.			1		0							misty	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Bengo																			Carlos Candid dos Réis.
Quanza, St. Vincent, W. I.	30.24	768.0	74.3	23.5	71	ne.			3		0					2	ne.	blue sky	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 21° 36′, W. 85° 20′	30.13	765.2	72.0	22.2	100	ene.			3		4							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.27	768.8	53	11.7	73	ne.	11	4.9	.....	.....	10	.....	.....	0	0	.....	.....	foggy	
N. Yard, Portsmouth, N. H.	30.33	770.4	18	— 7.8	.....	nw.	8	3.6	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Naval Hospital, Yokohama, Japan	30.02	762.5	40	4.4	34	n.	.....	.....	4	.....	5?	.....	sw.	0	0	.....	.....	clear.?	
Adams, Callao, Peru	29.79	756.7	67	19.4	100	sse.	.....	.....	1	.....	10	.....	.....	0	0	gr'd	.....	cloudy	
Alaska, Valparaiso, Chili	29.91	759.7	61	16.1	82	calm	.....	.....	0	.....	0	.....	.....	0	0	sm'h	.....	clear	
Alert, N. 2° 10′, E. 109° 26′*	29.79	756.7	82	27.8	79	nne.	.....	.....	4	.....	10	.....	calm	0	0	long	nne.	misty	
Alliance, N. 29° 40′, W. 67° 05′	30.17	766.3	61	16.1	71	nne.	.....	.....	3	.....	8	.....	.....	light	light	sm'h	.....	cloudy	
Ashuelot, Tientsin, China	30.46	773.7	31	— 0.6	79	se.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Brooklyn, Sandy Point, Patagonia	29.29	744.0	50	10.0	93	s.	3	1.3	.....	.....	10	.....	sw.	0.11	2.8	sm'h	.....	cloudy	
Colorado, New York, N. Y	30.47	773.9	29	— 1.7	89	sw.	2	0.9	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Enterprise, Off Port Royal, S. C.*	30.39	771.9	53	11.7	86	ne.	.....	.....	4	.....	2	.....	ne.	.....	.....	.....	.....	clear	
Essex, N. 14° 56′, W. 22° 20′	30.15	765.8	74	23.3	76	nne.	.....	.....	4	.....	0	.....	.....	.....	.....	long	e.	clear	
Franklin, Norfolk, Va	30.53	775.4	32	0.0	79	sw.	2	0.9	.....	.....	8	.....	wsw.	0	0	.....	.....	fair	
Galena, Villafranca, France	30.14	765.5	57	13.9	94	e.	.....	.....	1	.....	8	.....	.....	.....	.....	sm'h	.....	cloudy	
Independence, N. Yard, Mare I'd, Cal	29.67	753.6	51	10.6	93	sse.	10.8	4.8	.....	.....	10	.....	.....	0.53	13.5	.....	.....	light rain	
Kearsarge, New Orleans, La	30.15	765.8	60	15.6	88	e.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	rainy	
Lackawanna, Valparaiso, Chili*	29.97	761.2	59	15.0	?	ne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	misty	
Lancaster, N. 33° 25′, E. 29° 02′	30.32	770.1	60	15.6	71	ne.	.....	.....	3	.....	2	.....	ne.	0.02	0.5	sm'h	.....	fair	
Marion, S. 33° 54,′ E. 18° 24′	29.88	758.9	71	21.7	66	se.	.....	.....	4	.....	0	.....	.....	0	0	sm'h	.....	clear	
Michigan, Erie, Pa	30.20	767.1	30	— 1.1	78	ssw.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Minnesota, Newport, R. I	30.37	771.4	29	— 1.7	.....	wsw.	4	1.8	.....	.....	10	.....	calm	.....	.....	.....	.....	cloudy	
Monocacy, Yokohama, Japan	30.17	766.3	43	6.1	59	nnw.	.....	.....	3	.....	10	.....	nnw.	.....	.....	.....	.....	cloudy	
Nipsic, N. 39° 22′, W. 9° 53′	30.15	765.8	60	15.6	88	wsw.	.....	.....	4	.....	8	.....	sw.	.....	.....	long	w.	fair	
Onward, Callao, Peru†	30.11	764.8	66	18.9	100	sse.	.....	.....	2	.....	10	.....	nnw.	.....	.....	long	w.	misty	
Palos, Hong Kong, China	30.31	769.9	60	15.6	88	e.	.....	.....	3	.....	2	.....	n; e.	.....	.....	.....	.....	fair	
Passaic, Washington, D. C	30.42	772.7	30	— 1.1	.....	s.	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	clear	
Pensacola, Coquimbo, Chili	30.06	763.5	62	16.7	83	wsw.	2	0.9	.....	.....	10	.....	sw.	0	0	long	w.	cloudy	
Powhatan, Fredericstaed, Santa Cruz.	30.15	765.8	78	25.6	86	n;e.	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	fair	
Quinnebaug, Alexandria, Egypt	30.31	769.9	60	15.6	71	nw.	.....	.....	3	.....	8	.....	nnw.	.....	.....	sm'h	.....	fair	
Ranger, N. 19° 14′, W. 104° 43′*	29.96	761.0	71	21.7	85	nnw.	.....	.....	1	.....	2	.....	calm	0	0	sm'h	.....	clear	
Richmond, N. 32° 37′, E. 143° 14′*	30.06	763.5	60	15.6	76	nnw.	.....	.....	3	.....	5	.....	.....	0.04	1.0	sm'h	nw.	fair	
Shenandoah, S. 23° 05′, W. 25° 12′*	30.28	768.6	80	26.7	74	ne.	.....	.....	3	.....	2	.....	.....	.....	.....	long	ne.	fair	
St. Louis, League Island, Pa	30.58	776.7	30	— 1.1	100	ssw.	5.4	2.4	.....	.....	0	.....	.....	0	0	.....	.....	clear	
Swatara, Yokohama, Japan*	29.97	761.2	45	7.2	46	nnw.	.....	.....	4	.....	10	.....	sw.	.....	.....	mod.	n.	cloudy	
Tennessee, Fort Monroe, Va	30.48	774.2	36	2.2	80	sw.	7	3.1	.....	.....	2	.....	.....	0	0	.....	.....	hazy	
Vandalia, N. 21° 24′, W. 85° 50′*†	30.26	768.6	75	23.9	77	ne.	.....	.....	3	.....	5	.....	ne.	.....	.....	.....	.....	fair	
Wabash, Boston, Mass	30.34	770.6	23	— 5.0	.....	wsw.	4	1.8	.....	.....	5	.....	w.	0	0	.....	.....	hazy	
Wachusetts, Swanson Bay, B. C	29.04	737.6	35	1.7	90	e.	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	rainy	
Wyoming, Port Royal, S. C	30.40	772.1	41	5.0	82	ne.	10	4.5	.....	.....	2	.....	calm	0	0	.....	.....	clear	
Yantic, Belize, Central America*	30.12	765.0	74	23.3	81	ne.	.....	.....	2	.....	5	.....	.....	.....	.....	.....	.....	fair	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Seaswell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 43° 22′, W. 60° 32′	30.55	776.0	29	—1.7	.....	ne.	3	.....	7	.....	ne.	0	0	sm'h	.....	d. clouds	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 51° 54′, W. 28° 00′*	29.10	739.1	37	2.8	.....	nne.	6	.....	9	.....	ne.	4 h'r	4 h'r	r'gh	ne.	cloudy	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, N. 43° 13′, W. 56° 55′*	30.20	767.1	30	—1.1	.....	nnw.	3	.....	8	.....	n.	.....	.....	sm'h	.....	cloudy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Portland, Maine*	30.43	772.9	27	—2.8	.....	wnw.	2	.....	0	.....	.....	0	0	.....	.....	clear	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 40° 24, W. 61° 00′*†	30.07	763.8	40	4.4	.....	n.	5	.....	9	.....	n.	0	0	mod.	n.	cloudy	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	30.33	770.4	29	—1.7	89	w.	2	.....	2	.....	nnw.	.....	.....	.....	.....	clear	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 47° 56′, W. 29° 26′†	29.15	740.4	51	10.6	78	w.	5	.....	2?	.....	w.	h'vy	h'vy	hv'y	w.	overcast?	H. C. Fleming, 2d offi.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†	29.30	744.2	47	8.3	100	nnw.	4	.....	10	.....	w.	.....	.....	.....	.....	rainy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Young.
S. S. Galatia, Capt. J. D. Allison N. 50° 14′, W. 2° 25′*	29.28	743.7	.....	.....	.....	sw.	6	.....	8	.....	sw.	0	0	r'gh	wsw.	cloudy	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Cartagena, U. S. C*†	30.03	762.7	77	25.0	.....	n.	6	.....	10	.....	e.	0	0	.....	.....	.....	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 21° 40′, W. 74° 11′*†	30.01	762.2	73	22.8	.....	e.	2	.....	2	.....	.....	0	0	mod.	e.	fine	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 24° 05′, W. 74° 14′	.....	.....	.....	.....	.....	n.	2	.....	5?	.....	n.	.....	.....	mod.	n.	cloudy?	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 26° 07′, W. 31° 25′	30.14	765.5	78	25.6	.....	n.	3	.....	8	.....	.....	.....	.....	.....	.....	overcast	.....
Baroda, Capt. C. J. Russell, S. 32° 39′, W. 21° 32′	30.37	771.4	69.5	20.8	70	ene.	4	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Caldew, Capt. W. Peterson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Cipero, Capt. W. N. Lailey, N. 32° 04′ W. 37° 50′	30.20	767.1	71.2	21.8	85	ssw.	3	.....	1	.....	.....	.....	.....	2	sw.	blue sky	.....
S. City of Agra, Capt. Thos. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coppename. Capt. James Buchan, N. 19° 23′, W. 57° 58′	30.16	766.1	73	22.8	81	ese.	1	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, N. 13° 37′, E. 90° 50′	29.95	760.7	80	26.7	86	ne.	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Gordon Castle, Capt. W. Waring,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bg. Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hope, Capt. James Campbell, N. 5° 18′, W. 28° 45′	30.04	763.0	79.2	26.2	95	ne.	4	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
S. S. Humboldt, Capt. A. W. Jeffery, N. 33° 00′, W. 69° 20′	30.33	770.4	56	13.3	68	nne.	6	.....	4	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 4° 39′, W. 19° 40′	30.05	763.3	83	28.3	83	se.	3	.....	3	.....	.....	.....	.....	.....	.....	misty	.....
May Hulse, Capt. H. Youlden, S. 27° 49′, W. 76° 28′	30.00	762.0	63.2	17.3	88	nw.	5	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, S. 24° 39′, W. 46° 37′	30.10	764.5	79	26.1	78	calm	0	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. John Smith. N. 45° 12′, W. 26° 22′	29.49	749.0	54.0	12.2	97	wsw.	7	.....	8	.....	.....	.....	.....	.....	.....	d. clouds	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry. N. 1° 12′, E. 88° 02′	29.85	758.2	84	28.9	75	n.	2	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. C. W. Pearson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Hudson River, N. Y*†	30.42	772.7	.....	.....	.....	sw.	2	.....	0	.....	.....	0	0	.....	.....	clear	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 30° 55′, W. 79° 40′*†	30.35	770.9	41	5.0	.....	nne.	.....	.....	10	.....	ne.	.....	.....	r'gh	ne.	cloudy	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Stembridge, 3d offi
S. S. Gallia, Capt. W. H. P. Hains. N. 43° 35′, W. 44° 59′†	29.93	760.2	46	7.8	92	nne.	6	.....	5	.....	n.	0	0	mod.	nw.	fine	J. H. Mills, 3d officer.

MERCHANT-MARINE SERIES.—Continued.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt. Périer d'Hauterive,																	
S. S. St. Laurent, Capt. A. Sérvan,																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, New York.*																	
S. S. Gellert, Capt. W. Khlewein, N. 49° 43′, W. 9° 32′*†	29.11	739.4	53	11.7		w.	4		5?		w.	2 h'r and	rain hail	long	wsw.	cloudy?	
S. S. Silesia, Capt. A. Albers, N. 42° 26′, W. 55° 43′*†	30.17	766.3	34.2	1.2		nnw.	5		9		n.	0	0	4	nnw.	cloudy	
S. S. Wieland, Capt. C. Hebich,																	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsay & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch. N. 41° 47′, W. 51° 36′	30.11	764.8				nne.	5		10		n.	0	0		n.	overcast	John Inch.
LAMPERT & HOLT'S S. S. CO. *Lampert & Holt, Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, 0° —′, W. 30° —*†′	30.19	766.8	82	27.8		ese.	2		6?		se.	1 h'r	1 h'r	long	n.	clear?	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, Nem York.*																	
S. S. Colorado, Capt. M. B. Crowell, N. 29° 20′, W. 94° 00′*†	30.18	766.6	62	16.7		ne.	2		10			22 h'r	22 h'r	small	se.		C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 44° 54′, W. 48° 37′*†	30.00	762.0	35	1.7	90	nnw.	5		10		n.	1 h'r	sleet	small	nne; ene.		A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, Off Mantanzas, Cuba, W. I.*†	30.30	769.6	65	18.3			2		0			0	0			clear	F. C. Miller, 2d offi.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sanson [man																	
S. S. City of Alexandria, Capt. L. F. Timmer- Vera Cruz, Mexico*†	30.23	767.8	74	23.3		calm	0								ne.	misty	
S. S. City of Washington, Capt. J. W. Rey- N. 22° 12′, W. 87° 00′*† [nolds	30.30	769.6	77	25.0		e.	1							sm'h		fine	
S. S. Elbe, Capt. W. Willigerod, N. 40° 41′, W. 68° 12′*	30.41	772.4	34.7	1.5		w.	2-3							2	ne.	fair	
S. S. Lessing, Capt. B. Voss,																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick, N. 38° 25′, W. 74° 26′*†	30.46	773.7	38	3.3		sw.	1								ene.	clear	
S. S. Olbers, Capt. J. Clarke,																	
S. S. P. Caland, Capt. E Deddes,																	
S. S. Schiedam, Capt. E. M. Chevalier N. 39° 47′, W. 63° 00′	30.33	770.4	43	6.1		nne;	4								nne.	clear	
S. S. Scythia, Capt. M. Murphy						ne.											
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. Gen. Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur, N. 49° 30′, E. 8° 22′*†	29.18	741.2	51.8	11.0		wsw.	6		4?		sw.	2 h'r	2 h'r	r'gh	wsw.	cloudy?	E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 14° 57′, W. 24° 07′*	30.20	767.1	89.4	31.9		ne.	3		0			0	0	mod.	ne.	clear	G. H. Lose, 3d offi.
S. S. Leipzig, Capt. F. Pfeiffer, N. 48° 28′ W. 18° 29′	29.18	741.2	51	10.6	86	w.	6		2		wnw.	3 h'r	h'vy	cross	sw.	fair	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 48° 05′, W. 32° 40 *	29.27	743.4	57.2	14.0		wnw.	4-5		6		wnw.			high	var.	showery	
S. S. Mosel, Capt. F. Hesse, N. 49° 33′, W. 23° 02′	29.11	739.4	54.5	12.5		sw.	4		9		sw.	2½ h'r	2½ hr	long	sw.	rainy	J. Hesse.
S. S. Neckar, Capt. R. Bussius																	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	
S. S. Oder, Capt. Undeutsch, Bremerhaven, Germany*	29.22	742.2	47.8	8.8		ssw.	5		10		sw.	0	0			cloudy	Montz & Kohlenbeck.
S. S. Ohio, Capt. G. Meyer, N. 38° 09′, W. 68° 36′	30.45	773.4				nne.	3		8		ne.	0	0	r'gh	ne;e	cloudy	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Helmbruch N. 43° 08′, W. 53° 52′*	30.16	766.1	35.0	1.7	100	nne.	5		8		n.	4 h'r and	snow hail	mod.	n.	cloudy	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, N. 22° 41′, E. 116° 20′†	30.30	769.6	63	17.2	83	ne.	5		8		ne.	0	0	mod.	ne.	cloudy	J. Jones, 2d Officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 36° 48′, W. 158° 41′*†	30.30	769.6	58	14.4	81	wsw.	4		10					mod.	nw.	overcast	
S. S. Oceanic, Capt. J. Metcalfe, N. 44° 00′, W. 143° 07′..*	29.78	756.4	44	6.7	67	wnw.	6		4		w.			5	w.	clear	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 37° 26′, W. 74° 44′†*	30.14	765.5				sw.	1		1					long	ne.	clear	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett, Boston, Mass†	30.22	767.6	30	—1.1	78	sw.	3		2		w.	0	0			clear	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter.†	29.52	749.8	42	5.6	83	s.	2	.....	10	.....	ssw.	.....	.....	.....	.....	light rain	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer N. 46° 32′. W. 124° 22′*†	29.54	750.3	45	7.2	84	ssw.	4	.....	5	.....	sw.	¼h'r	¼h'r	long high	w.	raining	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Oterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. Fred. Bolles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, Columbia River, Oregon†	29.56	750.8	41	5.0	91	se.	2	.....	10	.....	.....	.....	.....	.....	.....	threatening.	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 36° 37′. W. 122° 11′†	29.81	757.2	52	11.1	93	s.	7	.....	10	.....	sse.	.....	.....	r'gh	sse.	cloudy	.....
S. S. Geo. W. Elder, Capt. H. G. Morse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Idaho, Capt. H. M. Hayward, Tacoma, Washington Ter†	29.50	749.3	38	3.3	?	se.	6	.....	10	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Orizaba, Capt. Chas. B. Johnson, N. 37° 36′, W. 122° 39′†	29.74	755.4	55	12.8	76	se.	9	.....	.....	.....	se.	.....	.....	r'gh	se.	heavy rain	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace. N. 37° 14′, W. 122° 32′†	29.81	757.2	52	11.1	93	sse.	4	.....	10	.....	se.	.....	.....	r'gh	se.	sprinkling	.....
S. S. State of California, Capt. G. Debney, Portland, Oregon†	29.53	750.0	40	4.4	91	calm	2	.....	8	.....	se.	12 h'r	rain	.....	.....	.....	.....
S. S. Victoria, Capt. W. E. Plummer, N. 48° 21′, W. 124° 37′†	29.39	746.5	39	3.9	100	se.	3	.....	8	.....	.....	.....	.....	mod.	w.	raining	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 13° 19′, W. 161° 48′	30.01	762.2	73	22.8	85	ene.	4	.....	8	.....	se.	1 h'r	light	long	ene.	cloudy	.....
S. S. City of New York, Capt. W. B. Cobb.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly N. 18° 16′, W. 103° 30′†	30.24	768.1	79	26.1	78	ne.	2	.....	0	.....	.....	0	0	sm'h	.....	clear	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, Sydney, N. S. W.†	30.02	762.5	80	26.7	55	ne.	6	.....	2	.....	ne.	0	0	sm'h	.....	fair	E. Le Saik.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	30.14	765.5	61	16.1	70	e.	2	.....	0	.....	.....	0	0	.....	.....	clear	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, Panama, Panama..†	29.94	760.5	75	23.9	85	n.	2	.....	2	.....	n.	0	0	.....	.....	clear	.....
S. S. Grenada, Capt M. Connolley, N. 22° 26′, W. 106° 21′†	29.99	761.7	69	20.6	?	nw.	2	.....	0	.....	.....	0	0	light	nw.	clear	.....
S. S. South Carolina, Capt. W. J. Russell, La Union, San Salvador†	30.02	762.5	80	26.7	74	ne.	2	.....	hz.	.....	.....	0	0	sm'h	.....	hazy	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, S. 34° 08′. E. 169° 35′	30.09	764.3	70	21.1	84	e.	4	.....	10	.....	e.	.....	.....	r'gh	ene.	hazy	.....
QUEBEC S. S. CO. *E. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M Faircloth.. St. Johns, Antiqua, W. I.	30.25	768.3	79	26.1	.....	w.	1	.....	5	.....	.....	3 h'r	3 h'r	sm'h	.....	rainy	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, Barbadoes, W. I.	.....	.....	.....	.....	.....	e.	2	.....	0	.....	.....	0	0	sm'h	.....	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes, Flushing, Netherlands*†	29.33	745.0	52	11.1	.....	ssw.	7	.....	7?	.....	wsw.	2 h'r	light	.....	.....	overcast?	.....
S. S. Nederland, Capt. J. Uberweg, N. 47° 13′, W. 47° 00′*	30.66	778.7	33	0.6	.....	nw.	4	.....	8	.....	nw.	0	0	cross	nnw.	cloudy	Albrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	29.46	748.3	51	10.6	78	ssw.	6	.....	10	.....	ssw.	0	0	.....	.....	cloudy	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison, N. 39° 04′. W. 73° 04′†	30.41	772.4	.....	.....	.....	sw.	2	.....	2	.....	wsw.	0	0	mod.	ene.	clear	.....
S. S. Vaderland, Capt. W. A. Beynon N. 48° 25′ W. 32° 07′*†	29.14	740.1	52	11.1	.....	w.	5	.....	8	.....	w.	0	0	long high	n. nw.	cloudy	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, Jersey City, N. J*	30.22	767.6	36	2.2	.....	w.	4	.....	0	.....	.....	0	0	.....	.....	clear	Olsen & Assfeld.
ROTTERDAM LINE. *Fundh, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 48° 30′, W. 21° 01′*	29.00	736.6	58.8	14.9	81	wsw.	6	.....	5?	.....	w.	0	0	high	w.	cloudy?	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Brooklyn, N. Y.†	30.22	767.6	27.0	—2.8	.....	wnw.	2	.....	2	.....	wnw.	.....	.....	.....	.....	clear	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters, N. 42° 44′, W. 66° 34′*†	30.42	772.7	32	0.0	.....	wsw.	4	.....	0	.....	.....	0	0	sm'h	.....	clear	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 40° 39′, W. 68° 06′*†	30.15	765.8	34	1.1	.....	sse.	2	.....	5	.....	s.	0	0	sm'h	.....	d. clouds	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell, Off Tuskar, Ireland*†	28.83	732.3	50	10.0	.....	ssw.	3	.....	8	.....	s.	14 h'r	driz.	mod.	sw.	cloudy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy, N. 50° 25′, W. 23° 16′*†	29.15	740.4	51	10.6	.....	w.	4	.....	5	.....	w.	sh's	sh's	long	sw.	d. clouds	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, New York, N. Y.*	30.41	772.4	34	1.1	.....	w.	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.

MERCHANT-MARINE SERIES.—Continued.

VESSELS AND MASTERS.	Barometer reduced to sea-level. Inch.	Barometer reduced to sea-level. Mill.	Temperature of the air. Fah.	Temperature of the air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill	Sea Swell. Character.	Sea Swell. Direction.	Weather.	Observers.
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. J. Jorgensen, Cedar Keys, Florida†	30.38	771.6	49	9.4	93	ene.	3	0	hz			0	0			clear	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 20° 58′, W. 39° 23′*†	30.27	768.8	72	22.2		ese.	3		1		e.	0	0	mod.	se.	clear	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 19° 15′, W. 58° 50′*†	30.14	765.5	77	25.0		w.	1		2		w.	light	light	long	n.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 43° 54′ W. 34° 37′*†	29.75	755.6	55	12.8	80	w.	6		5		w.	½ h'r	h'vy	high cross	wsw.	squally	C. McCarthy.
Sch'r Annie R. Lewis, Capt. L. L. Lewi N. 26° 06′, W. 69° 30*'†	30.22	767.6	68	20.0		nne.	3		10		ne.	rain	rain	very hv'y	nw.	cloudy	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, S. 16° 48′, W. 36° 25′*†	30.12	765.0	85	29.4		se.	3		1		sse.	½ h'r	light	sm'h	se.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen, N. 30° 30′ W. 69° 50′†	30.28	769.1				nne.	5					0	0	mod.	nne.	overcast	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia. N. 34° 58′, W. 59° 10′*†	30.10	764.5	54	12.2		n.	4		4		n.	0	0	mod.	n.	clear	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 39° 04′, W. 59° 55′*†	30.02	762.5				n.	4		8		nne.	rain	rain	mod.	nne.		G. D. Spicer.
Bk. E. L. Pettingill, Capt. A. J. Pettingill. S. 57° 49′, W. 68° 49′†	29.30	744.2				s.	1		2		s.	0	0	cross	wsw.		A. J. Pettingill.
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	29.42	747.3				ssw.	4		8		w.	0	0			cloudy	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr																	J. C. Andreson, Jr.
U.S.F.C.S.S.Fish Hawk, Lt. Tanner, U.S.N. N. 38° 02′, W. 76° 19′†	30.47	773.9	35	1.7	90	ssw.	4		8		ssw.	0	0			cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison.																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 20° 07′, W. 52° 13′			76	24.4		s.	4		5		s.	0	0	sm'h		fair	
Bk. Gamaliel, Capt. D. J. Anthony,																	
Bk. Geo. Booth, Capt. D. Williams S. 17° 11′, W. 33° 30′*†	29.87	758.7	86	30.0		ese.	2					sh'rs	sh'rs			showery	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 19° 41′, W. 37° 06′*†	30.44	773.2	74	23.3		e.	3					0	0	mod.	e.	clear	
Schr. Henry Denison, Capt. Jno. Fehring N. 30° 14′, W. 66° 54′†	30.20	767.1				nne.	4–5		3		nne.	sh'rs	sh'rs	r'gh	nne.	fair	J. Fehring.
Bk. Johanne Auguste, Capt. H. Schmidt, S. 35° 42′, E. 74° 48′*	30.00	762 0				nne.	2		3		nw.	sh'rs	shr's	mod.	nne.	fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann, N. 37° 47′, W. 65° 09′						wsw.	2		1		w.	1 h'r	light	long	ene.	fine	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith. N. 34° 29′, W. 63° 00′*†	30.22	767.6				nne.	7		5		n.	shr's	shr's	long	ne.	squally	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte, N. 21° 44′, W. 70° 35′†*	30.55	776.0				nne.					ne.			hv'y	n	clear	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen.																	Sorensen & Arvesen
Bk. Pawashick, Capt. Edwin Fry, N. 17° 54′, W. 42° 58′*†	30.50	774.7	75	23.9	85	ese.	5		2		ese.			h'vy	n.	fine	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, N. 43° 37′, E. 15° 14′†	30.24	768.1	57	13.9	75	wsw.	3		2		sw.			sm'h		fair	G. S. d'Ancona.
Bk Pilgrim, Capt. J. Connolly S. 37° 58′, W. 8° 25′*†	30.37	771.4				nw.			0			0	0			clear	J. Connolly.
Schr. S. B. Hubbard, N. 33° 30′, W. 77° 33′*†	30.41	772.4	60	15.6		nne.	1		0			0	0	long	ne.	fine	H. Mehaffey, 2d mate.
Bk. Stella, Capt. H. N. T. Sommer, S. 36° 02′, W. 47° 04′*	30.07	763.8	74.3	23.5	93	ne. to nw.	2		2		ne.						H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 21° 32′, W. 44° 27′*†	30.26	768.6	78	25.6	86	ese.	5		5		e.	0	0	mod.	e.	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert,																	
S. Wm. Woodbury, Capt. H. T. Schmidt, N. 52° 22′, E. 3° 00′*†	29.08	738.6	50	10.0	93	s.	7				w.			sm'h		cloudy	H. T. Schmidt.
Bk. Winifried, Capt. N. P. Dutton. S. 23° 47′, W. 41° 27′*†	30.05	763.3				var.					var.			mod.	se.	raining	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 27, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.26	768.6	70.2	21.2	87	e.			4		2			0	0	fair	Moiroud.
Algiers			30.12	765.0	65.1	18.4	59	w.			2		0			0	0	clear	Nicolas.
La Galle			30.04	763.0	61.2	16.2	85	wnw.			3		5			0.268	6.8	cloudy	Foufrède.
Tunis			30.03	762.7															Jacques.
Sfax																			Gau.
Saida			30.33	770.4	67.6	19.8	43	nw.			2		3			0	0	pretty fair	Dumas.
Tebessa			30.19	766.7	65.5	18.6	36	nw.			5		8			inap	inap.	very cloudy	Derché.
Geriville					58.3	14.6	48	nw.			7		5			0	0	cloudy	Louchamp.
Laghouat			30.33	770.3	64.4	18.0	20	e.			2		0			0	0	clear	Herbin.
Biskra			30.22	767.5	75.6	24.2	23	se.			1		6			0	0	cloudy	Malau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.94	760.5	30.03	762.7	58.2	14.6	73	wsw.	4	1.8			8			0.10	4.1	dull	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.03	737.4	29.58	751.4	48.2	9.0	82	s.			3		10			0.185	4.7	raining	Prof. Ivan Stozir.
Cracow, I. R Observatory	28.73	729.7	29.48	748.9	54.7	12.6	50	wnw.	9.8	4.4			9			0.020	0.5		Dr. Wierzbiski.
Eperies	28.72	729.6	29.61	752.0	46.4	8.0	73	s.			2		10 ks		n.	0	0		Julius Mikolik.
Gratz	28.34	719.7	29.57	751.0	53.1	11.7	56	s.			1		10			0	0		Andreas Rospini.
Hermannstadt	28.32	719.3	29.74	755.3	54.3	12.4	50	se.			2		6			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.18	715.7	29.51	749.6	47.8	8.8	81	nnw.			1		10			0.114	2.9	raining	The Staff.
Lemberg	28.58	725.9	29.56	750.9	47.1	8.4	70	sw.			1		10			0.118	3.0		Dr. T. Stanecki.
Pola	29.38	746.2	29.49	749.0	51.4	10.8	93	se.			6		10			0.118	3.0		I. R. Hydrographic Office.
Szathmar	29.20	741.7	29.66	753.3	48.0	8.9	65	e.			2		10			0	0		Joseph Midlinszky, S. J.
Szegedin	29.37	746.1	29.65	753.1	56.7	13.7	87	sw.			1		10			0.213	5.4		Karl Stancel.
Trieste	29.45	747.9	29.55	750.5	51.8	11.0	82	e.			1		10			0.354	9.0		Rieder.
Vienna	28.84	732.4	29.55	750.6	43.9	6.6	80	calm			0		10			0	0		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.23	742.4	29.33	745.0	40.0	4.4	57	ene.	29	13.0			7			0.005	0.1	squally	W. Boswell.
Armagh, Observatory	28.95	735.3	29.20	741.7	40.1	4.5	92	ene.	14	6.3			10					raining	S. Gall.
Bidston, Liverpool Obs'y			29.11	739.4	43.8	6.6	83	ene.	29	13.0			10					misty	John Hartnup.
Bolton, Sharples	28.62	726.9	29.14	740.1	41.4	5.2	87	ene.	12	5.4			10					overcast	Thomas Mackereth [A.S.
Bradford, Yorkshire	28.81	731.8	29.20	741.7	42.3	5.7	84	se.			2		10			0	0	overcast	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	81.0	27.2	72	ne.			2		3					d. clouds	Corpl. J. Surgenor, A. H. C.
Cardington			29.13	739.9	51.0	10.6	86	sw.			2.0		8					overcast	John McLaren.
Chatham, School M. E.	29.06	738.1	29.18	741.2	53.1	11.7	75	sw.			1		9					d. clouds	Lance Cpl. G. A. Pickles.
Falmouth, Observatory	29.06	738.1	29.28	743.7	51.6	10.9	75	w.			4		5					d. clouds	The Staff.
Fort Napier, Natal	27.70	703.6	29.91	759.7	76.4	24.7	64	se.			1		7						Pvt. E. K Annisa, A. H. C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	88.0	31.1	62	w.			1		2					blue sky	Sergt. John Robinson.
Galway, Queen's College			29.09	738.9				sw.			2		10			0.15	3.8	showery	J. O'Donaghue.
Gibraltar, Mediterranean	30.28	769.1	30.34	770.6	62.5	16.9	83	sw.			5		10					gloomy	Cpl. O. Baldwin.
Glasgow, Observatory	29.07	738.4	29.27	743.4	41.1	5.1	65	ene.			4		10 k					d. clouds	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.00	736.6	29.17	740.9	51.8	11.0	77	wsw.			3		10					drizzling	The Staff.
Guernsey	29.01	736.8	29.30	744.2	52.0	11.1	93	wnw.			3		5					showery	A. Collenette, F. M. S.
Kew, Observatory	29.14	740.1	29.18	741.2	51.6	10.9	72	sw.	17	7.6			9					threatening	The Staff.
Leicester, Museum	29.86	758.4	30.12	765.0	48.0	8.9	93	sw.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	30.03	762.7	30.10	764.5	64.2	17.9	60	w.			3		6					d. clouds	Corpl. A. King, A. H. C
Nassau, Bahamas	30.19	766.8	30.24	768.1	70.0	21.1	79	ne.			1		9					d. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.66	728.0	29.18	741.2	46.0	7.8	95	ssw.			0–1		10					raining	John Mac Email.
Oxford, Radcliffe Obs'y	28.94	735.1	29.17	740.9	48.9	9.4	84	sw.			4		9					squally	The Staff.
Plymouth	29.16	740.7	29.24	742.7	53.3	11.8	86	wnw.			3		10					overcast	John Merrifield.
Sandwick Manse, Orkneys			29.40	746.7	35.3	1.8	77	n.	19	8.5			0					blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.91	759.7	29.98	761.5	55.8	13.2	47	s.			1		1					blue sky	W. H. Lyne.
Sheffield	28.93	734.8	29.21	741.9	43.1	6.2	97	ne.			1		10			0.15	3.8	drizzling	W. F. Cooper.
Silloth Rectory	29.17	740.9	29.20	741.7	42.5	5.8	81	ne.			6		10			0.010	0.3	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.17	740.9	41.8	5.4	83	ene.	12	5.4			10					overcast	I. New.
Strathfield Turgiss	28.97	735.8	29.19	741.4	50.9	10.5	82	w.			3		10					showery	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	29.27	743.4	29.32	744.7	55	12.8	73	w.			6		6					d. clouds	W. Newcombe.
Valencia, Observatory	29.24	742.7	29.26	743.2	48.6	9.2	80	w.	28	12.5			10			blank	blank	misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	30.07	763.8	30.10	764.5	69.0	20.6	83	w.	4.5	2.0		5 c	0			0	0		John Duthie.
Cape Town, C. G. H. Obs'y	29.88	758.9						s.	32	14.3		0	2			0	0		The Staff, for D. Gill.
Worcester*†																			O. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.					25.0	— 3.9		calm	0	0		1 cs	0			0	0	clear	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.96	761.0	30.00	762.0	29	— 1.7	93	sw.	3	1.3			10 n			0.050	1.3	light snow	H. J. Cundall, C. E.
Chatham, N. B.*	29.98	761.5	30.04	763.0	28	— 2.2	96	nw.	1	0.4			10 n		nw.	0.09	2.3	light snow	G. A. Blair.
Cornwall, Ontario	29.96	761.0	30.16	766.1	33.5	0.8	95	w.			1		10 s			inap.	inap.	cloudy	James Smith, M. A.
Dalhousie, N. B.	29.86	758.4	30.04	763.0	27.0	— 2.8		calm			0		10 n			inap.	inap.	snowing	H. A. Johnson.
Father Point, Quebec*	30.01	762.2	30.03	762.7	27	— 2.8	96	w.	8	3.6			10 n		n.	0.03	0.8	light snow	J. McWilliams.
Fort Garry, Manitoba*	28.73	729.7	29.57	751.1	32	0.0	96	se.	28	12.5		hz	hz			0	0	hazy	James Stewart.
Fredericton, N. B.	29.99	761.7	30.06	763.5	29.0	— 1.7	91	calm	0	0			10 n			0.50	12.7	snowing	Prof. Harrison.
Granton, Ontario	29.06	738.1	30.21	767.3	34.0	1.1	100	calm	0	0			10 n			0	0	cloudy	James Grant.
Halifax, N. S*	29.95	760.7	30.09	764.3	31	— 0.6	92	sw.	6	2.7			10 n			0.06	1.5	light snow	A. Allison.
Hamilton, Ontario	29.78	756.4	30.18	766.6	36.2	2.3	94	w.			1	10 cs	0	w.		0	0	cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.86	758.4	30.21	767.3	34	1.1	88	calm	0	0			10 ks		nw.	0	0	threatening	A. P. Knight, M. A.
Little Glace Bay, N. S.	29.96	761.0	30.00	762.0	32	0.0	89	s.			2		10 n			inap.	inap.	snowing	C. B. Rigby.
Montreal, Quebec*	29.96	761.0	30.17	766.3	35	1.7	82	w.	12	5.4			10 ks		nw.	0.01	0.3	cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.48	748.8	30.20	767.1	33	0.6	100	calm	0	0			fg			0.04	1.0	foggy	Rev. R. Mosley.
Peterboro, Ontario	29.45	748.0	30.23	767.8	35.7	2.1	90	w.			2		10 n			0	0	cloudy	J. Dixon, B. A.
Port Dover, Ontario	29.49	749.0	30.22	767.6	34	1.1	89	calm	0	0			10 n			0	0	hazy	H. Morgan.
Port Stanley, Ontario	29.53	750.0	30.21	767.3	32.0	0.0	92	e.	2	0.9			hz			0	0	hazy	M. Payne.
Quebec, Quebec*	29.76	755.9	30.10	764.5	28	— 2.2	96	nw.			1		8 n		w.	0.25	6.3	cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.72	754.9	30.20	767.1	30	— 1.1	78	calm	0	0		0	0			0	0	clear	W. H. McIntyre.
Sangeen, Ontario*	29.45	748.0	30.19	766.8	34	1.1	89	s.	5	2.2			10 s			inap.	inap.	foggy	
St. Andrews, N. B.	30.00	762.0	30.06	763.5	31	— 0.6	92	sw.	3	1.3			10 n			0.14	3.6	light snow	
St. John, N. B.	29.88	758.9	30.05	763.3	32.0	0.0	89	w.	3	1.3			10 n			0.050	1.3	snowing	G. Murdock, C. E.
St. Pierre, N. F.			30.08	764.0	30.2	— 1.0		sw.			1					0	0		N. F. Land, Com't.
Stratford, Ontario	28.86	733.0	30.19	766.8	34.0	1.1	97	calm	0	0		0	fg			0.038	1.0	foggy	C. I. Macgregor, M. A.
Sydney, C. B*	30.00	762.0	30.06	763.5	26	— 3.3	100	s.	2	0.9			10 n			0.01	0.3	light snow	T. C. Hill, C. E.
Toronto, Ontario*	29.83	757.7	30.23	767.8	34	1.1	96	sw.	2	0.9			10 n			0	0	cloudy	Magnetic Observatory.
Windsor, N. S.	29.94	760.5	30.04	763.0	30.5	— 0.8	95	sw.	6	2.7			10 n			inap.	inap.	snowing	Prof. W. R. Butler.
Woodstock, Ontario	29.11	739.4	30.21	767.3	34.5	1.4	71	s.	1	0.4			10 ks			0.02	0.5	cloudy	Prof. Wolverton
Yarmouth, N. S*	30.04	763.0	30.11	764.8	33	0.6	88	sw.	3	1.3		10 k	hz	w.		0	0	cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.03	762.7	30.30	769.6	18	— 7.8		sw.	2	0.9		0	0			0	0	fair	John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow	30.16	766.1	30.46	773.7	42.6	5.9	75	n.			2		10 n			0.72	18.3		N. Titoushkin.
Sung-shu-chwangf	24.65	626.2			36.7	2.6	71	calm			0		10			0	0		A. Gueluy.
Zi-Ka-Wei, near Shanghai.	30.28	769.2	30.31	769.9	43.7	6.5	92	e.	4.7	2.1			10 n			0.047	1.2	raining	M. Marc Dechevrens,
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.00	736.7	29.05	737.9	46.9	8.3	86	sw.	20	9			10						Oversergent Fischer.
Fanöe	29.04	737.7	29.06	738.2	41.7	5.4	100	wsw.			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.60	751.7	29.64	752.8	23.7	— 4.6		s.			5		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.74	755.4	29.78	756.5	8.6	—13.0		calm			0		0						A. O. Thorlacius.
Thorshavn	29.61	752.1	29.65	753.0	30.0	— 1.1	67	ne.	16	7			6						Overloerer Bergh.
Vestervig	28.90	734.1	28.99	736.4	40.5	4.7	92	nne.			2		10						Loetrer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.07	738.4	29.74	755.5	53.6	12	80	w.			1		8 n		w.	0.677	17.2	very cloudy	M. Labroue, Director.
Alençon, Normal School	28.86	733.0	29.41	747.0	51.8	11	92	sw.			6		10 n	n.	n.	0.24	6.	raining	M. Nicot, Director.
Arras, Engineer School	29.02	737.2	29.28	743.7	50.5	10.3	84	wsw.			3		kn		w.	0.252	6.4		M. Klein, Commandant.
Avignon, Normal School	29.63	752.7	29.71	754.7	59.0	15	58	sw.			2		10		w.	0.256	6.5	covered	M. Giraud, Director.
Bar-sur-Seine	28.90	734.1	29.45	748.0	52.7	11.5	71	sw.			1		8		w.	0.272	6.9	very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.10	739.0	29.35	745.6	52.7	11.5	69	w.			2		8		w.	0.205	5.2	very cloudy	M. Frère Eugène Marl.
Besançon, Normal School			29.37	746.1	50.0	10	95	se.			3		10 n		se.	0.315	8.0	covered	M. Gobin, Director.
Bordeaux, Observatory	29.32	744.8	29.59	751.5	52.7	11.5	83	wsw.			6		10		w.	0.555	14.1	raining	M. Rayet, Director.
Bourges, Normal School	28.98	736.2	29.53	750.1	52.2	11.2	68	sw.			2		kn		sw.	0.335	8.5		M. Postel, Director.
Brest, Naval Observatory	29.16	740.7	29.41	746.9	53.2	11.8	86	w.			2		8		w.	0.307	7.8		M. de Kennaree, Dir.
Caen, Normal School	29.25	742.9	29.32	744.7	55.4	13	74						5		ne.	0	0	cloudy	M. Berson, Director.
Châlons-sur-Marne, N. Sch'l	29.02	737.0	29.33	745.0	48.7	9.3	89	s.			1		10			0.276	7.0	covered	M. Jadot, Director.
Charleville, Normal School.	28.89	733.9	29.40	746.8	47.1	8.4	76	nw.			1		10			0.16	4.	raining	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.17	715.6	29.51	749.5	53.1	11.7	62	w.			2		8		sw.	0.268	6.8	¾ covered	M. Alluard, Director.
Cluny, Normal School	28.79	731.2	29.66	753.4	52.7	11.5	60	s.			1		10		w.	0.220	5.6	raining	M. de Villemontée, Dir.
Commercy, Normal School.	28.58	725.8	29.43	747.6	49.5	9.7	82	wsw.			3	c	5 kn	wsw.	wsw.	0.24	6.	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.17	690.0	29.71	754.7	44.6	7	79	e.			2	0	4 n		w.	0.666	15.4		M. Jenngirard, Director.
Grésque, du. Rhone	28.59	726.2	29.70	754.3	56.7	13.7	62	nw.			2		8		nw.	0.39	10.	¾ covered	M. Kina, Director.
Grenoble, Normal School	28.87	733.3	29.63	752.6	53.6	12	67	sw.			1		kn	s.	w.	0.28	7.		M. Ablard, Director.
Guéret, Normal School	27.97	710.3	29.56	750.8	44.2	6.8	62	sw.			8		10 n		sw.	0.264	6.7	raining	M. Rivoire, Director.
Lamballe, Normal School	29.08	738.5	29.34	745.3	52.7	11.5	82	w.			2		8		w.	0.535	13.6	very cloudy	M. Ollitrault, Director.
Lescar, Normal School	29.23	742.4	29.79	756.6	59.4	15.2	38	w.			3					0.835	21.2		M. Chauvin, Director.
Lorient, Naval Observatory	29.26	743.3	29.37	745.9	52.7	11.5	93	wnw.			3		10			0.591	15.0	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.56	725.3	29.60	751.9	52.3	11.3	67	ssw.			2		10		ssw.	0.039	1.0	raining	M. André, Director.
Mans, Normal School	29.12	739.7	29.43	747.5	51.3	10.7	75	sw.			3		8		ssw.	0.421	10.7	very cloudy	M. Piboen, Director.
Marseille, Observatory	29.49	749.0	29.76	755.8	57.4	14.1	73	w.			2		3		wnw.	0.047	1.2		M. Stephan, Director.
Montlouis l'Instituteur	24.56	623.7	29.40	746.7	37.8	3.2	84	w.	26.2	11.7			3		sw.	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.58	751.4	29.71	754.7	58.6	14.8	72	w.			2		5		w.	0	0	cloudy	M. Galzin, Director.
Nancy, Normal School	28.65	727.8	29.42	747.3	49.6	9.8	72	s.			2		8 kn		sw.	0.217	5.5	very cloudy	M. Hasse, Director
Nantes, Observatory	29.23	742.4	29.39	746.5	55.8	13.2	74	sw.			2-4		10		sw.	0.402	10.2	covered	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	29.65	753.1	29.76	755.9	63.3	17.4	32	n.	15.0	6.7			7	nw.	nw.	0.020	0.5		Dr. Fines, Director.
Pic-du-Midi, Summit	20.94	531.8			18.7	— 7.4		sw.			2		10		sw.	1.201	30.5	snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.61	726.8	29.68	753.8	51.8	11	75	s.			1		5	s.	s.	0.402	10.2	cloudy	M. Tailleu.
Puy de Dôme Obs'y, Summit	24.59	624.6			30.9	— 0.6	100	wsw.			9		10			0.406	10.3	stormy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.50	749.3	29.53	750.1	52.9	11.6	93	sw.			3		10			0.157	4.0	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.17	741.0	29.38	746.3	53.6	12	83	w.			4		8		w.	0.138	3.5	very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.55	699.7	29.69	754.2	47.5	8.6	81	w.			2		5		e.	0.575	14.6	cloudy	M. Serger, Director.
Rouen, Normal School	29.29	743.9	29.34	745.1	53.2	11.8	73	wsw.			1		10			0.138	3.5	covered	M. Platrier, Director.
Saint Lô, Normal School	29.18	741.2	29.34	745.2	53.2	11.8	77	nw.			1		5		w.	0.445	11.3	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.22	742.3	29.39	746.5	52.2	11.2	77	sw.			2		10		w.	0.106	2.7	covered	M. Renou, Director.
Toulouse, Observatory	29.11	739.3	29.83	757.6	50.0	10.0	79	w.			8		10		nw.	0.685	17.4	thund'r st'm	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	28.87	733.4	29.37	745.9	52.9	11.6	71	sw.			3					0.102	2.6		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.10	739.2	29.39	746.6	53.4	11.9	70	sw.			3		8	sw.	wsw.	0.102	2.6	sprinkling	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.59	726.1	29.42	747.3	50.9	10.5	70	sw.			3	0	7 n		sw.	0.079	2.0	raining	Prof. Dr. Hoh.
Berlin	29.10	739.1	29.27	743.5	55.4	13.0	53	se.			4		7			0.012	0.3		Prof. Dr. Arndt.
Breslau	28.91	734.2	29.43	747.4	55.2	12.9	52	ssw.			2		9	sw.		0	0		Royal University Obs'y.
Carlsruhe	29.01	736.9	29.44	747.8	50.4	10.2	79	sw.			5		9	sw.		0.142	3.6	raining	Albert Senz.
Cassel	28.58	725.8	29.29	743.9	47.5	8.6	88	ssw.			5	0	7 n		sw.	0.126	3.2		Dr. H. Möhl.
Frankfort on the Main	29.00	736.7	29.37	745.9	52.9	11.6	65	wsw.			2		7			0.083	2.1		Physical Society.
Friedrichshafen	28.13	714.5	29.56	750.7	48.2	9.0	79	sw.			4		10	sw.		0.102	2.6		Wilhelm, Chief Tel.
Hamburg	29.10	739.0	29.19	741.4	50.4	10.2	73	wsw.			4		8			0	0		E. Preller.
Kiel	29.10	739.0	29.11	739.4	49.5	9.7	79	sw.			7		10			0.169	4.3		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	28.94	735.1	29.35	745.6	54.7	12.6	51	ssw.			4		7	sw.		0	0		H. Leppig, Asst.
Magdeburg	29.10	739.2	29.28	743.8	57.0	13.9	56	sw.			4	0	7 ks		w.	0	0		Dr. Assmann.
Memel	29.27	743.5	29.32	744.6	41.9	5.5	82	s.			4	9ck	0						Issermann.
Munich	27.72	704.2	29.56	750.8	48.2	9.0	69	nw.			2		9	w.		0.004	0.1		Central Station
Neufahrwasser	29.29	744.0	29.31	744.4	54.5	12.5	64	sw.			3		5			0.47	1.2		A. Lothes.
Neustadt, Palatinate	28.89	733.9	29.41	747.0	49.1	9.5	84	w.			2		10	w.				light rain	Dicknether.
Stuttgart	28.54	724.8	29.42	747.2	51.8	11.0	63	w.			2		4	w.		0.028	0.7		Prof. Dr. Schoder.
Wustrow	29.16	740.6	29.18	741.2	46.8	8.2	81	sw.			4		10 ks			·0	0		Profs. Brandes & Reimer.
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.71	754.7	30.10	764.6	62.2	16.8		sw.			1.0		0			0	0	clear	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.88	758.9	29.93	760.2	81.9	28.3	49	w.	23	10.3			0			0	0	misty	
Deesa	29.38	746.2	29.85	758.1	85.7	29.8	30	w.	9.9	4.4			0			0	0	blue sky	
Bombay	29.84	758.0	29.88	759.0	81.6	27.6	54	nw.	19	8.5			0			0	0	blue sky	
Poona, Yarrowda.	27.98	710.7	29.80	757.0	89.1	31.7	14	w.	23	10.3			0			0	0	blue sky	
Belgaum	27.33	694.1	29.82	757.5	84.8	29.3	39	sw.	8	3.6			0			0	0	blue sky	
Lahore	29.05	738.0	29.80	757.0	74.8	23.8	37	ne.	3.9	1.7			0			0	0	blue sky	
Roorkee	28.90	733.9	29.80	756.9	76.2	24.6	38	w.	2.1	0.9			3			0	0		
Agra	29.20	741.6	29.76	755.8	86.7	30.4	17	s.	4.7	2.1						0	0		
Nagpur	28.79	731.2	29.81	757.2	89.4	31.9	26	w.	3.1	1.4			0			0	0	blue sky	
Jubbulpore	28.53	724.6	29.88	758.9	82.8	28.2	23	calm	0.8	0.4			0			0	0	blue sky	
Lucknow	29.46	748.2	29.83	757.7	83.7	28.7	20	calm	0.6	0.3			2			0	0	d. clouds	
Allahabad	29.51	749.6	29.83	757.6	79.8	26.6	31	calm	0.8	0.4			0			0	0	blue sky	
Patna	29.71	754.6	29.90	759.4	75.7	24.3	39	ene.	2.4	1.1			0			0	0	blue sky	
Hazaribagh	27.86	707.7	29.87	758.7	79.9	26.6	18	nw.	4.8	2.2			0			0	0	blue sky	
Cuttack	29.81	757.2	29.89	759.3	81.2	27.3	50	ssw.	1.1	0.5			0			0	0	blue sky	
Calcutta, Alipore	29.88	759.0	29.90	759.5	77.0	25.0	46	sse.	3.0	1.3			0			0	0	blue sky	
Dhubri	29.80	757.0	29.93	760.1	71.4	21.9	51	calm	1.6	0.7			0			0	0	blue sky	
Chittagong	29.85	758.2	29.94	760.5	76.1	24.5	44	w.	2.1	0.9			0			0	0	blue sky	
Sibsagar	29.60	751.9	29.95	760.6	68.4	20.2	67	ene.	2.7	1.2			3			0	0	blue sky	
Jeypore	28.34	719.8	29.77	756.1	82.7	28.2	13	nw.	4.7	2.1			0			0	0	blue sky	
Zanzibar, Africa	29.79	756.7			87.2	30.7	65	ne.	11.6	5.2			2			0.15	3.8	d. clouds	
Trichinopoly	29.63	752.6			90.4	32.4	39	ese.	2	0.9			0			0	0	blue sky	
Bellary	28.38	720.8			93.6	34.2	14	se.	3.8	1.7			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.18	741.1	29.60	751.7	45.5	7.5	99	n.	3.1	1.4			10			0.831	21.1		Prof. Giovanni Clodig.
Milan	29.09	738.8	29.62	752.3	49.8	9.9	79	e.	1.3	0.6			10	sw.		0.528	13.4		Prof. Schiaparelli.
Padua	29.42	747.2	29.53	750.1	45.7	7.6	93	nne.	21.0	9.4			10	ne.		1.252	31.8		Prof. Dott. Lorenzoni.
Moncalieri	27.71	729.2	29.63	752.7	47.3	8.5	83	e.	5.6	2.5			7	e.		0.051	1.3		Prof. P. F. Denza.
Genoa	29.41	747.0	29.61	752.0	53.2	11.8	61	n.	4.9	2.2			2	n.		1.740	44.2		Prof. G. M. Garibaldi.
Mondovi	27.71	703.8	29.66	753.3	45.0	7.2	74	w.			2		8			0	0		Prof. D. C. Bruno.
Pesaro	29.45	747.9	29.50	749.2	57.4	14.1	66	nw.	13.0	5.8			9	sw.		0.287	7.3		Prof. Luigi Guidi.
Florence	29.33	744.9	29.58	751.4	59.4	15.2	53	sw.			6		5			0.110	2.8		Prof. Costantino Pitter.
Leghorn	29.48	748.9	29.57	751.1	56.5	13.6	72	w.	31.1	13.9			10	wnw.		0.346	8.8		Prof. P. Monte.
Rome	29.49	749.0	29.67	753.5	59.9	15.5	74	sw.	21.7	9.7			10	wsw.		0.264	6.7		Prof. P. S. Ferrari.
Lecce	29.59	751.6	29.85	758.2	58.5	14.7	73	sw.	31.1	13.9			10	sw.		0.028	0.7		Prof. C. de Giorgi.
Cosenza	29.02	737.2	29.93	760.2	60.8	16.0	75	wsw.	3.8	1.7			10	sw.		0.551	14.0		Prof. D. Conti.
Cagliari	29.63	752.5	29.82	757.5	60.4	15.8	71	w.			4		10			0.031	0.8		Prof. A. Pacinotti.
Palermo	29.67	753.5	29.92	759.9	65.3	18.5	53	sw.	21.7	9.7			10			0	0		Prof. G. Ciaccolatore.
Syracuse	29.95	760.7	30.00	761.9	63.3	17.4	47	wsw.	19.9	8.9			10	wsw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.20	741.7	29.72	754.8	56.3	13.5	89	sw.	15.4	6.9			10	w.		0.295	7.5		Prof. T. Brioschi.
Stelvio	21.72	551.6			26.6	— 3.0	89	ene.			2		3			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.74	552.3			31.6	— 0.2	73	n.			2		10			0.472	12.0	misty	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.38	771.6	30.41	772.4	25.6	— 3.6	81	w.	19.9	8.9			10 n			0.331	8.4	light snow	
Hakodate	30.36	771.1	30.37	771.4	27.0	— 2.8	61	nw.	6.0	2.7			2		ssw.	0	0	clear	
Hiroshima, I. M. Obs'y.....†	30.42	772.6	30.43	772.9	41.7	5.4	67	ne.	5.0	2.2		10 ck;cs	0	w.		0	0	overcast	K. Sasaki.
Kanazawa	30.47	773.9	30.58	776.7	32.1	0.1	85	se.	5.4	2.4		ck	10s;ks			0.010	0.3	overcast	S. Endo.
Kioto	30.35	770.9	30.54	775.7	30.9	— 0.6	74	nnw.	1.3	0.6		2 ck	0			0	0	clear	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.18	766.6	30.39	771.9	45.9	7.7	68	ne.	2.6	1.2		ck	1c s			0.360	9.1	overcast	S. Takehayashi.
Niigata	30.50	774.7	30.53	775.4	33.6	0.9	91	w.	8.8	3.4		10 ck	0	w.		0.010	0.3	cloudy	
Nobiru	30.43	772.9	30.45	773.2	28.6	— 1.9	90	nnw.	10.2	4.6		0	0			0	0	clear	H. Midzushima.
Sapporo					24.3	— 4.3	55	nw.	7.8	3.5			5			0.050	1.3		
Tokei Obs'y, Yeddo	30.38	771.6	30.45	773.4	36.9	2.7	51	nnw.	7.7	3.4		7 cs	0	w.		0	0	fair	The Staff.
Wakayama	30.46	773.7	30.51	774.9	36.9	2.7	59	nne.	7.1	3.2		0	0			0	0	clear	Y. Kuwamura.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.43	620.3	30.18	766.5	53.6	12.0	76	nnw.			1	0	0			0	0	foggy	Prof. M. Leal.
Mazatlan	29.78	756.4	30.04	763.1	65.0	18.3	86	e.	1.6	0.8		2 cs	0	sw.		0	0	clear	F. Quijano, U. E.
Mexico, Central Obs'y	23.12	587.3	30.25	768.5	50.0	10.0	56	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.26	616.2	30.42	772.9	56.7	13.7	74	s.			3	4 c	4 k	s.	s.	0	0	cloudy	M. Tena, M. D.
Pabellon, Aguascalientes	24.02	610.1	30.13	765.4	48.7	9.3	53									0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.46	595.8	30.31	769.9	46.4	8.0	67	calm	0	0		0	0			0	0	very fine	Prof. P. Spina.
San Luis Potosi	24.18	614.3	30.09	764.2	64.8	18.2	46	wsw.			1	0	0			0	0	fine	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Chávaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.58	573.6	30.27	768.8	52.7	11.5	53	wsw.	6.8	3.0		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.58	751.3	29.76	755.9	81.0	27.2	76	ene.	13.5	6.0	.....	2cs;ck	7 k;ks	nw.	e.	0.30	7.6	cloudy.....	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.24	742.6	29.24	742.6	50.0	10.0	.....	sw.	.....	.....	4	.....	.....	.....	.....	0.047	1.2	.....	
Groningen	29.10	739.2	29.16	740.6	48.2	9.0	.....	sw.	.....	.....	5	.....	.....	.....	.....	0.094	2.4	.....	
Helder	29.13	740.0	29.13	740.0	46.0	7.8	.....	ssw.	.....	.....	4	.....	.....	.....	.....	0.083	2.1	.....	
Hellevoetsluis	29.20	741.7	29.20	741.7	49.6	9.8	84	sw.	.....	.....	5	.....	.....	.....	.....	0.087	2.2	.....	
Utrecht	29.18	741.2	29.23	742.4	50.0	10.0	80	ssw.	.....	.....	4	.....	8	.....	.....	0.024	0.6	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	28.91	734.4	28.98	736.0	34.2	1.2	55	n.	18	8	.....	.....	7	.....	.....	0.528	13.4	.....	
Brono	29.49	749.0	29.53	750.0	19.2	— 7.1	48	ne.	9	4	.....	.....	0	.....	.....	0	0	.....	
Christiania	28.96	735.5	29.11	739.4	25.2	— 3.8	80	ene.	7	3	.....	.....	10	.....	.....	0.213	5.4	snowing.....	
Gjæsvær	29.39	746.6	29.42	747.2	14.9	— 9.5	.....	e.	.....	.....	2	.....	8	.....	.....	.....	.....	.....	
Lodingen	29.47	748.6	29.52	749.8	16.3	— 8.7	76	calm	.....	.....	0	.....	2	.....	.....	0	0	.....	
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	.....	.....	.....	.....	62.6	17.0	92	s.	23.7	10.6	.....	.....	6	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.20	741.7	30.21	767.2	59.0	15.0	74	ssw.	24.2	10.8	.....	.....	10	.....	.....	0.114	2.9	.....	Dr. A. M. R. dos Santos.
Funchal, Maderia	30.38	771.7	30.47	773.9	66.7	19.3	71	calm	0	0	.....	.....	6	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.92	760.0	30.29	769.3	58.5	14.7	98	wsw.	13.6	6.1	.....	.....	10	.....	.....	0.102	2.6	light rain.....	The Staff.
Ponta Delgada, Azores	30.07	763.8	30.14	765.6	63.0	17.2	88	sw.	22.4	10.0	.....	.....	3	.....	.....	0.024	0.6	.....	
Saint Paul de Loando	29.73	755.2	29.93	760.3	81.7	27.6	80	nne.	0.7	0.3	.....	.....	8	.....	.....	0.394	10.0	.....	
Serra da Estrella	25.30	642.7	30.15	765.7	38.5	3.6	100	wnw.	52.8	23.6	.....	.....	10	.....	.....	1.429	36.3	foggy	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.12	739.7	30.32	770.2	2.8	—16.2	.....	ssw.	4	2	.....	5 cs	0	.....	.....	0	0	.....	Major K. Lasarew.
Archangel	29.17	740.8	29.19	741.3	13.6	—10.2	90	nne.	9	4	.....	.....	10	.....	.....	0.177	4.5	snowing.....	Capt. Sseliwerstow.
Astrakhan	30.56	776.1	30.47	774.0	28.6	— 1.9	82	se.	11	5	.....	.....	10 s	.....	.....	0	0	.....	Capt. Wisganow.
Barnaul	30.06	763.4	30.61	777.4	14.5	— 9.7	65	se.	9	4	.....	.....	2	.....	.....	0	0	light clouds	Meteorological Obs'y.
Dorpat	28.99	736.4	29.23	742.5	43.0	6.1	87	ssw.	9	4	.....	.....	10 ks	.....	.....	0.063	1.6	light rain....	Observatory.
Ekaterinburg	28.81	731.7	29.82	757.5	20.8	— 6.2	76	wsw.	22	10	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Kasan	29.60	751.7	29.87	758.8	33.4	0.8	82	ssw.	31	14	.....	.....	8	.....	.....	0	0	.....	Observatory.
Kertch	30.04	762.9	30.06	763.4	40.5	4.7	89	se.	7	3	.....	3 cs	0	.....	.....	0	0	.....	Lagorio & Sastyrez.
Kieff	29.14	740.1	29.78	756.5	40.8	4.9	76	ssw.	13	6	.....	c	2 ks	.....	.....	0	0	.....	Observatory.
Lugan	29.93	760.1	30.13	765.4	40.6	4.8	68	sse.	18	8	.....	.....	7	.....	.....	0	0	.....	Meteorological Obs'y.
Moscow	29.21	741.9	29.69	754.2	40.5	4.7	67	ssw.	13	6	.....	0	3 ks	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	29.89	759.1	29.96	760.9	49.6	9.8	68	s.	22	10	.....	0	0	.....	.....	0	0	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.40	772.1	30.48	774.3	5.0	—15.0	80	w.	9	4	.....	.....	10	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	30.35	770.8	30.49	774.4	35.6	2.0	68	calm	0	0	.....	.....	9 n	.....	.....	0	0	.....	Physical Observatory.
St. Petersburg	29.13	739.8	29.14	740.2	41.5	5.3	86	sw.	25	11	.....	.....	10 n	.....	.....	0.098	2.5	light rain....	Central Physical Obs'y.
Tashkend, Laboratory	28.96	735.6	30.68	779.2	22.5	— 5.3	78	calm	0	0	.....	.....	9	.....	.....	0.098	2.5	.....	Teich, A. M.
Tiflis	28.95	735.3	30.43	772.9	39.7	4.3	55	ssw.	2	1	.....	0	1 k	.....	.....	0	0	.....	Physical Observatory.
Vladivostok	30.53	775.4	30.60	777.1	8.4	—13.1	56	calm	0	0	.....	0	0	.....	.....	0	0	.....	
Warsaw	29.00	736.6	29.42	747.2	50.9	10.5	68	sse.	11	5	.....	10 cs;ck	0	.....	.....	.....	.....	solar corona	Astronomical Obs'y.
Wilna	29.03	737.3	29.45	747.9	46.0	7.8	73	sse.	7	3	.....	.....	9	.....	.....	0	0	.....	Berg, Assistant.
Yeniseisk	30.17	766 3	30.48	774.1	27.5	— 2.5	63	sw.	25	11	.....	.....	7	.....	.....	0	0	.....	M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.33	745.0	41	5.0	83	ne.	.....	.....	6	.....	10	.....	.....	0	0	hazy	J. Youngclause.
North Unst, Shetland I'ds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	29.70	754.4	29.80	757.0	61.2	16.2	51	w.	7.8	3.5	.....	.....	4 k	.....	.....	0	0	.....	Antonio Rave, Director
Bilbao, Met. Obs'y	29.79	756.6	29.85	758.1	67.3	19.6	44	nw.	4.3	1.9	.....	2	7	nw.	.....	0.248	6.3	almost cov...	Prof. Manuel de Naveran'
Burgos, Met. Obs'y	26.96	684.8	29.95	760.6	49.5	9.7	63	sw.	19.2	8.6	.....	0	6	.....	.....	0.165	4.2	cloudy.....	Domingo Martin.
Madrid, Royal Obs'y	27.82	706.6	30.06	763.4	55.4	13.0	76	w.	33.5	15.0	.....	.....	10	.....	.....	0.098	2.5	covered.....	The Staff.
Murcia, Met. Obs'y	29.89	759.1	30.04	762.9	75.6	24.2	44	nw.	8.7	3.9	.....	0	4	.....	.....	0	0	clouds.....	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.03	737.3	29.93	760.2	56.3	13.5	87	sw.	16.1	7.2	.....	.....	10	.....	.....	0.472	12.0	sprinkling...	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	30.08	764.0	30.15	765.8	64.2	17.9	79	ese.	1.3	0.6	.....	0	0	.....	.....	0	0	clear.....	Benito Vines, S. J.
Manilla, Philippine Islands	30.00	762.0	30.06	763.5	76.9	24.9	70	ne.	3.3	1.5	.....	0	1 s	.....	.....	0	0	clear.....	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.25	768.4	30.35	770.9	60.6	15.9	97	wsw.	14.0	6.3	.....	.....	10	.....	w.	0.046	3.7	light rain	Capt. O. Pujazon, R. N.
San Juan de Porto Rico, W.I	30.06	763.4	30.15	765.7	74.1	23.4	89	e.	8.7	3.9	.....	3 k	4 k	e.	e.	2.953	75.0	d. clouds.....	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.98	761.5	30.12	765.0	74.5	23.6	75	ese.	0.7	0.3	.....	0	3 ck	.....	ese.	inap.	inap.	fair.....	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.47	748.4	29.50	749.4	1.4	—17.0	90	n.	.....	.....	4	.....	5	.....	.....	0	0	.....	
Umea	29.37	746.0	29.42	747.3	12.9	—10.6	86	ne.	.....	.....	6	.....	10	.....	.....	0	0	.....	
Hernosand	29.32	744.6	29.37	745.9	16.3	— 8.7	66	nne.	.....	.....	6	.....	10	.....	.....	0.146	3.7	.....	
Stockholm	28.87	733.2	29.04	737.7	26.2	— 3.2	96	ene.	.....	.....	6	.....	10	.....	.....	0.138	3.5	snowing	
Wisby	28.97	735.8	29.03	737.3	45.3	7.4	86	sw.	.....	.....	6	.....	5	.....	.....	0.075	1.9	.....	
Sub-Series.																			
Upsala	28.99	736.3	29.08	738.5	24.4	— 4.2	91	nne.	15.4	6.9	.....	.....	10	.....	.....	0.067	1.7	snowing.....	S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.18	715.8	29.62	752.3	50.7	10.4	61	ssw.	.....	.....	4	.....	.....	.....	.....	0.059	1.5	raining.....	The Observatory.
Zurich	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.02	762.6	57.4	14.1	37	sw.	13	6.0	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	29.99	761.7	62.1	16.7	.....	s.	.....	.....	1	.....	10	.....	.....	0	0	covered.....	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.28	769.1	58.5	14.7	62	n.	.....	.....	1	0	1 k	.....	n.	0.165	4.2	.....	Prof. C. V. A. van Dyck

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.14	765.5	30.24	768.1	33	0.6	68	sw.	3	1.3			10s;sk		w.	0	0	cloudy	
Alpena, Michigan	29.49	749.0	30.20	767.1	34	1.1	88	s.	5	2.2			10 s		sw.	0.02	0.5	cloudy	
Atlanta, Georgia	29.00	736.6	30.22	767.6	44.0	6.7	93	e.	9	4.0			10 n		calm	0.02	0.5	light rain	
Atlantic City, New Jersey	30.25	768.3	30.26	768.6	31.3	— 0.4	88	sw.	1	0.4		4 c	fg.			0	0	fair	
Augusta, Georgia	30.07	763.8	30.27	768.8	51.0	10.6	80	e.	2	0.9			10s;sk			0.05	1.3	cloudy	
Baltimore, Maryland	30.25	768.3	30.30	769.6	37	2.8	82	s.	1	0.4			fg.			0	0	dense fog	
Barnegat, New Jersey	30.24	768.1	30.26	768.6	31.5	— 0.3	87	w.	3	1.3		0	0			0	0	clear	
Bismarck, Dakota	27.61	701.3	29.59	751.6	36	2.2	82	se.	5	2.2		6 c	0	calm		0	0	fair	
Block Island, Rhode Island																			
Boise City, Idaho	27.13	689.1	30.09	764.3	27	— 2.8	88	nw.	2	0.9			10 n		calm	0.14	3.6	light snow	
Boston, Massachusetts	30.01	762.2	30.17	766.3	33.0	0.6	68	sw.	9	4.0		7 ck	0	w.		0	0	fair	
Brownsville, Texas	29.80	756.9	29.86	758.4	72	22.2	97	s.	17	7.6		0	7 k		s.	0	0	fair	
Buffalo, New York	29.47	748.5	30.27	768.8	36.6	2.6	81	s.	5	2.2		4 ck	2 ks	s.	s.	inap.	inap.	fair	
Burlington, Vermont	29.88	758.9	30.19	766.8	33.5	0.8	70	s.	1	0.4			10 n		s.	inap.	inap.	light snow	
Cairo, Illinois	29.63	752.6	30.05	763.3	48.0	8.9	88	se.	8	3.6			10 s		se.	0	0	threatening	
Campo, California	27.51	698.7	30.15	765.8	38	3.3	92	sw.	3	1.3			10 s		sw.	1.11	28.2	cloudy	
Camp Thomas, Arizona	27.10	688.3	29.94	760.5	52	11.1	59	nw.			2	0	6 ks		w.	0	0	fair	
Cape Henry, Virginia	30.26	768.6	30.28	769.1	45	7.2	76	sw.	4	1.8			10 s			inap.	inap.	cloudy	
Cape May, New Jersey	30.25	768.3	30.28	769.1	40	4.4	82	calm	0	0			10 ks		sw.	0	0	cloudy	
Castroville, Texas	29.03	737.3	29.87	758.7	64	17.8	93	calm	0	0			fg.			0	0	dense fog	
Cedar Keys, Florida	30.14	765.5	30.16	766.1	59	15.0	81	e.	5	2.2			10 ks		ne.	inap.	inap.	cloudy	
Champaign, Illinois	29.19	741.4	30.06	763.5	41.0	5.0	82	se	16	7.2			10 s		se.	0	0	cloudy	
Charleston, S. Carolina	30.17	766.3	30.23	767.8	53	11.7	93	ne.	4	1.8			fg			inap.	inap.	dense fog	
Charlotte, N. Carolina	29.35	745.5	30.24	768.1	44.0	6.7	76	w.	2	0.9			10s;fg			0.03	0.8	cloudy	
Chattanooga, Tennessee	29.37	746.0	30.23	767.8	44.0	6.7	93	e.	3	1.3			10n;fg		s;calm	0.05	1.3	light rain	
Cheyenne, Wyoming	23.65	600.7	29.90	759.4	35.0	1.7	61	w.	2	0.9		0	4 s			0	0	fair	
Chicago, Illinois	29.33	745.0	30.08	764.0	40.4	4.7	84	s.	4	1.8		10 k	fg.	s.		0	0	cloudy	
Chincoteague, Virginia	30.26	768.6	30.28	769.1	38	3.3	100	calm	0	0			10 s			0	0	cloudy	
Cincinnati, Ohio	29.51	749.5	30.20	767.1	42.1	5.6	73	se.	1	0.4			10 s		e.	0	0	cloudy	
Cleveland, Ohio	29.47	748.5	30.26	768.6	36.5	2.5	75	s.	8	3.6		0	0			0	0	clear	
Coleman City, Texas	28.01	711.4	29.89	759.2	55	12.8	93	se.	8	3.6			10 s			0	0	cloudy	
Columbus, Ohio	29.32	744.7	30.22	767.6	36	2.2	69	se.	3	1.3		0	5 s			0	0	fair	
Concho, Texas	27.91	708.9	29.93	760.2	59	15.0	87	s.	14	6.3			10 s			0	0	cloudy	
Davenport, Iowa	29.27	743.4	29.97	761.2	44	6.7	76	se.	4	1.8			10 s		se.	inap.	inap.	cloudy	
Dayton, Washington T'y	28.01	711.4	29.82	757.4	33	0.6	85	sw.	10	4.5			10 n		sw.	0.43	10.9	light snow	
Deadwood, Dakota	24.85	631.2	29.77	756.1	41.5	5.3	62	sw.	22	9.8		0	6 s		w.	0	0	fair	
Decatur, Texas					49	9.4	86	se.	11	4.9			fg.			0	0	dense fog	
Delaware Breakwater, Del.	30.26	768.6	30.28	769.1	36	2.2	100	s.	3	1.3		1 cs	8 s		s.	0	0	cloudy	
Denison, Texas	28.99	736.3	29.83	757.7	58.0	14.4	100	s.	10	4.5			10 n			0.14	3.6	light rain	
Denver, Colorado	24.34	618.2	29.86	758.4	37.0	2.8	50	s.	6	2.7		0	0			0	0	clear	
Des Moines, Iowa	28.92	734.6	29.89	759.2	42	5.6	82	se.	6	2.7			10 s		se.	0	0	cloudy	
Detroit, Michigan	29.46	748.3	30.21	767.3	46.0	7.8	77	s.	5	2.2		0	4 s		sw.	0.03	0.8	fair	
Dodge City, Kansas	27.01	686.0	29.75	755.6	47.5	8.6	87	s.	8	3.6			10 s			0.01	0.3	cloudy	
Dubuque, Iowa	29.20	741.7	29.96	761.0	38.5	3.6	85	se.	5	2.2			fg.		calm	0	0	dense fog	
Duluth, Minnesota	29.18	741.2	29.94	760.5	35	1.7	79	ne.	6	2.7			10 s		ne.	0	0	cloudy	
Eagle Pass, Texas	29.05	737.9	29.89	759.2	62.2	16.8	93	calm	0	0			fg.			0	0	dense fog	
Eagle Rock, Idaho	24.99	634.7	29.89	759.2	27	— 2.8	80	sw.	36	16.1			10 s			0	0	cloudy	
Eastport, Maine	30.00	762.0	30.07	763.8	32	0.0	88	sw.	3	1.3			10 n		sw.	0.10	2.5	heavy snow	
El Paso, Texas	26.10	662.9	29.98	761.5	51	10.6	44	w.	13	5.8		0	0			0	0	clear	
Erie, Pennsylvania	29.47	748.5	30.24	768.1	38	3.3	82	calm	0	0		hz.	0			0	0	dense haze	
Escanaba, Michigan	29.38	746.2	30.10	764.5	35	1.7	100	se.	6	2.7			fg.			0	0	dense fog	
Fort Apache, Arizona	24.92	633.0	30.02	762.5	34	1.1	100	sw.	4	1.8			10 n		calm	0.32	8.1	heavy snow	
Fort Assinnaboine, Montana	26.62	676.1	29.66	753.4	35	1.7	56	sw.	13	5.8		0	2 s		sw.	0	0	clear	
Fort Bennett, Dakota	27.87	707.9	29.60	751.8	40	4.4	82	se.	10	4.5		0	2 s			0	0	clear	
Fort Benton, Montana	26.66	677.2	29.66	753.4	37	2.8	65	sw.	20	8.9		0	7 ks		sw.	0	0	fair	
Fort Buford, Dakota	27.40	695.9	29.58	751.3	33	0.6	62	se.	2	0.9		5 cs	0	calm		0	0	fair	
Fort Custer, Montana	26.29	667.8	29.65	753.1	34	1.1	80	s.	3	1.3		0	4 s		calm	0	0	fair	
Fort Davis, Texas	25.02	635.5	29.98	761.5	50	10.0	86	sw.	3	1.3			10 s		s.	0	0	cloudy	
Fort Elliott, Texas	26.93	684.0	29.83	757.7	45	7.2	71	sw.	4	1.8		3 c	0	sw.		0	0	clear	
Fort Gibson, Indian T'y	29.18	741.2	29.78	756.4	53.5	11.9	93	se.	8	3.6			10 s		s.	0	0	cloudy	
Fort Grant, Arizona	25.12	638.0	29.98	761.5	42	5.6	86	sw.	9	4.0			10 s			0.06	1.5	cloudy	
Fort Griffin, Texas	28.56	725.4	29.94	760.5	63	17.2	90	s.	9	4.0		10 cs	0	s.		0	0	cloudy	
Fort Keogh, Montana	26.94	684.3	29.62	752.3	33	0.6	62	se.	4	1.8		9 cs	0			0	0	cloudy	
Fort Macon, North Carolina	30.27	768.8	30.28	769.1	48	8.9	100	n.	9	4.0			10 s		n.	0.10	2.5	cloudy	
Fort McKavett, Texas	27.46	697.5	29.84	757.9	56.4	13.6	42	sw.	3	1.3		0	0			0	0	clear	
Fort Missoula, Montana	26.32	668.5	29.75	755.6	30	— 1.1	81	nw.	7	3.1		0	5 ks		se.	0.01	0.3	fair	
Fort St. Michaels, Alaska	29.62	752.3	29.66	753.4	—27	—32.8	100	sw.	4	1.8		0	0			0	0	clear	
Fort Shaw, Montana	25.83	656.1	29.68	753.9	31	— 0.6	71	sw.	21	9.4		8 k	0	w.		0	0	cloudy	
Fort Sill, Indian Territory	28.48	723.4	29.79	756.7	53.5	11.9	94	s.	9	4.0			10 s			0.08	2.0	cloudy	
Fort Stevenson, Dakota	27.52	699.0	29.54	750.3	32	0.0	81	s.	3	1.3		hz.	0	calm		0	0	dense haze	
Fort Verde, Arizona					40.1	4.5	82	n.			1	0	0			0.42	10.7	clear	
Fort Washakie, Wyoming	24.04	610.6			25.0	— 3.9	64	ne.	2	0.9		0	0			0	0	clear	
Fredericksburg, Texas	28.09	713.5	29.89	759.2	64	17.8	93	s.	3	1.3			10 s			0.01	0.3	cloudy	
Galveston, Texas	29.90	759.4	29.94	760.5	66	18.9	100	s.	10	4.5			10 ks		s.	1.07	27.2	cloudy	
Grand Haven, Michigan	29.41	747.0	30.12	765.0	39.0	3.9	94	se.	3	1.3			fg.			0	0	dense fog	
Hatteras, North Carolina	30.27	768.8	30.29	769.4	46	7.8	93	ne.	8	3.6			10n;fog			0.20	5.1	light rain	
Helena, Montana	25.35	643.9	29.75	755.6	32	0.0	38	w.	2	0.9		0	0			0	0	clear	
Henrietta, Texas	28.75	730.2	29.80	756.9	57	13.9	93	se.	10	4.5			10 s			0	0	cloudy	
Huron, Dakota	28.23	717.0	29.75	755.6	38.2	3.4	72	se.	22	9.8			10 ks		se.	0	0	cloudy	
Indianapolis, Indiana	29.27	743.4	30.12	765.0	42	5.6	73	se.	6	2.7		1 ck	9 s	s.	s.	inap.	inap.	cloudy	
Indianola, Texas	29.88	758.9	29.91	759.7	69.0	20.6	100	s.	12	5.4			10ks;n		sw.	inap.	inap.	light rain	
Jacksboro, Texas	28.60	726.4	29.84	757.9	58	14.4	86	s.	9	4.0			10 s		s.	0	0	cloudy	
Jacksonville, Florida	30.14	765.5	30.20	767.1	55	12.8	86	ne.	2	0.9		3 cs	fg.	w.		0	0	fair	
Keokuk, Iowa	29.21	741.9	29.91	759.7	42.5	5.8	93	se.	12	5.4			10 s		se.	0	0	cloudy	
Key West, Florida	30.12	765.0	30.15	765.8	65.7	18.7	83	e.	6	2.7		2 cs	1 s			0	0	clear	
Kittyhawk, North Carolina	30.29	769.4	30.31	769.9	45	7.2	93	calm	0	0			10 n			0.03	0.8	light rain	
Knoxville, Tennessee	29.16	740.7	30.24	768.1	43	6.1	88	ne.	3	1.3			10 s			0.03	0.8	cloudy	
La Crosse, Wisconsin	29.12	739.6	29.96	761.0	44	6.7	76	se.	1	0.4			10 s			0	0	cloudy	
La Mesilla, New Mexico	25.94	658.9	29.95	760.7	49.0	9.4	46	w.	14	6.3		0	0			0	0	clear	
Leavenworth, Kansas	28.88	733.5	29.83	757.7	48	8.9	86	se.	6	2.7			10s;fg			0.02	0.5	cloudy	
Lewiston, Idaho	28.96	735.6	29.82	757.4	34.6	1.4	67	se.	4	1.8			10 s			0.03	0.8	cloudy	
Little Rock, Arkansas	29.60	751.8	29.93	760.2	50	10.0	93	se.	4	1.8			fg.			0.02	0.5	dense fog	
Los Angeles, California	29.75	755.6	30.15	765.8	45.2	7.3	83	nw.	1	0.4		0	0			0.75	19.0	clear	
Louisville, Kentucky	29.51	749.5	30.10	764.5	43	6.1	68	se.	5	2.2			10 s			0	0	cloudy	
Lynchburg, Virginia	29.52	749.8	30.24	768.1	35.5	1.9	79	calm	0	0		7 ck	0	sw.		0	0	fair	
Mackinac City, Michigan																			
Madison, Wisconsin	28.98	736.1	30.07	763.8	38	3.3	89	se.	5	2.2			fg.		calm	0.01	0.3	dense fog	
Marquette, Michigan	29.30	744.2	30.08	764.0	37	2.8	72	s.	2	0.9			10 s		calm	0	0	cloudy	
Mason, Texas	28.17	715.5	29.90	759.4	62.5	16.9	85	sw.	3	1.3			10 s		sw.	inap.	inap.	cloudy	
Memphis, Tennessee	29.64	752.8	29.99	761.7	48	8.9	100	e.	2	0.9			fg.			inap.	inap.	dense fog	
Milwaukee, Wisconsin	29.28	743.7	30.08	764.0	39	3.9	89	se.	4	1.8			fg.			0	0	dense fog	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.02	762.5	30.06	763.5	58	14.4	100	e.	2	0.9			10s;fg			1.16	29.5	cloudy	
Montgomery, Alabama	29.89	759.2	30.13	765.3	52	11.1	93	se.	4	1.8			10 s			1.27	32.3	cloudy	
Moorhead, Minnesota	28.61	726.7	29.71	754.6	34	1.1	88	s.	36	16.1			10 s		s.	0	0	cloudy	
Morgantown, W. Virginia	29.22	742.2	30.29	769.4	34.5	1.4	77	calm	0	0		0	fg			0	0	clear	
Mt. Washington, N. H	23.54	597.9	30.16	766.1	13.0	—10.6	87	nw.	73	32.6			fg		nw.	0	0	light fog	
Nashville, Tennessee	29.56	750.8	30.12	765.0	47.8	8.8	78	se.	3	1.3		10 cs	0			0.01	0.3	cloudy	
New Haven, Connecticut	30.11	764.8	30.23	767.8	31	— 0.6	88	calm	0	0		7 c	sk	sw.		0	0	fair	
New London, Connecticut	30.20	767.1	30.24	768.1	35	1.7	79	w.	2	0.9		2 cs	0	w.		0	0	clear	
New Orleans, Louisiana	29.95	760.7	30.01	762.2	61.0	16.1	93	e.	4	1.8			fg			0.68	17.3	dense fog	
Newport, Rhode Island	30.16	766.1	30.21	767.3	35.0	1.7	82	sw.	13	5.8		3 ck	4 ks	nw.	w.	0	0	fair	
New River, N. Carolina					44	6.7	100	ne.			1		10 n			0.39	9.9	light rain	
New Shoreham, Rhode I'd	30.19	766.8	30.22	767.6	36.5	2.5	75	sw.	5	2.2		2 cs	0	n.		0	0	clear	
New York, New York	30.08	764.0	30.27	768.8	34	1.1	88	sw.	4	1.8		4 cs	0	sw.		0	0	fair	
Norfolk, Virginia	30.25	768.3	30.28	769.1	45	7.2	76	sw.	3	1.3			10s;hz			0	0	cloudy	
North Platte, Nebraska	26.72	678.7	29.82	757.4	42.6	5.9	80	e.	5	2.2			10 s			0.03	0.8	cloudy	
Olympia, Washington T'y	29.50	749.3	29.54	750.3	36.5	2.5	84	s.	20	8.9			10 n		calm	0.61	15.5	light snow	
Omaha, Nebraska	28.58	725.9	29.85	758.2	44.2	6.8	86	se.	4	1.8			fg			0.02	0.5	threatening.	
Ooglaamie, Pt. Barrow, Alas.	29.33	745.0	29.35	745.5	—28.0	—33.3	78	sw.	11	4.9		hz	4 s			0	0	fair	
Oswego, New York	29.88	758.9	30.23	767.8	39.0	3.9	86	w.	4	1.8			10 s		nw.	0.05	1.3	cloudy	
Palestine, Texas	29.30	744.2	29.88	758.9	64	17.8	100	s.	12	5.4			fg			0	0	dense fog	
Pensacola, Florida	30.05	763.3	30.08	764.0	59.0	15.0	96	e.	8	3.6			10 s		se.	0.90	22.9	cloudy	
Philadelphia, Pa	30.18	766.0	30.29	769.4	38	3.3	72	sw.	2	0.9			hz		sw.	0	0	dense haze	
Pike's Peak, Colorado	17.31	439.7	30.03	762.7	7.5	—13.6	91	sw.	12	5.4		0	3 ks			0	0	clear	
Pioche, Nevada	23.88	606.5	30.04	763.0	29	— 1.7	70	nw.	9	4.0		0	0			0.17	4.3	clear	
Pittsburg, Pennsylvania	29.41	747.0	30.27	768.8	35.0	1.7	77	n.	2	0.9			fg.			0	0	dense fog	
Port Eads, Louisiana	30.04	763.0	30.04	763.0	62.1	16.7	100	se.	4	1.8			10s;fg			1.21	30.7	cloudy	
Port Huron, Michigan	29.49	749.0	30.22	767.6	36.1	2.3	70	s.	1	0.4		10 cs	sk			0.01	0.3	cloudy	
Portland, Maine	30.07	763.8	30.12	765.0	32.0	0.0	60	w.	7	3.1		9 k	0	w.		0	0	cloudy	
Portland, Oregon	29.60	751.8	29.67	753.6	39.0	3.9	89	s.	16	7.2			10 n		s.	0.42	10.7	light rain	
Portsmouth, N. Carolina					45	7.2	100	ne.	13	5.8			10 n		calm	0.13	3.3	light rain	
Prescott, Arizona	24.60	624.8	29.96	761.0	32.2	0.1	81	s.	6	2.7		0	3 s		s.	0.84	21.3	clear	
Provincetown, Mass	30.14	765.5	30.17	766.3	34.5	1.4	79	sw.	11	4.9		3 k	3 s	w.	calm	0	0	fair	
Punta Rassa, Florida	30.14	765.5	30.15	765.8	60.5	15.8	76	e.	6	2.7		10 ck	0	w.		0	0	cloudy	
Red Bluff, California	29.78	756.4	30.16	766.1	44.2	6.8	93	sw.	5	2.2			10 s		calm	0.26	6.6	cloudy	
Rio Grande City, Texas	29.57	751.1	29.82	757.4	67	19.4	90	se.	4	1.8		3 c	0	calm		0	0	clear	
Rochester, New York	29.53	750.0	30.24	768.1	37	2.8	82	calm	0	0			10s;fg		w.	0	0	cloudy	
Roseburg, Oregon	29.42	747.3	29.99	761.7	40	4.4	86	s.	5	2.2			10 n		s.	0.12	3.0	light rain	
Sacramento, California	30.13	765.3	30.21	767.3	43.8	6.6	83	se.	7	3.1			9 s			0.39	9.9	cloudy	
St. Louis, Missouri	29.36	745.7	30.00	762.0	43.8	6.6	93	s.	12	5.4			10 n			0.06	1.5	light rain	
St. Paul, Minnesota	28.98	736.1	29.92	760.0	36.0	2.2	89	se.	10	4.5			10 s		se.	0	0	cloudy	
St. Vincent, Minnesota	28.64	727.4	29.61	752.1	30	— 1.1	100	s.	33	14.8			10 s		s.	0	0	threatening.	
Salt Lake City, Utah	25.41	645.4	29.97	761.2	36	2.2	82	nw.	3	1.3			10 s			0.12	3.0	threatening.	
San Antonio, Texas	29.16	740.7	29.88	758.9	67.7	19.8	100	e.	8	3.6			10 s		calm	0	0	cloudy	
San Diego, California	30.10	764.5	30.17	766.3	51.7	10.9	73	nw.	5	2.2		0	1 s			0.34	8.6	clear	
Sandusky, Ohio	29.49	749.0	30.21	767.3	39	3.9	73	s.	12	5.4		0	0			0	0	clear	
Sandy Hook, New Jersey	30.22	767.6	30.26	768.6	34.0	1.1	78	w.	8	3.6		5 k	0	w.		0	0	fair	
San Francisco, California	30.15	765.8	30.22	767.6	49	9.4	89	sw.	4	1.8			10 n		sw.	0.43	10.9	light rain	
Santa Fé, New Mexico	22.97	583.4	30.01	762.2	35	1.7	72	sw.	12	5.4		0	4 s		sw.	0.01	0.3	fair	
Savannah, Georgia	30.13	765.3	30.22	767.6	51	10.6	86	n.	4	1.8			fg			0.02	0.5	dense fog	
Shreveport, Louisiana	29.63	752.6	29.88	758.9	56	13.3	100	se.	3	1.3			fg.			0.01	0.3	dense fog	
Silver City, New Mexico	24.10	612.1	29.94	760.5	39	3.9	76	w.	6	2.7		0	8 ks		w.	0	0	cloudy.	
Sitka, Alaska	28.53	724.6	28.60	726.4	34.5	1.4	77	e.	26	11.6		0	2 s		calm	1.01	25.7	clear	
Smithville, North Carolina	30.22	767 6	30.26	768.6	49	9.4	100	ne.	8	3.6			10 n			0.20	5.1	light rain	
Spokane Falls, Wash. Ter.	27.64	702.0	29.77	756.1	31	— 0.6	81	sw.	14	6.3		0	2 s			0.14	3.6	clear	
Springfield, Illinois	29.29	744.0	30.02	762.5	46	7.8	68	se.	12	5.4			10 s		s.	Inap.	Inap.	cloudy	
Springfield, Massachusetts	30.08	764.0	30.22	767.6	32.9	0.5	78	s.	2	0.9		8 k	fg	w.		0	0	cloudy	
Springfield, Mo	28.39	721.1	29.96	761.0	46	7.8	89	se.	12	5.4			10 n			0.01	0.3	light rain	
Stockton, Texas	26.80	680.7	29.94	760.5	49.2	9.6	80	sw.	4	1.8		0	7 s		sw.	0	0	cloudy	
Thatcher's Island, Mass	30.10	764.5	30.16	766.1	31.0	— 0.6	83	w.	14	6.3		0	0			0	0	clear	
Toledo, Ohio	29.47	748.5	30.21	767.3	37	2.8	79	s.	4	1.8		0	fg			0	0	clear	
Tucson, Arizona	27.51	698.7	29.99	761.7	51	10.6	80	se.	3	1.3		0	2 s			0	0	clear	
Umatilla, Oregon	29.46	748.3	29.84	757.9	36.4	2.4	77	sw.	3	1.3			10 s			0.06	1.5	cloudy	
Uvalde, Texas	28.85	732.8	29.85	758.2	65	18.3	100	se.	4	1.8			fg			0	0	dense fog	
Vicksburg, Mississippi	29.70	754.4	29.97	761.2	56	13.3	93	se.	11	4.9			10s;fg		se.;c	0.09	2.3	threatening.	
Visalia, California	29.79	756.7	30.17	766.3	43	6.1	83	nw.	4	1.8		0	7 s			0.62	15.7	fair	
Washington, D. C	30.17	766.3	30.29	769.4	33	0.6	88	calm	0	0		6 c	fg			0	0	fair	
West Los Animas, Colorado	25.64	651.2	29.77	756.1	26	— 3.3	67	nw.	4	1.8		0	3 s		w.	0	0	clear	
Wickenburg, Arizona					43.5	6.4	96	nw.			1	0	8 k		nw	0.27	6.9	cloudy	
Williamsport, Pa	29.64	752.8	30.27	768.8	34	1.1	78	ne.	3	1.3			hz			0	0	dense haze	
Wilmington, N. Carolina	30.22	767.6	30.28	769.1	50	10.0	93	e.	1	0.4			10 n		calm	0.45	11.4	light rain	
Winnemucca, Nevada	25.51	647.9	30.03	762.7	30	— 1.1	71	sw.	14	6.3			10 ks		sw.	0.06	1.5	cloudy	
Wood's Holl, Mass																			
Yankton, Dakota	28.40	721.3	29.82	757.4	39	3.9	73	se.	13	5.8			10 ks		se.	0	0	cloudy	
Yuma, Arizona	29.86	758.4	30.01	762.2	53.0	11.7	48	nw.	6	2.7		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1			55.6	13.1	80	sw.	4	1.8		6 k	2 s		w.	0	0	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.13	765.3	30.14	765.5	78	25.6	91	e.				5 k	5 ks	e.	e.	0.40	10.2	fair	J. A. Racker.
Buenaventura, U. S. C	30.01	762.2	30.03	762.7	76	24.4	90	calm	0	0			10 ks			0.10	2.5	cloudy	J. I. Plume.
Guadeloupe, W. I	30.00	762.0	30.02	762.5	76	24.4	95	e.				1 k	0			0	0	clear	B. Bigar.
Havana, Cuba, W. I	30.14	765.5	30.19	766.8	69	20.6	76	se.	1.2	0.5		0	1 ks		calm	0	0	clear	A. Van Caneghem.
Kingston, Jamaica, W. I																			Robert Johnstone
Navassa, W. I																			F. M. Everett.
Paramaribo, S. A	30.07	763.8	30.07	763.8	78	25.6	86	e.			2	4 c	5 k	e.	e.	0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.66	753.4	30.12	765.0	78	25.6	84	nw.			1		10 ks		calm	0	0	cloudy	Miss Flora A. Nichols.
Rivas, Nicaragua																			Earl Flint.
Santiago de Cuba, W. I	30.11	764.8	30.14	765.5	73	22.8	67	calm	0	0		0	0			0.02	0.5	clear	Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	29.20	741.7	29.26	743.2	— 4.0	—20 0	82	sw.	13	5.8		4 k	2 s	s.	sw.	0	0	cloudy	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill				
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Gibraltar, Mediterranean	30.33	770.4	62	16.7	97	ssw.			3-4		7	ssw.				1	ssw.	drizzling	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S. Alert, N. 3° 30′, E. 61° 20′	29.88	758.9	83	28.3	77	n.			2-3		6							showery	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.09	764.3	64	17.8	67	s.			4-6		3	ssw.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 24° 54′, E. 36° 00′	30.10	764.5	72	22.2	54	nnw.			4-5		1	n.				4	nnw.	blue sky	Capt. Lord Chas. Scott.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.93	760.2	73	22.8	63	ese.			4-6		2	calm						squally	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S. 40° 54′, E. 53° 52′	29.90	759.4	67.5	19.7	92	nw.			3-4		9					2	nnw.	d. clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 10° 39′, W. 61° 31′	30.13	765.3	78	25.6		ne.			2		2	ne.						d clouds	Capt. C. Domville.
H. M. Dock Yard, Bermuda, W. I.	30.34	770.6	58	14.4	69	ene.			1-2		3	nne.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	29.76	755.9	75	23.9	85	nnw.			3-4		5					2-3	nnw.	squally	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S 12° 18′, E. 44° 31′	29.76	755.9	83	28.3		wnw.			3-7		6	wnw.				1	w.	thnd'r str,m	Capt. E. St. J. Garforth.
H. M. S. Espiegle, S. 36° 15′, E. 26° 15′	30.10	764.5	69	20.6	79	ese.			2		5	ne.				3	ene; s.	d. clouds	Capt. C. A. G. Bridge.
H. M. S. Fawn, N. 13° 32′, E. 43° 20′	29.92	760.0	78.5	25.8	86	sw.			2		0							misty	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.51	774.9	41	5.0	91	nne.			1		2	nne.				1	ene.	d. clouds	Capt. R. F. Hoskyn.
H. M. S. Gannet, S. 21° 10′, W. 85° 30′	30.09	764.3	70.5	21.4	71	ese.			4-5		10					3 3	se. s.	d. clouds	Comm. E. G. Bourke. Capt. L. F. Jones.
H. M. S. Garnet																			
H. M. S. Inconstant, Singapore, Malay Pen	29.88	758.9	75	23.9	90	ne.			1-2		10							overcast	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′ E. 114° 10′	30.14	765.5	60	15.6	82	ese.			1		10	se.						overcast	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	30.00	762.0	62	16.7		calm			0		10							overcast	Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.94	760.5	64	17.8	100	s.			4		9							raining	Capt. J. E. Erskine.
H. M. S. Northampton, Off Port Royal, Jamaica, W.I.	30.04	763.0	72.2	22.3	89	n.			1		1							blue sky	Capt. E. Drummond.
H. M. S. Orontes, S. 19° 27′, E. 41° 59′	29.77	756.1	83.5	28.6	76	s.			5		3					4	ssw.	d. clouds	Capt. R. J. Kinahan. Capt. F. R. Dicken.
H. M. S. Pelican																			Capt. H. H. Grentell.
H. M. S. Phœnix																			
H. M. S. Rambler, Fernando Po, Lower Guinea	29.90	759.4	84	28.9	96	ne.			2									hazy	Capt. A. Littleton.
H. M. S. Rendy, Bassorah, Asiatic Turkey	30.10	764.5	64	17.8		nw.			1		1							blue sky	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	29.36	745.7	41	5.0	91	sse.			3-5		10							squally	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 3° 12′, E. 40° 11′	29.26	743.2	84	28.9	87	ne.			2-3		4	ne.				6	nne.	d. clouds	Capt. E. T. Church.
H. M. S. Thalia, N. 26° 34′, W. 21° 04′	30.40	772.1	70	21.1		ese.			4-5		0					5	wnw.	blue sky	
H. M. S. Triumph, S. 21° 09′, W. 85° 32′	30.16	766.1	70	21.1	75	se.			5		8	se.				6	se.	d. clouds	Capt. A. H. Markham. Capt. J. E. Stokes.
H. M. S. Tyne																			
H. M. S. Urgent, Port Royal, Jamaica, W.I.	30.08	764.0	73	22.8		n.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Bombay, India	29.87	758.7	80.5	26.9	48	wsw.			2-3		0							misty	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Quanza, St. Vincent, Cape Verd Id.	30.22	767.5	73.4	23.0	74	ne.			2		0					3	ne.	blue sky	C. da Silva Costa.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 22° 52′, W. 85° 12′	30.08	764.0	73.2	22.9	91	se.			1		2							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10.	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.06	763.5	62	16.7	88	ne.	10	4.5	.....	.....	8	.....	se.	1.20	30.5	.....	.....	cloudy	
N. Yard, Portsmouth, N. H.	30.13	765.3	32	0.0	.....	w.	8	3.6	.....	.....	3	.....	w.	0	0	.....	.....	fair	
Naval Hospital, Yokohama, Japan	30.22	767.6	38.5	3.6	38	n.	.....	.....	3	.....	8	.....	w.	0	0	.....	.....	cloudy	
Adams, Callao, Peru	29.71	754.6	67	19.4	100	ese.	.....	.....	1	.....	10	.....	.....	0	0	gr'd	.....	foggy	
Alaska, Valparaiso, Chili	30.01	762.2	60	15.6	82	calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	clear	
Alert, Sarawak river, Borneo*	29.78	756.4	81	27.2	83	nnw.	.....	.....	1	.....	10	.....	calm	.....	.....	sm'h	.....	misty	
Alliance, N. 28° 15′, W. 66° 15′	30.25	768.3	64	17.8	73	nne.	.....	.....	3	.....	2	.....	.....	sli't	sli't	sm'h	.....	clear	
Ashuelot, Tientsin, China	30.45	773.4	36	2.2	90	e.	.....	.....	2	.....	10	.....	e.	.....	.....	.....	.....	overcast	
Brooklyn, Sandy Point, Patagonia	29.29	744.0	46	7.8	100	sse.	5	2.2	.....	.....	10	.....	calm	2.15	54.6	sm'h	.....	raining	
Colorado, New York, N. Y	30.24	768.1	34	1.1	90	w.	3	1.3	.....	.....	5	.....	calm	0	0	.....	.....	misty	
Enterprise, Port Royal, S. C.*	30.19	766.8	56	13.3	94	nne.	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Essex, Porto Praya, Cape Verd Ids	30.15	765.8	76	24.4	60	ne.	.....	.....	4	.....	0	.....	.....	.....	.....	long	e.	hazy	
Franklin, Norfolk, Va	30.31	769.9	46	7.8	84	s.	2.4	1.1	.....	.....	10	.....	calm	0	0	.....	.....	cloudy	
Galena, Villafranca, France	29.57	751.1	63	17.2	67	sw.	.....	.....	2	.....	2	.....	.....	.....	.....	long	.....	fair	
Independence, N. Yard, Mare I'd, Cal	30.09	764.3	49	9.4	85	calm	0	0	.....	.....	8	.....	.....	0.01	0.3	.....	.....	cloudy	
Kearsarge, New Orleans, La	30.01	762.2	61	16.1	94	calm	.....	.....	0	.....	10	.....	wsw.	.....	.....	.....	.....	foggy	
Lackawanna, Valparaiso, Chili*	29.98	761.5	60	15.6	94	calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	clear	
Lancaster, N. 36° 03′, E. 28° 27′	30.20	767.1	61	16.1	87	nnw.	.....	.....	1	.....	2	.....	nw.	.....	.....	sm'h	.....	fair	
Marion, S. 33° 54′, E. 18° 24′	29.77	756.1	76	24.4	64	wnw.	.....	.....	2	.....	10	.....	sw.	.....	.....	.....	.....	cloudy	
Michigan, Erie, Pa	30.15	765.8	36	2.2	80	s.	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....	cloudy	
Minnesota, Newport, R. I	30.19	766.8	35	1.7	90	wsw.	10	4.5	.....	.....	10	.....	nnw.	.....	.....	.....	.....	cloudy	
Monocacy, Yokohama, Japan	30.47	773.9	40	4.4	64	nnw.	.....	.....	3	.....	8	.....	n.	.....	.....	.....	.....	fair	
Nipsic, N. 42° 08′, W. 9° 02′	30.04	763.0	59	15.0	82	wnw.	.....	.....	4	.....	8	.....	nw.	.....	.....	r'gh	nw.	fair	
Onward, Callao, Peru†	30.09	764.3	66	18.9	100	sse.	.....	.....	1	.....	10	.....	nnw.	.....	.....	long	w.	foggy	
Palos, Hong Kong, China	30.15	765.8	59	15.0	88	ese.	.....	.....	3	.....	10	.....	s; e.	.....	.....	.....	.....	overcast	
Passaic, Washington, D. C	30.29	769.4	31	— 0.6	.....	ne.	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	clear	
Pensacola, Coquimbo, Chili	30.03	762.7	61	16.1	88	calm	0	0	.....	.....	10	.....	calm	0	0	sm'h	.....	foggy	
Powhatan, Fredericstaed, Santa Cruz.	30.15	765.8	77	25.0	77	ene.	.....	.....	1	.....	2	.....	ene.	.....	.....	.....	.....	clear	
Quinnebaug, Alexandria, Egypt	30.34	770.6	60	15.6	55	nnw.	.....	.....	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear	
Ranger, N. 18° 10′, W. 103° 20′*	29.94	760.5	79	26.1	78	e.	.....	.....	2	.....	2	.....	calm	0	0	sm'h	.....	clear	
Richmond, N. 33° 46′, E. 141° 30′*	30.31	769.9	52	11.1	60	n.	.....	.....	3	.....	5	.....	w.	0.01	0.3	sm'h	sw.	fair	
Shenandoah, S. 20° 57′, W. 25° 25′*	30.22	767.6	80	26.7	70	ene.	.....	.....	3	.....	2	.....	ene.	.....	.....	long	ene.	fair	
St. Louis, League Island, Pa	30.51	774.9	32	0.0	100	calm	0	0	.....	.....	2	.....	.....	0	0	.....	.....	clear	
Swatara, Yokohama, Japan*	30.24	768.1	41	5.0	49	n.	.....	.....	3	.....	8	.....	wnw.	.....	.....	mod.	n.	fair	
Tennessee, Fort Monroe, Va	30.26	768.6	46	7 8	84	s.	5	2.2	.....	.....	10	.....	.....	0	0	sm'h	.....	hazy	
Vandalia, N. 23° 02′, W. 85° 26′*†	30.22	767.6	74	23.3	76	ese.	.....	.....	1	.....	2	.....	calm	.....	.....	.....	.....	clear	
Wabash, Boston, Mass	30.15	765.8	33	0.6	70	wsw.	4	1.8	.....	.....	5	.....	nw.	0	0	.....	.....	fair	
Wachusetts, Cardaenas Bay, B. C	28.55	725.2	35	1.7	90	sse.	.....	.....	3	.....	10	.....	calm	.....	.....	.....	.....	snowing	
Wyoming, Port Royal, S. C	30.19	766.8	51	10.6	100	ne.	10	4.5	.....	.....	10	.....	calm	0.01	0.3	.....	.....	misty	
Yantic, N. 17° 24′, W. 88° 11′*	30.03	762.7	75	23.9	90	e.	.....	.....	2	.....	2	.....	.....	.....	.....	sm'h	.....	clear	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 43° 56′, W. 54° 15′	30.51	774.9	32	0.0	.....	ssw.	2	.....	3	.....	s.	0	0	3	ne.	d. clouds	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 55° 25′, W. 21° 30′*	29.23	742.4	43	6.1	.....	nnw.	5	.....	3	.....	n.	0	0	r'gh	n.	fair	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, N. 44° 20′, W. 62° 53′*	30.04	763.0	31	—0.6	.....	wsw.	3	.....	8	.....	sw.	.....	.....	sm'h	.....	hazy	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Portland, Maine*	30.21	767.3	30	—1.1	.....	wnw.	2	.....	0	.....	.....	0	0	.....	.....	clear	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 39° 48′, W. 67° 26′*†	30.09	764.3	38	3.3	.....	sw.	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn.	30.12	765.0	32	0.0	89	w.	3	.....	2	.....	w.	.....	.....	.....	.....	clear	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 45′, 58° W. 34° 58′†	29.67	753.6	49	9.4	64	nw.	4	.....	5?	.....	nnw.	light	light	mod.	wnw.	cloudy?	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†	29.15	740.4	49	9.4	85	n.	5	.....	10	.....	n.	.....	.....	.....	.....	cloudy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Young.
S. S. Galatia, Capt. J. D. Allison N. 49° 15′, W. 6° 54′†	29.49	749.0	.....	.....	.....	w.	6	.....	4	.....	w.	2 h'r	2 h'r	mod.	w.	fine	John Daw, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Cartagena, U. S. C.*	30.00	762.0	78	25.6	.....	nne.	3	.....	5	.....	n.	0	0	.....	.....	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 25° 08′, W. 74° 12′*†	30.00	762.0	71	21.7	.....	e.	3	.....	8	.....	.....	½ h'r	light	mod.	e.	cloudy	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 27° 20′, W. 74° 45′	.....	.....	.....	.....	.....	nne.	1	.....	2?	.....	nne.	.....	.....	mod.	nne.	cloudy?	R. de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
F. W. Mickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. S. Auckland, Capt. A. McDougall, S. 25° 21′, W. 30° 13′	30.08	764.0	77	25.0	.....	nnw.	3	.....	4	.....	.....	.....	.....	.....	.....	blue sky	.....
Baroda, Capt. C. J. Russell, S. 34° 42′, W. 20° 18′	30.22	767.6	69.6	20.9	95	nne.	2	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Bk. Caldew, Capt. W. Peterson S. 25° 03′, W. 26° 40′	30.14	765.5	78.8	26.0	.....	n.	5	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Cipero, Capt. W. N. Lailey N. 34° 41′, W. 34° 34	30.01	762.2	66.8	19.3	94	ssw.	5	.....	10	.....	.....	.....	.....	4	sw.	drizzling	.....
S. City of Agra, Capt. Thos. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coppename, Capt. James Buchan N. 20° 44′, W. 57° 56′	30.21	767.3	74	23.3	81	ene.	4	.....	3	.....	.....	.....	.....	.....	.....	blue sky	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, N. 14° 55′, E. 89° 19′	29.93	760.2	80	26.7	78	ne.	2–3	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
S. S. Gordon Castle, Capt. W. Waring, N. 29° 33′, E. 32° 35′	30.27	768.8	63	17.2	61	nnw.	3	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Hermine, Capt. S. G. Jones,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hope, Capt. James Campbell,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery, N. 36° 20′, W. 71° 20′	30.28	769.1	59	15.0	81	wsw.	4	.....	10	.....	.....	.....	.....	.....	.....	drizzling	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 2° 40′, W. 21° 13′	30.00	762.0	81.8	27.7	87	se.	3	.....	6	.....	.....	.....	.....	.....	.....	drizzling	.....
May Hulse, Capt. H. Youlden, R. N. R., S. 35° 44′, W. 74° 24′	30.12	765.0	60.7	15.9	77	ssw.	2	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, Santos Brazil, S. A.	30.04	763.0	76.6	24.8	82	calm	0	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. J. Smith, N. 45° 43′, W. 24° 55′	29.78	756.4	52.5	11.4	86	wsw.	2	.....	10	.....	.....	.....	.....	.....	.....	overcast	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry. N. 1° 36′, E. 88° 22′	29.83	757.7	84.8	29.3	75	nnw.	4	.....	5	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. C. W. Pearson	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Hudson River, N.Y*†	30.35	770.9	.....	.....	.....	sw.	2	.....	0	.....	.....	0	0	.....	.....	clear	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York.																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 34° 10′, W. 75° 30′*†	30.35	770.9	56	13.3	.....	n.	.....	.....	10	.....	ne.	.....	.....	chop	ne.	cloudy	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Stembridge, 3d offi.
S. S. Gallia, Capt. W. H. P. Hains, N. 45° 49′, W. 38° 02′†	29.82	757.4	46	7.8	100	une.	6	.....	8	.....	n.	hail	hail	mod.	ne.	gloomy	J. H. Mills, 3d officer.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Bebian, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt Périer d'Hauterive,																	
S. S. St. Laurent, Capt. A. Sérvan,																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein, N. 49° 59′, W. 16° 20′*†	29.48	748.8	56	13.3		nnw.	4		2		w.	1 h'r	1 h'r	long	w.		
S. S. Silesia, Capt. A. Albers. N. 41° 31′, W. 62° 24′*†	30.28	769.1	36.5	2.5		wsw.	6		2		w.	0	0	3	w.	fair	
S. S. Wieland, Capt. C. Hebich,																	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch N. 43° 03′, W. 46° 33′	30.11	764.8				nnw.	6		8?		nw.	shr's	sh'rs		ne.	clear.?	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt. Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, N. 4° —′, W. 29° —′*†.	30.19	766.8	82	27.8		ene.	2		10?		ne.	2 h'r	2 h'r	long	nnw.	clear?	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, Galveston, Texas*†	30.00	762.0	65	18.3		sw.	1		10			0	0			foggy	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 42° 26′, W. 52° 02′*†	30.28	769.1	35	1.7	90	nnw.	5		10		n.	1 h'r	snow		n.	overcast	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, Matanzas, Cuba, W. I.*†	30.27	768.8	74	23.3			1		0			0	0			clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, [man							1		0								
S. S. City of Alexandria, Capt. L. F. Timmer-Vera Cruz, Mexico*† [nolds	30.10	764.5	74	23.3		s.	4								ne.	d. clouds	
S. S. City of Washington, Capt. J. W. Rey-N. 23° 03′, W. 83° 20′*†	30.25	768.3	80	26.7		e.	1							sm'h		clear	
S. S. Elbe, Capt. W. Willigerod N. 41° 40′, W. 59° 55′*	30.22	767.6	46.4	8.0		sw.	6							2	sw.	cloudy	
S. S. Lessing, Capt. B. Voss																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick, N. 34° 40′ W. 76° 55′½†.	30.30	769.6	52	11.1		nne.	3							sm'h		rainy	
S. S. Olbers, Capt. J. Clarke																	
S. S. P. Caland, Capt. E. Deddes,																	
S. S. Schiedam. Capt. E. M. Chevalier, N. 40° 15′, W. 57° 40′	30.19	766.8	49	9.4		se.	2							sm'h		clear	
S. S. Scythia, Capt. M. Murphy N. 51° 06′, W. 13° 30′			49	9.4		w.	4							high	e.	cloudy	
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oetrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur, N. 49° 30′, W. 13° 34′*†	29.58	751.3	52.7	11.5		wnw.	6		8		w.	0	0	h'vy	wnw.		E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 11° 00′, W. 26° 00′*	30.06	763.5	83.8	28.8		ene.	4		0			0	0	mod.	ene.	clear	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer, N. 49° 09′, W. 11° 37′	29.47	748.5	52	11.1	72	w.	7		2		wnw.	8 h'r	light	h'vy	wsw.	clear	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 46° 26′, W. 39° 15′*	29.86	758.4	42.8	6.0		nne.	3-4		6		ne.	0	0	high	ne;w	cloudy	
S. S. Mosel, Capt. F. Hesse, N. 49° 28′, W. 14° 52′	29.52	749.8	53.4	11.9		wnw.	6		5		w.	1½h'r	1¼h'r	high r'gh	wnw.	fair	J. Hesse.
S. S. Neckar, Capt. R. Bussius,																	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	
S. S. Oder, Capt. C. Undeutsch, N. 52° 16′, E. 2° 54′*	29.15	740.4	54.5	12.5		ssw.	4		5		sw.	0	0	mod.	ssw.	fair	Montz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, N. 39° 24′, W. 63° 21′	30.33	770.4				ssw.	3		0			0	0	mod.	nw.	clear	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch, N. 42° 23′, W. 59° 34′*	30.29	769.4	46.0	7.8	85	sw.	3		7		sw.	0	0	sm'h	w.	fair	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, Hong Kong, China†	30.14	765.5	62	16.7	88	ene.	5		2			0	0	sm'h		clear	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 36° 42′, W. 163° 21′†*	30.24	768.1	62	16.7	61	wnw.	6		8		w.			mod.	nw.	hazy	
S. S. Oceanic, Capt. J. Metcalfe, N. 42° 33′, W. 136° 30′*	29.62	752.3	51	10.6	93	wsw.	6		9		sw.			6	wsw.	cloudy	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, N. 33° 17′, W. 78° 00′*†	29.94	760.5				n.	1		10		nw.			long	e.	rainy	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Boston, Mass†	30.12	765.0	40	4.4		w.	3		2		w.	0	0			clear	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter†	29.52	749.8	38	3.3	80	ssw.	4	.....	10	.....	sw.	.....	.....	.....	.....	heavy rain..	E W. Holmes.
S. S. Willamette, Capt. L. Meyer, N. 43° 28′, W. 124° 38′*†	29.93	760.2	47	8.3	92	sse.	6	.....	7	.....	s.	½ h'r	½ h'r	cross	s; w.	raining	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. F. Bolles,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 43° 03′, W. 124° 33′†	29.93	760.2	43	6.1	75	s.	9	.....	10	.....	.....	.....	.....	r'gh	s.	misty.....	G. Boese.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls, N. 34° 22′, W. 120° 12′†	30.13	765.3	48	8.9	71	nnw.	3	.....	0	.....	.....	.....	.....	sm'h	.....	clear.....	.....
S. S. G. W. Elder, Capt. H. G. Morse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Idaho, Capt. H. M. Hayward, Seattle, Wash. Ter†	29.45	748.0	46	7.8	69	se.	7	.....	10	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harisson & McCallum.
S. S. Senator. Capt. Thos. Wallace, San Francisco, Cal†	30.31	769.9	49	9.4	85	s.	1	.....	10	.....	se.	.....	.....	.....	.....	light rain.....	.....
S. S. State of California, Capt. G. Debney, Portland, Oregon†	29.71	754.6	37	2.8	100	sse.	5	.....	10	.....	s.	12 h'r	12 h'r	.....	.....	.....	.....
S. S. Victoria, Capt. W. E. Plummer, N. 47° 17′, W. 124° 52′†	29.47	748.5	48	8.9	85	ssw.	7	.....	10	.....	.....	.....	.....	very hv'y	ssw.	raining	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bulley, Supt., New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 8° 12′, W. 163° 54′	29.95	760.7	77	25.0	100	ene.	5	.....	10	.....	ene.	8 h'r	light	long	ene.	drizzling	.....
S. S. City of New York, Capt. W. B. Cobb,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly, N. 16° 48′, W. 99° 54′†	30.26	768.6	80	26.7	95	se.	2	.....	2	.....	se.	0	0	sm'h	.....	fine.....	J. M. Dow, 3d officer.
S. S. City of Sidney, Capt. H. C. Dearborn, Sydney, N. S. W†	29.99	761.7	81	27.2	58	nne.	6	.....	5	.....	ne.	0	0	sm'h	.....	fair.....	E. Le Salk.
S. S. City of Tokio, Com. J. Maury, Hong Kong, China†	30.18	766.6	62	16.7	77	e.	3	.....	8	.....	e.	0	0	.....	.....	cloudy.....	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, Panama, Panama†	29.96	761.0	73	22.8	90	nne.	2	.....	2	.....	n.	0	0	.....	.....	clear.....	.....
S. S. Grenada. Capt. M. Connolley, N. 23° 10′, W. 107° 45′†	29.97	761.2	68	20.0	100	wnw.	4	.....	2	.....	n.	0	0	mod.	wnw.	hazy.....	.....
S. S. South Carolina, Capt. W. J. Russell, La Libertad, San Salvador†	30.07	763.8	78	25.6	78	n.	1	.....	0	.....	.....	0	0	light	sw.	fine.....	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, S. 34° 59′, E. 173° 58′	30.10	764.5	75	23.9	81	e.	4	.....	10	.....	e.	.....	.....	r'gh	e.	foggy	.....
QUEBEC S. S. CO *A. E. Outerbridge & Co., Agents, New York.*																	
S. S. Bermuda, Capt. F. M. Faircloth St. John's, W. I.†	30.20	767.1	80	26.7	.....	e.	2	.....	5	.....	e.	4 h'r	4 h'r	sm'h	.....	rainy.....	F. M. Faircloth.
S. S. Muriel. Capt. Geo. S. Locke, Barbadoes, W. I	.....	.....	.....	.....	.....	ene.	2	.....	0	.....	.....	0	0	sm'h	.....	fair.....	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes Portland, England*†	29.22	742.2	49	9.4	.....	sw.	4	.....	1	.....	sw.	0	0	mod.	sw.	fair	.....
S. S. Nederland, Capt J. Ueberweg, N. 43° 23′, W. 49° 02′*†	30.83	783.1	34	1.1	.....	nnw.	3	.....	2	.....	wnw.	0	0	cross	n.	fair.....	Atbrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	29.33	745.0	52	11.1	86	ssw.	5	.....	10	.....	ssw.	0.3	8.	.....	.....	cloudy..	C. H. Grant, 2d off.
S. S. Switzerland, Capt. J. O. Jamison, N. 39° 53′, W. 68° 06′†	30.23	767.8	.....	.....	.....	sw.	2	.....	0	.....	.....	0	0	light	ene.	clear.....	.....
S. S. Vaderland, Capt. W. A Beynon, N. 48° 40′, W. 25° 52′*†	29.56	750.8	48	8.9	.....	w.	4	.....	8	.....	sw.	0	0	long high	nne.	cloudy.....	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels. Jersey City, N. J *	30.07	763.8	37	2.8	.....	sw.	4	.....	2	.....	sw.	0	0	.....	.....	clear	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis. N. 49° 10′, W. 14° 24′*	29.39	746.5	60.0	15.6	76	wnw.	6	.....	6	.....	w.	0	0	high	w.	.....	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Brooklyn, N. Y.†	30.20	767.1	40.1	4.5	.....	sw.	1	.....	2	.....	sw.	0	0	.....	.....	clear.....	J. T. Etberling
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agent, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 41° 14′, W. 60° 07′*†	30.07	763.8	45	7.2	.....	ssw.	4	.....	5	.....	sw.	0	0	sm'h	.....	d. clouds.....	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell Mersey River, Eng*†	29.00	736.6	42	5.6	.....	e.	3	.....	10	.....	se.	shr's	sh'rs	.....	.....	misty.....	B. Gleadell
S. S. Germanic. Capt. C. W. Kennedy. N. 49° 04′, W. 31° 22′*†	29.86	758.4	48	8.9	.....	nw.	4	.....	2	.....	nnw.	sh'rs	shr's	long	nw.	d. clouds.....	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, New York, N. Y*	30.26	768.6	35	1.7	.....	sw.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.

MERCHANT-MARINE SERIES.—Continued.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Cedar Keys, Florida†	30.24	768.1	58	14.4	87	ene.	3	.....	10 s	.....	.....	0	0	.....	.....	cloudy	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 19° 00′, W. 38° 28′*†	30.27	768.8	73	22.8	.....	ene.	3	.....	1	.....	ene.	0	0	short r'gh	ese.	clear	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 19° 40′, W. 60° 48′.*†	30.16	766.1	76	24.4	.....	ne.	5	.....	3	.....	ne.	0	0	cross	nw.	fair	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 43° 14′, W. 35° 00′*†	29.67	753.6	55	12.8	80	n.	5	.....	8	.....	nne.	3 h'r	h'vy	long	nnw.	rainy	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. N. 27° 33′, W. 70° 38′*†	30.28	769.1	70	21.1	.....	ne.	2	.....	10	.....	.....	rain	rain	mod.	ne.	hazy	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, S. 18° 10′ W. 36° 56′*†	30.00	762.0	84	28.9	.....	ne.	3	.....	1	.....	ne.	0	0	sm'h	se.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen, N. 30° 00′, W. 68° 30′†..	30.37	771.4	.....	.....	.....	e.	3	.....	.....	.....	se.	0	0	mod.	ne.	overcast	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia., N. 34° 18′, W. 57° 04′*†	30.37	771.4	.....	.....	.....	n.	2	.....	4	.....	n.	0	0	r'gh	n nnw.	fair	G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 39° 44′, W. 62° 10′*†.	30.14	765.5	.....	.....	.....	w.	1	.....	.....	.....	w.	0	0	mod.	nne.	cloudy	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill. S. 57° 31′ W. 73° 06′†	29.50	749.3	.....	.....	.....	ese.	4	.....	10	.....	se.	0	0	cross	s.	overcast	A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	29.09	738.9	.....	.....	.....	sw.	6	.....	10	.....	sw.	sh'rs	sh'rs	.....	.....	sprinkling	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Andersen, Jr.
U. S. F. C. S. Fish Hawk, Lt. Tanner, U.S.N., N. 38° 02′, W. 76° 19′†.	30.35	770.9	44	6.7	84	sse.	1	.....	3	.....	calm	0	0	.....	.....	fair	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. D. Morrison.
Bk. Freya, Capt. J. R. Blauow, N. 20° 19′, W. 54° 50′	.....	.....	74	23.3	.....	ne.	3	.....	10	.....	ne.	4 h'r	4 h'r	mod.	nw.	squally	.....
Bk. Gamaliel, Capt. D. J. Anthony	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bk. Geo. Booth, Capt. D. Williams, S. 18° 50′, W. 32° 24′*†	29.90	759.4	84	28.9	.....	e.	3	.....	.....	.....	.....	shr's	shr's	.....	.....	.....	D. Williams.
Bk. Granville, Capt. R. Bonney, N. 16° 48′, W. 36° 20′*†	30.40	772.1	75	23.9	.....	ene.	3	.....	.....	.....	.....	0	0	mod.	e.	clear	.....
Schr Henry Denison, Capt. Jno. Fehring, N. 28° 00′, W. 65° 46′†	30.30	769.6	.....	.....	.....	ne.	4	.....	3	.....	ene.	shr's	sh'rs	mod.	ne.	fair	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt, S. 35° 20′, E. 77° 09′*	29.94	760.5	.....	.....	.....	ese.	2	.....	5	.....	sse.	sh'rs	sh'rs	long	ssw.	threatening.	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann, N. 38° 16′, W. 61° 36′*†	30.18	766.6	.....	.....	.....	n.	6	.....	8	.....	nnw.	4 h'r	h'vy	mod.	nnw.	clearing	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith,. N. 34° 26′, W. 62° 26′*†	30.38	771.6	.....	.....	.....	calm	0	.....	2	.....	n.	0	0	mod.	ne.	fine	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 17° 33′ W. 44° 51′*†	30.50	774.7	74	23.3	90	e.	4	.....	2	.....	e.	.....	.....	h'vy	n;e	fine	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, N. 43°, 35′ E. 15° 22′†	29.75	755.6	57	13.9	87	se.	7	.....	10	.....	sw.	.....	.....	r'gh	sse.	drizzling	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 39° 10′. W. 6° 12′*†	30.30	769.6	.....	.....	.....	nw.	.....	.....	5?	.....	nw.	0	0	.....	.....	cloudy?	J. Connolly.
Schr. S. B. Hubbard, N. 32° 19′ W. 79° 26′*†	30.25	768.3	62	16.7	.....	nne.	1	.....	6	.....	ne.	½ h'r	½ h'r	long	ne.	clearing	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 37° 12′, W. 49° 19′*	29.83	757.7	72.1	22.3	93	nw.	4	.....	4	.....	nw.	.....	.....	.....	.....	squally	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 21° 26′. W. 45° 57′*†	30.26	768.6	78	25.6	86	e.	4	.....	5	.....	e.	0	0	mod.	e.	fair	J. Green.
Bg. Wauburn, Capt. I. W. Covert,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Wm. Woodbury Capt. H. T. Schmidt, N. 53° 51′, E. 6° 20′*†	28.88	733.5	50	10.0	93	sw.	6	.....	.....	.....	w.	.....	.....	cross	sw.	cloudy	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton,. S. 23° 34′, W. 42° 05′*†	30.00	762.0	.....	.....	.....	var.	.....	.....	.....	.....	var.	.....	.....	mod.	.....	.....	N. P. Dutton.

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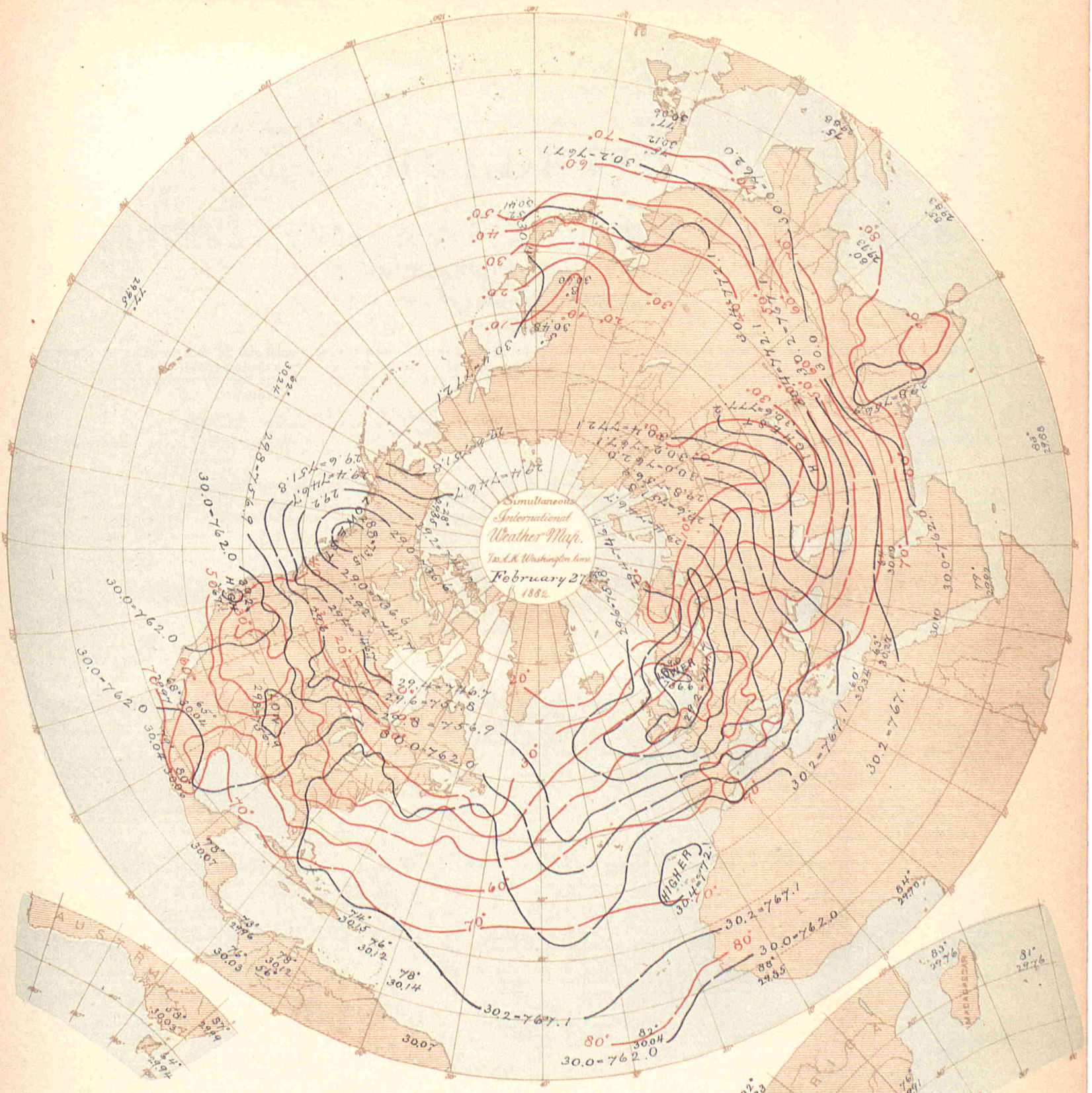
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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Heliotype Printing Co Boston.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON FEBRUARY 28, 1882,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

STATIONS	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
ALGERIAN SERIES.—Furnished by co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.24	768.1	72.3	22.4	81	ne.			4		2			0	0	fair.	Moiroud.
Algiers			30.11	764.9	65.8	18.8	56	w.			2		0			0	0	clear.	Nicolas.
La Calle			30.09	764.3	63.7	17.6	66	wnw.			3		5			0	0	cloudy	Fonfrède.
Tunis			30.04	763.1															Jacques.
Sfax																			Gan.
Saida			30.33	770.3	63.0	17.2	57	w.			6		2			0	0	fair.	Dumas.
Tebessa			30.19	766.9	62.2	16.8	39	nw.			5		5			0	0	cloudy	Derché.
Geriville					60.4	15.8	32	wnw.			2		9			0	0	covered.	Lonchamp.
Laghouat			30.30	769.5	68.0	20.0	32	w.			1		1			0	0	very fair.	Herbin.
Biskra			30.21	767.2	77.4	25.2	35	nnw.			6		3			0	0	pretty fair.	Mahau.
AUSTRALIAN SERIES.—Furnished by co-operation of R. L. J. Ellery, Director of the Observatory at Melbourne, N. S. W., and respective observers.																			
Melbourne, Victoria	29.99	761.7	30.08	764.0	63.6	17.6	84	ssw.	4	1.8			10			0	0	dull.	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES.—Furnished by co-operation of Prof. Dr. Julius Hann, Dir. of the Imp. and Royal Central Met. Institute at Vienna.																			
Agram	29.13	740.0	29.68	753.8	56.5	13.6	50	w.			5		4			0	0		Prof. Ivan Stozir.
Cracow, I. R Observatory	28.82	732.0	29.59	751.6	45.3	7.4	89	w.	7.4	3 3			10			0.075	1.9		Dr. Wierzbiski.
Eperies	28.05	727.7	29.53	750.1	43.9	6.6	94	calm			0		10			0.217	5.5		Julius Mikolik.
Gratz	28.43	722.1	29.67	753.7	50.5	10.3	74	w.			2		2			0.382	9.7		Andreas Rospini.
Hermannstadt	28.15	714.9	29.55	750.6	56.3	13.5	51	w.			2		10			0.028	0.7		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.39	721.0	29.74	755.5	42.8	6.0	88	wsw.			2		10			0.154	3.9	rainy	The Staff.
Lemberg	28.54	724.9	29.52	749.9	47.3	8.5	83	sw.			1		10			0.311	7.9		Dr. T. Stanecki.
Pola	29.65	753.2	29.77	756.1	52.5	11.4	78	wnw.			1		8			0.252	6.4		I. R. Hydrographic Office.
Szathmar	29.06	738.1	29.52	749.7	50.5	10.3	79	e.			1		10			0	0		Joseph Midlinszky, S. J.
Szegedin	29.29	744.0	29.58	751.2	48.4	9.1	98	sw.			3		10			0	0		Karl Stancel.
Trieste	29.68	753.8	29.78	756.4	50.4	10.2	73	calm			0		8			0	0		Rieder.
Vienna	28.95	735.4	29.67	753.6	48.9	9.4	70	w.			3		10			0.130	3.3		I. R. Central Met. Obs'y.
BRITISH SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and respective observers.																			
Aberdeen	29.50	749.3	29.60	751.8	38.2	3.4	49	se.	14	6.3			6			0.080	2.0	d. clouds	W. Boswell.
Armagh, Observatory	29.09	738.9	29.33	745.0	47.0	8.3	78	sse.	12	5.4			7					d. clouds	S. Oall.
Bidston, Liverpool Obs'y			29.44	747.8	43.0	6.1	83	ese.	21	9.4			10					overcast	John Hartnup.
Bolton, Sharples	28.94	735.1	29.48	748.8	39.5	4.2	81	ese.	7	3.1			10					overcast	Thomas Mackereth [A.S.
Bradford, Yorkshire	29.04	737.6	29.44	747.8	41.7	5.4	81	se.			2		10			0.74	18.8	raining.	J. McLandsborough, F. R.
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	82.0	27.8	63	ne.			2		3					d. clouds	Corpl. J. Surgenor, A.H.C.
Cardington			29.51	749.5	44.4	6.9	88	se.			1.0		9					overcast	John McLaren.
Chatham, School M. E.	29.45	748.0	29.58	751.3	40.1	7.8	88	se.			1		9			blank	blank	misty	Lance Cpl. G.A. Pickles.
Falmouth, Observatory	29.13	739.9	29.36	745.7	48.0	8.9	94	se.			6		10					rain & fog	The Staff.
Fort Napier, Natal	27.54	699.5	29.76	755.9	84.2	29.0	24	ne.			2		3					blue sky	Pvt. E. K Anniss, A. H.C.
Free Town, Sierra Leone	29.57	751.1	29.80	756.9	89.0	31.7	66	w.			1		3					d. clouds	Sergt. John Robinson.
Galway, Queen's College			29.09	738.9				s.			2		10			0.52	13.2	overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.26	768.6	30.31	769.9	65.5	18.6	77	wsw.			4		5					d. clouds	Opl. O. Baldwin.
Glasgow, Observatory	29.28	743.7	29.48	748.8	33.7	0.9	84	e.			4		10					overcast	Harry Urquhart, Asst.
Greenwich, Royal Obs'y	29.39	746.5	29.50	750.8	47.4	8.6	89	se.			1		9					drizzling	The Staff.
Guernsey	29.19	741.4	29.49	749.0	46.0	7.8	100	se.			2		10					raining	A. Collenette, F. M. S.
Kew, Observatory	29.52	749.8	29.55	750.6	47.9	8.8	75	ene.	11	4.9			9					misty	The Staff.
Leicester, Museum	29.25	742.9	29.51	749.5	42.0	5.6	90	se.			1		10					overcast	J. C. Smith.
Malta, Mediterranean	29.90	759.4	29.97	761.2	64.6	18.1	76	sw.			3		2					blue sky	Corpl. A. King, A. H. C.
Nassau, Bahamas	30.12	765.0	30.17	766.3	71.5	21.9	80	se.			1		4					d. clouds	U. S. Duncombe.
Oscott, St. Mary's College	28.98	736.1	29.50	749.3	41.9	5.5	92	ese.			2		10					overcast	John Mac Email.
Oxford, Radcliffe Obs'y	29.29	744.0	29.52	749.8	48.8	9.3	70	sse			3		8					d. clouds	The Staff.
Plymouth	29.34	745.2	29.42	747.3	49.0	9.4	92	se.			2		10					drizzling	John Merrifield.
Sandwick Manse, Orkneys			29.60	751.8	35.5	1.9	70	e.	23	10.3			10					misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.77	756.1	29.83	757.7	51.0	10.6	62	sw.			3		10					raining	W. H. Lyne.
Sheffield	29.22	742.2	29.50	749.3	40.6	4.8	86	sse.			1		10			0.45	11.4	overcast	W. F. Cooper.
Silloth Rectory	29.42	747.3	29.45	748.0	38.0	3.3	83	ene.			4		10			0.070	1.8	overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.51	749.5	40.0	4.4	73	ese.	11	4.9			10					overcast	I. New.
Stratfield Turgiss	29.34	745.2	29.56	750.8	49.7	9.8	73	s.			2		10					overcast	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.04	737.6	29.09	738.9	50	10.0	93	se.			7		10					raining	W. Newcombe.
Valencia, Observatory	29.06	738.1	29.08	738.6	48.4	9.1	81	e.	25	11.2			10					misty	The Met'g'l Office.
CAPE COLONY SERIES.—Furnished by co-operation of the Meteorological Commission of Cape Colony, Cape Town, and respective observers.																			
Cape St. Francis Lt. House	29.86	758.4	29.89	759.2	69.0	20.6	94	e.	5.0	2.2		0	8 k			0.040	1.0	hazy	John Duthie.
Cape Town, C. G. H. Obs'y.					82.5	28.1	54	s.	23	10.3						0	0		The Staff, for D. Gill.
Worcester*†																			C. Stokes.

Entered at the Post Office at Washington, D. C., as Second-Class Matter.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
CANADIAN SERIES.—Furnished by co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and respective observers.																			
Bathurst, N. B.					15.0	— 9.4		calm	0	0		0	0			0	0	clear	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.37	771.4	30.42	772.7	20	— 6.7	95	nw.	6	2.7		0	0			0.025	0.6	clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.42	772.7	30.48	774.2	6	—14.4	100	nw.	1	0.4		0	0			0.03	0.3	clear	G. A. Blair.
Cornwall, Ontario	30.04	763.0	30.24	768.1	21.4	— 5.9	94	e.			1	0	0			0	0	clear	James Smith, M. A.
Dalhousie, N. B.	30.30	769.6	30.48	774.2	15.0	— 9.4		w.			1	0	0			0.050	1.3	clear	H. A. Johnson.
Father Point, Quebec*	30.39	771.9	30.41	772.4	16	— 8.9	91	sw.	3	1.3		2 cs	0	calm		0	0	clear	J. McWilliams.
Fort Garry, Manitoba*	28.47	723.1	29.31	774.5	27	— 2.8	96	sw.	5	2.2		0	0			0	0	clear	James Stewart.
Fredericton, N. B.	30.44	773.2	30.51	774.9	11.1	—11.6	100	nw.	2	0.9		0	0			0	0	clear	Prof. Harrison.
Granton, Ontario	28.84	732.5	29.97	761.2	36.0	2.2	100	se.	5	2.2			10 n			0	0	gloomy	James Grant.
Halifax, N. S.*	30.30	769.6	30.43	772.9	21	— 6.1	96	nw.	7	3.1		0	0			0.17	4.3	clear	A. Allison.
Hamilton, Ontario	29.60	751.8	30.01	762.2	34.7	1.5	95	e.			1	0	fg			0	0	dense mist	Geo. Dickson, B. A.
Kingston, Ontario*	29.83	757.7	30.18	766.6	31	— 0.6	88	ne.	3	1.3		10 ck	0	w.		0	0	hazy	A. P. Knight, M. A.
Little Glace Bay, N. S.	30.30	769.6	30.34	770.6	22.0	— 5.6	93	w.			3		10 n			0	0	cloudy	C. H. Rigby.
Montreal, Quebec*	30.11	764.8	30.33	770.4	16	— 8.9	91	e.	10	4.5		0	0			0	0	clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nixon.
Parry Sound, Ontario*	29.25	742.9	29.97	761.2	36	2.2	75	e.	24	10.7		2 k	5 ks	sw.	sw.	0	0	fair	Rev. R. Mosley.
Peterboro, Ontario	29.36	745.7	30.14	765.5	36.7	2.6	61	calm			0	0	0			0	0	clear	J. Dixon, B. A.
Port Dover, Ontario	29.30	744.2	30.02	762.5	37	2.8	90	se.	3	1.3		10 c	0	n.		0	0	fair	H. Morgan.
Port Stanley, Ontario	29.31	744.5	29.98	761.5	37	2.8	79	e.	22	9.8		0	8 k		e.	0	0	cloudy	M. Payne.
Quebec, Quebec*	30.07	763.8	30.42	772.7	19	— 7.2	91	ne.			1	0	hz			0	0	clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.65	753.1	30.13	765.3	29	— 1.7	88	se.	8	3.6		2 c	0	sw.		0	0		W. H. McIntyre.
Saugeen, Ontario*	29.17	740.9	29.89	759.2	39	3.9	65	se.	28	12.5		0	0			0	0	clear	
St. Andrews, N. B.	30.40	772.1	30.45	773.4	25	— 3.9	88	ne.	4	1.8		0	0			0.01	0.3	clear	
St. John, N. B.	30.35	770.9	30.53	775.4	26.0	— 3.3	100	ne.	6	2.7		0	0			0.100	2.5	clear	G. Murdock, C. E.
St. Pierre, N. F.			30.08	764.0	26.6	— 3.0		ne.			4					0	0		N. F. Land, Com't.
Stratford, Ontario	28.64	727.4	29.96	761.0	34.4	1.3	84	se.	7	3.1			10 s			0	0	cloudy	C. I. Macgregor, M. A.
Sydney, C. B.*	30.23	767.8	30.29	769.4	20	— 6.7	87	n.	8	3.6		0	0			0.03	0.8	clear	T. C. Hill, C. E.
Toronto, Ontario*	29.67	753.6	30.06	763.5	35	1.7	92	ne.	6	2.7		5 cs	0	w.		0	0	fair	Magnetic Observatory.
Windsor, N. S.	30.33	770.4	30.43	772.9	23.0	— 5.0	86	w.	4	1.8		0	1 s			0.10	2.5	clear	Prof. W. R. Butler.
Woodstock, Ontario	28.91	734.3	30.01	762.2	33.5	0.8	80	e.	10	4.5		4 c	5 ks	e.		0	0	cloudy	Prof. Wolverton.
Yarmouth, N. S.*	30.40	772.1	30.47	773.9	29	— 1.7	80	ne.	1	0.4		0	sk			0	0	smoky	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.99	761.7	30.25	768.3	29	— 1.7		e.	1	0.4			10					snowing	John Delany.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CHINESE SERIES.—Furnished by co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Hankow																			N. Titoushkin.
Sung-shu-chwang†	24.79	629.7			32.2	0.1	81	calm			0		10			1.26	32.		A. Gueluy.
Zi-Ka-Wei, near Shanghai	30.39	771.9	30.41	772.5	44.6	7.0	97	ne.	5.4	2.4			10 n			0.13	3.3	raining	M. Marc Dechevrens.
DANISH SERIES.—Furnished by co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.56	750.9	29.61	752.1	30.4	— 0.9	67	n.	16.8	7.5			10						Oversergent Fischer.
Fanöe	29.67	753.6	29.69	754.1	31.8	— 0.1	78	ne.			4		5						Overloerer Lauridsen.
Godthaab, Greenland	29.81	757.1	29.85	758.2	11.1	—11.6		s.			3		10					snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.43	747.4	29.47	748.5	21.9	— 5.6		se.			2		10					snowing	A. O. Thorlacius.
Thorshavn	29.67	753.5	29.70	754.4	37.8	3.2	53	ese.	9	4			3						Overloerer Bergh.
Vestervig	29.61	752.0	29.70	754.3	30.2	— 1.0	74	nne.			4		8						Loerer Oesterbol.
FRENCH SERIES.—Furnished by co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and respective observers.																			
Agen, Normal School	29.23	742.4	29.87	758.8	57.2	14	80	calm			0		kn		w.	0.264	6.7		M. Labroue, Director.
Alençon, Normal School	29.15	740.4	29.70	754.4	47.3	8.5	94	s.			4		n	n.	n.	0.12	3.		M. Nicot, Director.
Arras, Engineer School	29.37	746.0	29.63	752.6	49.6	9.8	76	(?)			4		10 n		nw.	0.138	3.5	covered	M. Klein, Commandant.
Avignon, Normal School	29.80	757.0	29.88	759.0	59.7	15.4	48	nnw.			1		2		nw.	0	0	slightly cl'dy	M. Girnud, Director.
Bar-sur-Seine	29.24	742.8	29.80	756.9	50.0	10.0	72	s.			1		8			0.189	4.8	very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.47	748.5	29.73	755.2	53.8	12.1	57	ssw.			2		8		sw.	0.228	5.8	very cloudy	M. Frère Eugène Marl.
Besançon, Normal School			29.84	757.9	51.8	11	86	ssw.			1		10 n		s.	0.138	3.5	raining	M. Gobin, Director.
Bordeaux, Observatory	29.50	749.2	29.76	755.8	56.7	13.7	60	s.			2		10			0.350	8.9	covered	M. Rayet, Director.
Bourges, Normal School	29.23	742.4	29.78	756.3	53.8	12.1	67	sw.			2		n		sw.	0.16	4.		M. Postel, Director.
Brest, Naval Observatory	29.19	741.4	29.43	747.6	48.2	9.0	97	s.			4		10		s.	0.177	4.5	raining	M. de Kennaree, Dir.
Caen, Normal School	29.55	750.6	29.63	752.5	51.1	10.6	82	e.			2		10			0	0	covered	M. Berson, Director.
Châlons-sur-Marne, N.Sch'l	29.34	745.1	29.66	753.4	49.3	9.6	79	s.			2		5	sw.	w.	0.169	4.3	cloudy	M. Jadot, Director.
Charleville, Normal School	29.23	742.5	29.74	755.5	47.5	8.6	76	ssw.			1		10			0.20	5.	covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.47	723.2	29.82	757.4	54.3	12.4	63	se.			1		10			0.886	22.5	covered	M. Alluard, Director.
Cluny, Normal School	29.08	738.7	29.91	759.7	50.9	10.5	62	s.			2		10		sw.	0.571	14.5	rainy	M. de Villemontée, Dir.
Commercy, Normal School.	28.91	734.2	29.77	756.2	48.4	9.1	81	wnw.			1		5 n	wnw.	wnw.	0.138	3.5	cloudy	Dr. Coulet, Director.
Gap, Normal School	27.31	693.7	29.85	758.3	49.5	9.7	58	n.			4	3 ck	0	n.		0.39	10.		M. Jeangirard, Director.
Gréasque, du. Rhone	28.74	729.9	29.86	758.4	54.9	12.7	45	nw.			3		2		nw.	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.12	739.6	29.89	759.1	52.2	11.2	71	sse.			1		kn		nw.	0.677	17.2		M. Ablard, Director.
Guéret, Normal School	28.22	716.7	29.79	756.6	48.0	8.9	61	sw.			3		n		sw.	1.055	26.8		M. Rivoire, Director.
Lamballe, Normal School	29.26	743.1	29.52	749.9	49.1	9.5	93	s.			6		10		s.	0.20	5.	raining	M. Ollitrault, Director.
Lescar, Normal School	29.30	744.1	29.85	758.3	61.2	16.2	49	w.			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.36	745.7	29.46	748.3	50.0	10.0	92	s.			9		10			0.051	1.3	covered	Lt. T. Carré, Director.
Lyon, St. Genis-Laval	28.82	732.1	29.88	758.9	54.0	12.2	64	sse.			1	c	5 k	nw.		0.047	1.2	cloudy	M. André, Director.
Mans, Normal School	29.41	747.0	29.72	754.8	49.1	9.5	91	nw.			1		10		s.	0.083	2.1	covered	M. Piboen, Director.
Marseille, Observatory	29.62	752.4	29.89	759.2	59.2	15.1	46	wnw.			2		1		nw.	0	0		M. Stephan, Director.
Montlouis l'Institutteur	24.69	627.0	29.53	750.0	45.0	7.2	41	wsw.	13.0	5.8			6		s	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.76	756.0	29.89	759.3	62.1	16.7	73	nw.			2		2			0	0	slightly cl'dy	M. Galzin, Director.
Nancy, Normal School	28.97	735.9	29.76	755.8	48.9	9.4	71	sw.			2		10 kn		sw.	0.138	3.5	covered	M. Hasse, Director
Nantes, Observatory	29.54	750.2	29.70	754.3	52.0	11.1	86	s.			2-3		10		s.	0.331	8.4	raining	M. Larocque, Director.
Nice																			Capt. Boissière, Director.
Perpignan, Observatory	29.82	757.3	29.93	760.1	61.5	16.4	50	se.	11.2	5.0			1		nw.	0.024	0.6	clear	Dr. Fines, Director.
Pic-du-Midi, Summit	21.09	535.8			29.3	— 1.5		w.			3		10		w.	0.646	16.4	cloudy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.84	732.5	29.91	759.7	55.8	13.2	64	nw.			1		5 k	s.	s.	0	0	cloudy	M. Tailleu.
Puy de Dôme Obs'y, Summit	24.91	632.8			32.0	0.0	100	wsw.			4		10			0.657	16.7	foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.71	754.7	29.74	755.5	51.3	10.7	93	s.			1		10			0.260	6.6	raining	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.47	748.5	29.69	754.1	49.3	9.6	89	s.			1		10			0.16	4.	raining	M. Mouliot, Director.
Rodez, Normal School	27.71	703.7	29.85	758.3	48.9	9.4	81	nw.			1		5		ne.	0.47	12.	cloudy	M. Serger, Director.
Rouen, Normal School	29.62	752.4	29.67	753.6	53.6	12	65	s.			1		10			0	0	covered	M. Platrier, Director.
Saint Lô, Normal School	29.47	748.4	29.62	752.4	50.2	10.1	79	s.			1		5		ssw.	0.031	0.8	cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.56	750.7	29.72	754.9	51.3	10.7	67	ssw.			2		10		sw.	0.087	2.2	covered	M. Renou, Director.
Toulouse, Observatory	29.23	742.4	29.95	760.7	57.9	14.4	73	se.			1		8		nw.	0.185	4.7	very cloudy	M. Baillaud, Director.
Tours																			M. de Tastes.
Versailles, Observatory	29.22	742.2	29.71	754.7	50.7	10.4	70	sw.			2					0.394	10.0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.43	747.6	29.72	755.0	51.4	10.8	67	ssw.			3		10		sw.	0.110	2.8	covered	M. Marié Davy, Director

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers
GERMAN SERIES.—Furnished by co-operation of Prof. Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.85	732.8	29.70	754.3	48.2	9.0	73	nw.			3	0	8 k		w.	0.055	1.4	raining	Prof. Dr. Hoh.
Berlin	29.42	747.2	29.60	751.7	42.4	5.8	58	n.			2		10			0.012	0.3		Prof. Dr. Arndt.
Breslau	29.06	738.2	29.59	751.5	50.9	10.5	59	w.			3		8			0	0		Royal University Obs'y.
Carlsruhe	29.30	744.2	29.73	755.2	50.9	10.5	74	sw.			2		10		sw.	0.071	1.8	raining	Albert Senz.
Cassel	28.86	733.0	29.57	751.1	47.1	8.4	90	ssw.			2	0	7 n		sw.	0.075	1.9		Dr. H. Möhl.
Frankfort on the Main	29.29	744.0	29.65	753.2	49.1	9.5	84	sw.			1		10			0.114	2.9		Physical Society.
Friedrichshafen	28.38	720.8	29.82	757.5	46.8	8.2	78	wsw.			6		10	w.		0.209	5.3		Wilhelm, Chief Tel.
Hamburg	29.56	750.7	29.65	753.1	39.6	4.2	58	nnw.			1		8	nnw.		0.091	2.3		E. Preller.
Kiel	29.62	752.4	29.64	752.8	35.8	2.1	68	ne.			2		7			0.276	7.0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.21	741.8	29.63	752.6	42.8	6.0	90	nw.			2		10			0.024	0.6		H. Leppig, Asst.
Magdeburg	29.44	747.7	29.63	752.6	40.8	4.9	79	n.			1		10 ks		nw.	0.020	0.5		Dr. Assmann.
Memel	29.34	745.2	29.38	746.3	40.1	4.5	92	sw.			4	0	8 s					smoky	Iesermann.
Munich	27.94	709.6	29.78	756.5	47.3	8.5	75	nw.			3		4	sw.		0	0		Central Station.
Neufahrwasser	29.48	748.9	29.50	749.3	41.9	5.5	74	wsw.			4		10			0.008	0.2		A. Lothes.
Neustadt, Palatinate	29.15	740.4	29.67	753.6	50.0	10.0	75	w.			4		10	w.		0	0		Dicknether.
Stuttgart	28.79	731.2	29.68	753.8	51.3	10.7	64	w.			1		10			0.043	1.1		Prof. Dr. Schoder.
Wustrow	29.61	752.1	29.63	752.7	35.1	1.7	70	n.			5	0	3 k			0	0		Profs. Brandes & Reimer.
GREEK SERIES.—Furnished by co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.48	748.7	29.87	758.6	59.2	15.1		sw.			3.0		8			0.051	1.3	covered	Schmidt & Wourlisch.
INDIAN SERIES.—Furnished by co-operation of H. F. Blanford, Meteorological Reporter to the Government of India at Calcutta.																			
Kurrachee	29.85	758.3	29.90	759.6	74.5	23.6	63	sw.	27	12.1			0			0	0	misty	
Deesa	29.34	745.3	29.81	757.2	85.1	29.5	28	ssw.	5.8	2.6			0			0	0	blue sky	
Bombay	29.88	759.0	29.92	760.0	78.4	25.8	73	nw.	10	4.5			0			0	0	blue sky	
Poona, Yarrowda.	28.01	711.5	29.84	758.0	86.0	30.0	20	w.	19	8.5			0			0	0	blue sky	
Belgaum	27.33	694.2	29.84	757.8	83.4	28.6	29	w.	10	4.5			0			0	0	misty	
Lahore	29.03	737.4	29.78	756.4	74.8	23.8	44	nw.	3.1	1.4			6		sw.	0	0	d. clouds	
Roorkee	28.93	734.8	29.84	757.8	77.2	25.1	40	se.	4.8	2.2			3			0.01	0.3		
Agra	29.26	743.2	29.82	757.5	83.2	28.4	23	n.	5.5	2.5						0	0		
Nagpur	28.80	731.4	29.82	757.4	90.7	32.6	20	calm	3.4	1.5			0			0	0	blue sky	
Jubbulpore	28.49	723.7	29.84	758.0	82.8	28.2	21	nw.	2.3	1.0			0			0	0	blue sky	
Lucknow	29.46	748.4	29.84	758.0	80.2	26.8	25	calm	3.9	1.7			0			0	0	blue sky	
Allahabad	29.52	749.7	29.83	757.6	83.2	28.4	22	calm	2.5	1.1			0			0	0	blue sky	
Patna	29.70	754.3	29.88	759.1	75.5	24.2	55	ene.	6.6	3.0			2	ene.	ene.	0	0		
Hazaribagh	27.84	707.0	29.83	757.6	83.8	28.8	21	w.	7.9	3.5			0			0	0	blue sky	
Cuttack	29.84	757.9	29.92	760.0	82.1	27.8	60	s.	0.7	0.3			0			0	0	blue sky	
Calcutta, Alipore	29.90	759.4	29.92	760.0	79.5	26.4	57	sse.	8.0	3.6			0			0	0	blue sky	
Dhubri	29.81	757.2	29.93	760.3	72.8	22.7	76	calm	2.9	1.3			5		wsw.	0.41	10.4	d. clouds	
Chittagong	29.90	759.4	29.99	761.7	73.8	23.2	59	w.	1.7	0.8			0			0	0	blue sky	
Sibsagar	29.70	754.4	30.05	763.3	61.3	16.3	91	ne.	2.6	1.2			10	w.	w.	0.30	7.6	d. clouds	
Jeypore	28.38	720.9	29.83	757.6	79.7	26.5	18	nw.	6.1	2.7			0			0	0	blue sky	
Zanzibar, Africa	29.80	756.9			86.9	30.5	65	nne.	9.9	4.4			5			0	0	d. clouds	
Trichinopoly	29.63	752.6			91.0	32.8	39	calm	0	0			0			0	0	blue sky	
Bellary	28.38	720.8			93.0	33.9	12	se.	2.9	1.3			0			0	0	blue sky	
ITALIAN SERIES (by authority of the Minister of Agriculture, Industry and Commerce).—Furnished by co-operation of Prof. P. Tacchina, Director of the Central Meteorological Office at Rome, and respective observers.																			
Udine	29.37	746.0	29.79	756.6	51.1	10.6	64	s.	0.7	0.3			6			1.035	26.3		Prof. Giovanni Clodig.
Milan	29.25	743.0	29.78	756.5	51.8	11.0	71	nw.	2.5	1.1			2	w.		0	0		Prof. Schiaparelli.
Padua	29.68	753.9	29.80	756.8	45.7	7.6	91	nw.	3.1	1.4			10			0.024	0.6		Prof. Dott. Lorenzoni.
Moncalieri	28.84	732.4	29.76	755.9	52.7	11.5	65	se.	1.3	0.6			0			0	0		Prof. P. F. Denza.
Genoa	29.56	750.8	29.76	755.8	58.5	14.7	57	sw.	2.5	1.1			0			0	0		Prof. G. M. Garibaldi.
Mondovi	27.83	706.8	29.78	756.3	56.3	13.5	37	e.			2		0			0	0		Prof. D. C. Bruno.
Pesaro	29.74	755.4	29.79	756.7	49.3	9.6	84	n.	13.6	6.1			10			0	0		Prof. Luigi Guidi.
Florence	29.50	749.3	29.76	755.8	57.9	14.4	63	ene.			2		3	sw.		0.197	5.0		Prof. Costantino Pitter.
Leghorn	29.61	752.1	29.70	754.3	58.8	14.9	68	wsw.	16.1	7.2			3			0.020	0.5		Prof. P. Monte.
Rome	29.56	750.9	29.74	755.4	61.9	16.6	47	wnw.	1.8	0.8			4	w.		0	0		Prof. P. S. Ferrari.
Lecce	29.43	747.5	29.77	756.1	57.2	14.0	65	nw.	11.2	5.0			6			0.130	3.3		Prof. C. de Giorgi.
Cosenza	28.93	734.9	29.84	757.9	53.6	12.0	74	nw.	3.1	1.4			10	w.		1.724	43.8		Prof. D. Conti.
Cagliari	29.72	754.8	29.91	759.8	61.9	16.6	46	nw.			4		2	nw.		0.150	3.8		Prof. A. Pacinotti.
Palermo	29.67	753.5	29.92	759.9	65.8	18.8	53	wsw.	16.1	7.2			1			0.953	24.2		Prof. G. Cincciatore.
Syracuse	29.82	757.5	29.87	758.7	65.3	18.5	54	wsw.	18.6	8.3			9	wsw.		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.24	742.6	29.76	756.0	57.2	14.0	78	w.	12.5	5.6			6	nw.		0.189	4.8		Prof. T. Brioschi.
Stelvio	21.89	556.0			27.1	— 2.7	58	ne.			2		8			0	0	misty	Prof. P. F. Denza.
Valdobbia	21.92	556.8			26.2	— 3.2	73	ene.			6		1			0	0	misty	Prof. P. F. Denza.
JAPANESE SERIES.—Furnished by co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Aomori	30.41	772.4	30.44	773.2	25.3	— 3.7	93	sw.	3.3	1.5		ck	8 n			0.120	3.0	light snow	
Hakodate	30.40	772.1	30.41	772.4	26.7	— 2.9	53	n.	13.8	6.2			1		n.	0	0	clear	
Hiroshima, I. M. Obs'y	30.32	770.1	30.34	770.6	35.6	2.0	88	ne.	6.0	2.7		10 ck	0	w.		0.340	8.6	overcast	K. Sasaki.
Kanazawa	30.43	772.9	30.54	775.7	32.0	0.0	93	ene.	2.7	1.2		ck;cs	4 s		ne.	0.050	1.3	fair	S. Endo.
Kioto	30.30	769.6	30.49	774.4	34.0	1.1	96	w.	0.1	0.04			10 n			0.088	2.2	light snow	M. Tojima.
Kochi																			
Nagasaki, I. M. Obs'y	30.12	765.0	30.33	770.4	45.5	7.5	92	ne.	3.0	1.3			10 s			0.380	9.6	overcast	S. Takehayashi.
Niigata	30.51	774.9	30.55	776.0	35.8	2.1	65	wnw.	4.9	2.2		10 ck	0			0.005	0.1	covered	
Nobiru	30.41	772.4	30.43	772.9	33.6	0.9	69	nw.	11.8	5.3			10 s			0	0	overcast	H. Midzushima.
Sapporo					24.1	— 4.4	98	nw.	13.2	5.9			9			0.060	1.5	overcast	
Tokei Obs'y, Yeddo	30.36	771.1	30.43	772.9	38.3	3.5	77	nne.	6.8	3.0			10 s		ssw.	0.012	0.3	cloudy	The Staff.
Wakayama	30.41	772.4	30.47	773.9	34.0	1.1	95	ene.	6.5	2.9			10 n			0.109	2.8	snowing	Y. Kuwamura.
MEXICAN SERIES (by authority of the Secretary of Public Works).—Furnished by co-operation of Señor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.38	619.2	30.11	764.7	54.7	12.6	74	n.			1	0	1			0	0	foggy	Prof. M. Leal.
Mazatlan	29.71	754.6	29.97	761.3	59.5	15.3	88	nnw.	5.3	2.3		0	0			0	0	clear	F. Quijano, C. E.
Mexico, Central Obs'y	23.08	586.2	30.28	769.1	49.1	9.5	57	calm	0	0		0	0			0	0	very fine	The Staff.
Morelia	24.21	615.0	30.39	772.1	54.5	12.5	79	se.			3	0	0			0	0	fine	M. Tena, M. D.
Rabellon, Aguascallentes	24.01	609.9	30.13	765.3	49.3	9.6	54					0	0			0	0		M. V de Leon, M. E.
Puebla, Catholic Institute	23.41	594.5	30.27	768.8	46.8	8.2	77	ne.	1.3	0.6		0	0			0	0	fine	Prof. P. Spina.
San Luis Potosi	24.12	612.7	30.07	763.8	66.9	19.4	53	w.			1	0	0			0	0	fine	G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.51	571.7	30.21	767.3	47.6	8.7	59	w.	10.9	4.2		0	0			0	0	fine	J. A. Bonilla, M. E.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
MAURITIUS SERIES.—Furnished by co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.59	751.6	29.78	756.4	80.6	27.0	80	ene.	11.0	4.9			10n;ks		e.	0.64	16.3	overcast	Oliver & Figon.
NETHERLANDS SERIES.—Furnished by co-operation of Prof. Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.66	753.4	29.66	753.4	45.0	7.2		ese.			3					0.012	0.3		
Groningen	29.60	751.7	29.65	753.1	42.3	5.7		ene.			1					0.059	1.5		
Helder	29.65	753.1	29.65	753.1	41.0	5.0		nne.			2					0.331	8.4		
Hellevoetsluis	29.63	752.5	29.63	752.5	42.4	5.8	74	e.			1					0	0		
Utrecht	29.62	752.3	29.67	753.5	43.0	6.1	62	ne.			2		8			0.031	0.8	very cloudy	H. van der Brink.
NORWEGIAN SERIES.—Furnished by co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.61	752.0	29.67	753.6	28.8	— 1.8	56	se.	4	2			0			0	0		
Brono	29.82	757.3	29.85	758.3	21.7	— 5.7	45	se.	4	2			0			0.059	1.5		
Christiania	29.58	751.4	29.74	755.4	19.4	— 7.0	49	nnw.	11	5			0			0.008	0.2		
Gjæsvær	29.57	751.1	29.60	751.7	23.9	— 4.5		ssw.			4		10					snowing	
Lodingen	29.72	755.0	29.77	756.2	24.6	— 4.1	66	sw.			4		7			0.008	0.2		
PORTUGUESE SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Obs'y of the Infante Dom Luiz at Lisbon.																			
Angra, Azores					56.1	13.4	80	nw.	6.9	3.1			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.19	741.3	30.19	766.9	59.0	15.0	87	ssw.	10.5	4.7			10			0.094	2.4		Dr. A. M. R. dos Santos.
Funchal, Maderia	30.29	769.4	30.38	771.7	65.8	18.8	68	wsw.	5.6	2.5			4			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.86	758.4	30.22	767.6	59.4	15.2	81	sw.	28.6	12.8			10			0.142	3.6		The Staff.
Ponta Delgada, Azores	30.20	767.0	30.27	768.8	62.2	16.8	59	nw.	11.9	5.3			4			0.031	0.8		
Saint Paul de Loando	29.69	754.1	29.89	759.1	86.0	30.0	77	nw.	0.7	0.3			2	sse.		0	0		
Serra da Estrella	25.26	641.7	30.06	763.6	41.7	5.4	99	w.	39.1	17.5			10			5.102	129.6	light rain	
RUSSIAN SERIES.—Furnished by co-operation of Prof. H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.26	743.3	30.45	773.3	12.7	—10.7		sw.	31	14			10 n			0.028	0.7		Major K. Lasarew.
Archangel	29.85	758.1	29.87	758.6	— 1.3	—18.5	68	ene.	13	6			10			0	0		Capt. Sseliwerstow.
Astrakhan	30.41	772.4	30.33	770.3	30.6	— 0.8	79	ese.	13	6			10 s			0	0		Capt. Wisganow.
Barnaul	30.03	762.7	30.58	776.7	12.0	—11.1	63	sw.	4	2			4			0	0	light clouds.	Meteorological Obs'y.
Dorpat	29.12	739.6	29.36	745.8	44.2	6.8	87	s.	11	5			10 ks			0.055	1.4		Observatory.
Ekaterinburg	29.16	740.6	30.16	766.1	33.3	0.7	44	wsw.	31	14			9			0	0		Meteorological Obs'y.
Kasan	29.99	761.8	30.28	769.0	33.8	1.0	73	ssw.	9	4			0			0	0		Observatory.
Kertch	29.94	760.5	29.96	761.0	43.0	6.1	87	ese.	4	2		4 ck	0			0	0		Lagorio & Sastyrez.
Kieff	28.99	736.4	29.63	752.6	45.9	7.7	76	se.	7	3		c;cs	10 ks			0	0		Observatory.
Lugan	29.85	758.2	30.06	763.5	38.7	3.7	75	ese.	9	4			4			0	0		Meteorological Obs'y.
Moscow	29.26	743.2	29.75	755.6	35.6	2.0	71	ssw.	4	2		0	3 ks			0	0		Meteorological Obs'y.
Nikolaiev	29.68	753.9	29.75	755.7	50.9	10.5	73	s.	13	6		4 cs	0			0	0	light clouds	Capt. Kurdakow.
Nikolaievsk, on the Amoor.	30.34	770.7	30.43	772.9	— 2.6	—19.2	85	calm	0	0			0			0	0		Lieut. Iwanow.
Pekin, China	30.60	777.3	30.74	780.9	27.5	— 2.5	68	calm	0	0			9 n			0.189	4.8		Physical Observatory.
St. Petersburg	29.36	745.7	29.37	746.1	39.2	4.0	92	ese.	22	10			10 n			0.035	0.9		Central Physical Obs'y.
Tashkend, Laboratory	29.02	737.2	30.77	781.5	15.8	— 9.0	81	calm	0	0			1			0.169	4.3		Teich, A. M.
Tiflis	28.83	732.2	30.28	769.0	49.3	9.6	32	s.	2	1		0	0			0	0		Physical Observatory.
Vladivostok	30.60	777.2	30.67	778.9	13.8	—10.1	47	calm	0	0		0	0			0	0		
Warsaw	29.10	739.2	29.33	744.9	50.2	10.1	72	sw.	7	3		7 c;cs	0						Astronomical Obs'y.
Wilna	29.07	738.4	29.49	749.0	46.4	8.0	82	s.	2	1			7			0	0		Berg, Assistant.
Yeniseisk	30.24	768.0	30.55	775.9	20.5	— 6.4	56	s.	2	1			4			0	0		M. O. Marks.
SCOTTISH SERIES.—Furnished by co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburg, and respective observers.																			
Leith, Restalrig Park																			Andrew Gibb.
Monach Lt. House, Hebrides			29.36	745.7	35	1.7	90	e.			6		10					snowing	J. Youngclause.
North Unst, Shetland I'ds																			Robert Burnet
SPANISH SERIES.—Furnished by co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and respective observers.																			
Barcelona, Met. Obs'y	29.80	756.9	29.91	759.6	62.2	16.8	57	sw.	4.3	1.9			3			0	0	clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.71	754.5	29.76	756.0	69.4	20.8	49	s.	4.5	2.0		6	4	w.		c	0	covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.99	685.5	29.96	761.0	53.6	12.0	76	sw.	18.3	8.2			10			0.087	2.2	covered	Domingo Martin.
Madrid, Royal Obs'y	27.84	707.2	30.06	763.6	58.8	14.9	80	sw.	33.5	15.0			9			0.020	0.5	almost cov.	The Staff.
Murcia, Met. Obs'y	29.97	761.1	30.11	764.8	74.3	23.5	50	nnw	5.6	2.5		2	3	se.		0	0	clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.76	730.6	29.66	753.3	54.9	12.7	96	ssw.	56.6	25.3			10			0.740	18.8	raining	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.96	761.0	30.03	762.7	67.1	19.5	84	se.	6.7	3.0		0	0			0	0	clear	Benito Vines, S. J.
Manilla, Philippine Islands	30.01	762.2	30.07	763.7	77.3	25.2	72	e.	0	0		0	1 s			0	0	clear	P. F. Faura, S. J.
San Fernando, Naval Obs'y	30.24	768.1	30.34	770.7	64.0	17.8	84	wsw.	6.6	3.0		0	7		sw.	0	0		Capt. C. Pujazon, R. N.
San Juan de Porto Rico, W. I	30.00	762.1	30.10	764.4	72.3	22.4	92	calm	0	0		4 k	4 k	e.	e.	0	0	d. clouds	E. Gadea, Chief Engn'r.
Tuguegarao, Philippine Id's	29.99	761.7	30.13	765.3	75.2	24.0	71	wnw.	4.0	1.8		0	2 ck		e.	0	0	fair	José L. Yrastorza.
SWEDISH SERIES.—Furnished by co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.82	757.3	29.85	758.3	4.6	—15.2	91	n.			2		10			0	0		
Umea	29.61	752.0	29.66	753.3	10.8	—11.8	100	ne.			8		10			0.169	4.3		
Hernosand	29.55	750.5	29.60	751.8	14.5	— 9.7	46	n.			7		10			0	0		
Stockholm	29.30	744.1	29.47	748.6	17.6	— 8.0	83	nnw.			6		10			0.358	9.1		
Wisby	29.37	746.0	29.43	747.5	26.2	— 3.2	82	n.			6		10			0.110	2.8		
Sub-Series.																			
Upsala	29.38	746.2	29.47	748.4	15.1	— 9.4	84	nw.	22.8	10.2			10		nne.	0	0		S. G. Fineman.
SWISS SERIES.—Furnished by co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.44	722.4	29.88	758.9	50.5	10.3	63	ssw.			4					0.370	9.4	clouds	The Observatory.
Zurich																			The Observatory.
TURKISH SERIES.—Furnished by co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.87	758.7	58.2	12.9	54	sw.	20	9.0			10		sw.	0.122	3.1	raining	The Observatory.
Valona			29.84	757.8	58.5	14.7		w.			1		10			1.77	45.	covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.29	769.4	59.9	15.5	58	nw.			1	0	0			0	0		Prof. C. V. A. van Dyck.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.33	770.4	30.42	772.7	31	— 0.6	78	ne.	2	0.9			fg.			0	0	dense fog	
Alpena, Michigan	29.11	739.4	29.82	757.4	35	1.7	89	se.	16	7.2		10 cs	0	s.		0	0	cloudy	
Atlanta, Georgia	28.75	730.2	29.97	761.2	56.5	13.6	90	e.	21	9.4			10 n		calm	1.28	32.5	light rain	
Atlantic City, New Jersey	30.28	769.1	30.29	769.4	40	4.4	89	ne.	8	3.6		9 ck	0			0	0	cloudy	
Augusta, Georgia	29.91	759.7	30.11	764.8	55.4	13.0	93	e.	4	1.8			10 n;sk			0.20	5.1	light rain	
Baltimore, Maryland	30.26	768.6	30.31	769.9	39	3.9	82	se.	4	1.8			10s;fg		se.	0	0	cloudy	
Barnegat, New Jersey	30.29	769.4	30.31	769.9	40.5	4.7	88	e.	12	5.4		0	7 s		se.	0	0	fair	
Bismarck, Dakota	27.66	702.6	29.64	752.8	32	0.0	81	se.	4	1.8		0	0			0	0	clear	
Block Island, Rhode Island																			
Boise City, Idaho	27.06	687.3	30.02	762.5	35	1.7	82	e.	8	3.6			10 s		calm	0.23	5.8	cloudy	
Boston, Massachusetts	30.30	769.6	30.46	773.7	35.5	1.9	75	ne.	4	1.8		4 c	hz.	n.		0	0	fair	
Brownsville, Texas	29.79	756.7	29.84	757.9	63	17.2	56	n.	4	1.8		10 cs	0			0	0	cloudy	
Buffalo, New York	29.30	744.2	30.10	764.5	44.8	7.1	43	se.	17	7.6		7 cs	0	se.		0	0	fair	
Burlington, Vermont	30.03	762.7	30.34	770.6	30.5	— 0.8	73	se.	11	4.9		0	0			Inap.	Inap.	clear	
Cairo, Illinois	29.04	737.6	29.46	748.3	57.0	13.9	96	se.	17	7.6			10 n		se.	1.38	35.1	heavy rain	
Campo, California	27.51	698.7	30.15	765.8	29.3	— 1.5	88	e.	2	0.9		0	0			0	0	clear	
Camp Thomas, Arizona	27.31	693.7	30.14	765.5	36	2.2	66	calm			0	0	0			0.12	3.0	clear	
Cape Henry, Virginia	30.18	766.6	30.20	767.1	46	7.8	83	ne.	15	6.7			10 s			0	0	cloudy	
Cape May, New Jersey	30.25	768.3	30.28	769.1	45	7.2	76	e.	16	7.2			10 s		se.	0	0	cloudy	
Castroville, Texas	28.96	735.6	29.80	756.9	56	13.3	45	nw.	8	3.6		0	0			0.07	1.8	clear	
Cedar Keys, Florida	29.99	761.7	30.01	762.2	61	16.1	84	e.	4	1.8		0	3 ks			0	0	clear	
Champaign, Illinois	28.75	730.2	29.62	752.3	52.6	11.4	88	se.	13	5.8			10 s		se.	0	0	cloudy	
Charleston, S. Carolina	30.04	763.0	30.10	764.5	57	13.9	93	ne.	8	3.6			10 s		ne.	0	0	threatening.	
Charlotte, N. Carolina	29.25	742.9	30.14	765.5	49.0	9.4	100	se.	9	4.0			10s;fg			0.06	1.5	cloudy	
Chattanooga, Tennessee	29.02	737.1	29.88	758.9	53.0	11.7	93	se.	11	4.9			10 n		s.	0.69	17.5	light rain	
Cheyenne, Wyoming	23.77	603.7	30.02	762.5	35.3	1.8	37	nw.	34	15.2		1 c	0			0	0	clear	
Chicago, Illinois	28.89	733.8	29.64	752.8	50.8	10.4	97	s.	9	4.0			10 n			0.08	2.0	light rain	
Chincoteague, Virginia	30.22	767.6	30.24	768.1	43	6.1	83	e.	12	5.4			10 s		s.	0	0	cloudy	
Cincinnati, Ohio	29.11	739.4	29.80	756.9	57.9	14.4	64	se.	12	5.4			10 s		se.	0	0	cloudy	
Cleveland, Ohio	29.18	741.2	29.96	761.0	45.5	7.5	57	se.	17	7.6			10 s			0	0	cloudy	
Coleman City, Texas	28.00	711.2	29.88	758.9	48	8.9	86	nw.	20	8.9		0	0			0.15	3.8	clear	
Columbus, Ohio	29.00	736.6	29.90	759.4	50	10.0	63	se.	8	3.6			10 s		se.	0	0	cloudy	
Concho, Texas	27.90	708.6	29.92	760.0	67	19.4	93	w.	26	11.6		0	0			0.34	8.6	clear	
Davenport, Iowa	28.86	733.0	29.56	750.8	53	11.7	80	se.	1	0.4			10 n		calm	0.03	0.8	light rain	
Dayton, Washington T'y	27.84	707.1	29.64	752.8	44	6.7	86	sw.	6	2.7			10 n			0.21	5.3	heavy rain	
Deadwood, Dakota	25.02	635.5	29.94	760.5	37	2.8	82	sw.	5	2.2		0	0			0	0	clear	
Decatur, Texas					54	12.2	74	nw.	12	5.4		0	5 s			0	0	fair	
Delaware Breakwater, Del.	30.26	768.6	30.28	769.1	41	5.0	92	e.	10	4.5		9 k	0	se.		0	0	cloudy	
Denison, Texas	28.68	728.5	29.52	749.8	54.3	12.4	74	nw.	9	4.0		0	0			0.15	3.8	clear	
Denver, Colorado	24.54	623.3	30.06	763.5	46.0	7.8	35	n.	5	2.2		0	4 s		calm	0	0	fair	
Des Moines, Iowa	28.61	726.7	29.58	751.3	43	6.1	93	calm	0	0			fg.			0.04	1.0	dense fog	
Detroit, Michigan	29.12	739.6	29.87	758.7	51.0	10.6	59	se.	20	8.9			10 s		s.	0	0	cloudy	
Dodge City, Kansas	27.10	688.3	29.84	757.9	41.5	5.3	39	n.	27	12.1		0	0			0	0	clear	
Dubuque, Iowa	28.79	731.3	29.55	750.6	44.5	6.9	93	se.	3	1.3			10 n		calm	0.08	2.0	light rain	
Duluth, Minnesota	28.79	731.3	29.55	750.6	37	2.8	92	calm	0	0			10n;fog		calm	0.26	6.6	light rain	
Eagle Pass, Texas	29.05	737.9	29.89	759.2	56.2	13.4	40	nw.	6	2.7		0	0			0	0	clear	
Eagle Rock, Idaho	25.18	639.6	30.08	764.0	25	— 3.9	88	sw.	28	12.5			10 s			0	0	threatening.	
Eastport, Maine	30.40	772.1	30.47	773.9	29	— 1.7	77	ne.	3	1.3		0	0			0.02	0.5	clear	
El Paso, Texas	26.27	667.2	30.15	765.8	41	5.0	67	w.	10	4.5		0	0			0	0	clear	
Erie, Pennsylvania	29.24	742.7	30.01	762.2	45	7.2	60	se.	20	8.9			10 s			0	0	cloudy	
Escanaba, Michigan	28.92	734.6	29.64	752.8	38	3.3	100	s.	6	2.7			10 n			0.13	3.3	light rain	
Fort Apache, Arizona	25.08	637.0	30.18	766.6	28	— 2.2	61	ne.	3	1.3		0	0			0.17	4.3	clear	
Fort Assinnaboine, Montana	26.66	677.2	29.70	754.4	34	1.1	55	w.	5	2.2			10 s			0	0	cloudy	
Fort Bennett, Dakota	28.00	711.2	29.73	755.1	32	0.0	62	calm	0	0		0	0			0	0	clear	
Fort Benton, Montana	26.67	677.4	29.67	753.6	42	5.6	59	sw.	3	1.3		0	6 ks		calm	0	0	fair	
Fort Buford, Dakota	27.49	698.2	29.67	753.6	33	0.6	62	w.	8	3.6		0	0			0	0	clear	
Fort Custer, Montana	26.38	670.0	29.74	755.4	44	6.7	41	se.	28	12.5		0	3 s		calm	0	0	fair	
Fort Davis, Texas	25.08	637.0	30.04	763.0	45	7.2	71	w.	22	9.8		0	0			0	0	clear	
Fort Elliott, Texas	26.94	684.3	29.84	757.9	42	5.6	38	n.	20	8.9		0	0			0	0	clear	
Fort Gibson, Indian T'y	28.84	732.5	29.44	747.8	58.3	14.6	93	w.	4	1.8			10 n			Inap.	Inap.	light rain	
Fort Grant, Arizona	25.27	641.8	30.13	765.3	35	1.7	61	e.	2	0.9		0	0			Inap.	Inap.	clear	
Fort Griffin, Texas	28.38	720.8	29.76	755.9	53	11.7	80	nw.	18	8.0		0	0			0	0	clear	
Fort Keogh, Montana	27.02	686.3	29.70	754.4	35	1.7	65	sw.	9	4.0		1 c	0			0	0	clear	
Fort Macon, North Carolina	30.15	765.8	30.16	766.1	45	7.2	100	ne.	14	6.3			fg.		calm	0.20	5.1	dense fog	
Fort McKavett, Texas	27.55	699.8	29.93	760.2	52.6	11.4	44	sw.	24	10.7		0	0			0.10	2.5	clear	
Fort Missoula, Montana	26.24	666.5	29.67	753.6	36	2.2	92	sw.	10	4.5			10 n			0.09	2.3	heavy rain	
Fort St. Michaels, Alaska	29.71	754.6	29.74	755.4	—17	—27.2	100	sw.	5	2.2		0	5 s		s.	0	0	fair	
Fort Shaw, Montana	25.87	657.1	29.72	754.9	36	2.2	82	w.	11	4.9			10 s			0	0	cloudy	
Fort Sill, Indian Territory	28.35	720.1	29.66	753.4	50.8	10.4	62	nw.	18	8.0		0	0			0	0	clear	
Fort Stevenson, Dakota	27.60	701.0	29.62	752.3	34	1.1	66	sw.	6	2.7		0	6 s		sw.	0	0	fair	
Fort Verde, Arizona					36	2.2	72	w.			1	0	0			0	0	clear	
Fort Washakie, Wyoming	24.22	615.2			24.0	— 4.4	73	n.	3	1.3		0	0			0	0	clear	
Fredericksburg, Texas	28.00	711.2	29.80	756.9	54	12.2	57	nw.	16	7.2		0	0			0.33	8.4	clear	
Galveston, Texas	29.65	753.1	29.69	754.1	57.5	14.2	100	sw.	5	2.2			10ks;fg		s.	0.75	19.0	threatening.	
Grand Haven, Michigan	28.96	735.6	29.67	753.6	49.0	9.4	82	se.	12	5.4			10 s		sw.	0	0	cloudy	
Hatteras, North Carolina	30.15	765.8	30.17	766.3	45	7.2	100	n.	12	5.4			fg.			0.35	8.9	dense fog	
Helena, Montana	25.32	643.1	29.72	754.9	42	5.6	52	sw.	14	6.3			10 s		sw.	0	0	cloudy	
Henrietta, Texas	28.64	727.4	29.69	754.1	52	11.1	47	nw.	24	10.7		0	0			0	0	clear	
Huron, Dakota	28.22	716.8	29.74	755.4	33	0.6	81	nw.	1	0.4		0	0			0	0	clear	
Indianapolis, Indiana	28.84	732.5	29.68	753.9	53.5	11.9	79	se.	11	4.9			10 s		se.	0.09	2.3	cloudy	
Indianola, Texas	29.71	754.6	29.74	755.4	59.0	15.0	70	w.	12	5.4		0	2 k		nw.	0.04	1.0	clear	
Jacksboro, Texas	28.44	722.4	29.68	753.9	53	11.7	69	nw.	18	8.0		0	0			0	0	clear	
Jacksonville, Florida	30.00	762.0	30.05	763.3	61	16.1	87	e.	5	2.2		4 cs	fg.	w.		0	0	fair	
Keokuk, Iowa	28.80	733.0	29.56	750.8	50.5	10.3	100	calm	0	0			fg.			0.02	0.5	dense fog	
Key West, Florida	30.02	762.5	30.05	763.3	70.5	21.4	76	se.	8	3.6		0	3 k		se.	0	0	clear	
Kittyhawk, North Carolina	30.18	766.6	30.20	767.1	45	7.2	100	ne.	11	4.9			10k;ha.		ne.	0.06	1.5	cloudy	
Knoxville, Tennessee	28.87	733.3	29.95	760.7	49.2	9.6	95	e.	2	0.9			10 n		sw.	0.14	3.6	light rain	
La Crosse, Wisconsin	28.75	730.2	29.59	751.6	44	6.7	93	s.	1	0.4			fg.			0.03	0.8	dense fog	
La Mesilla, New Mexico	26.11	663.2	30.12	765.0	33.7	0.9	70	calm	0	0		0	1 s			0	0	clear	
Leavenworth, Kansas	28.63	727.2	29.58	751.3	50	10.0	93	nw.	12	5.4			10s;fg			0.28	7.1	cloudy	
Lewiston, Idaho	28.75	730.2	29.62	752.3	42	5.6	96	nw.	1	0.4			10 n		calm	0.22	5.6	light rain	
Little Rock, Arkansas	29.08	738.6	29.41	747.0	55	12.8	100	s.	12	5.4			10 s		sw.	3.89	98.8	cloudy	
Los Angeles, California	29.80	756.9	30.20	767.1	43.1	6.2	74	n.	1	0.4		0	0			0	0	clear	
Louisville, Kentucky	29.11	739.4	29.70	754.4	55	12.8	93	se.	11	4.9			10 n			0.04	1.0	light rain	
Lynchburg, Virginia	29.49	749.0	30.21	767.3	41.3	5.2	73	calm	0	0			10 s;sk			0	0	cloudy	
Mackinac City, Michigan																			
Madison, Wisconsin	28.51	724.1	29.60	751.8	45	7.2	93	se.	5	2.2			fg.		calm	0.47	11.9	dense fog	
Marquette, Michigan	28.81	731.8	29.59	751.6	39	3.9	89	s.	12	5.4			10 n		s.	0.29	7.4	light rain	
Mason, Texas	28.09	713.5	29.82	757.4	56	13.3	37	nw.	24	10.7		0	0			0.16	4.1	clear	
Memphis, Tennessee	29.22	742.2	29.57	757.4	54	12.2	100	sw.	15	6.7			10 n			2.37	60.2	thund'r st'm.	
Milwaukee, Wisconsin	28.83	732.3	29.03	752.6	43	6.1	100	se.	8	3.6			10n;fg			0.61	15.5	light rain	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.72	754.9	29.76	755.9	65	18.3	93	s.	12	5.4			10 s		sw.	0	0	cloudy	
Montgomery, Alabama	29.61	752.1	29.85	758.2	63.4	17.4	99	se.	12	5.4			10 s		se.	0.16	4.1	threatening.	
Moorhead, Minnesota	28.50	723.9	29.60	751.8	32	0.0	88	calm	0	0		0	3 s			0.28	7.1	fair	
Morgantown, W. Virginia	28.98	736.1	30.06	763.5	50.0	10.0	57	s.	2	0.9			10 s			0	0	cloudy	
Mt. Washington, N. H.	23.94	608.1	30.56	776.2	25.0	— 3.9	67	w.	2	0.9		0	5 s		w.	0	0	fair	
Nashville, Tennessee	29.12	739.6	29.68	753.9	57.0	13.9	86	se.	10	4.5			10 n		se.	1.09	27.7	thnd'r str'm	
New Haven, Connecticut	30.31	769.9	30.43	772.9	35	1.7	79	ne.	4	1.8		3 c	sk	w.		0	0	clear	
New London, Connecticut	30.41	772.4	30.46	773.7	38	3.3	72	ne.	2	0.9			10 s		ne.	0	0	cloudy	
New Orleans, Louisiana	29.61	752.1	29.67	753.6	69.5	20.8	89	s.	17	7.6			10 s		s.	0	0	threatening	
Newport, Rhode Island	30.40	772.1	30.45	773.4	38.3	3.5	66	e.	5	2.2		6 k	4 ks	n.	ne.	0	0	cloudy	
New River, N. Carolina					44	6.7	100	ne.			1		fg			0.09	2.3	dense fog	
New Shoreham, Rhode I'd.	30.41	772.4	30.44	773.2	39.8	4.3	79	e.	7	3.1		7 k	0	ne		0	0	fair	
New York, New York	30.20	767.1	30.39	771.9	37	2.8	89	ne.	15	6.7		5 cs	fg			0	0	fair	
Norfolk, Virginia	30.20	767.1	30.23	767.8	45	7.2	83	ne.	7	3.1			10 s			inap.	inap.	cloudy	
North Platte, Nebraska	26.80	680.7	29.90	759.4	31.6	— 0.2	68	w.	12	5.4		0	0			0	0	clear	
Olympia, Washington T'y	29.52	749.8	29.56	750.8	41.0	5.0	92	s.	6	2.7			10 n		calm	1.45	36.8	light rain	
Omaha, Nebraska	28.40	721.3	29.67	753.6	43.8	6.6	89	nw.	6	2.7			10 s			0.03	0.8	cloudy	
Ooglaamie, Pt. Barrow, Alas.	29.39	746.5	29.41	747.0	—30.2	—34.6	78	ssw.	26	11.6			10 s			0	0	cloudy	
Oswego, New York	29.83	757.7	30.18	766.6	38.0	3.3	82	se.	16	7.2		4 c	0			0	0	fair	
Palestine, Texas	29.02	737.1	29.60	751.8	57	13.9	80	sw.	16	7.2		0	3 s			1.88	47.8	clear	
Pensacola, Florida	29.79	756.7	29.82	757.4	66.2	19.0	97	se.	11	4.9			10 s		s.	0	0	cloudy	
Philadelphia, Pa.	30.24	768.1	30.35	770.9	38	3.3	72	se.	11	4.9			10 k		se.	0	0	cloudy	
Pike's Peak, Colorado	17.49	444.2	30.21	767.3	9	—12.8	73	nw.	40	17.9		0	9 s			0	0	cloudy	
Pioche, Nevada	24.12	612.6	30.28	769.1	27	— 2.8	70	s.	1	0.4		2 k	0	calm		0	0	clear	
Pittsburg, Pennsylvania	29.11	739.4	29.97	761.2	45.8	7.7	53	e.	5	2.2		0	0			0	0	clear	
Port Eads, Louisiana	29.76	755.9	29.76	755.9	67.5	19.7	92	s.	16	7.2			10 s		w.	inap.	inap.	cloudy	
Port Huron, Michigan	29.13	739.9	29.86	758.4	42.2	5.7	65	se.	9	4.0		10 cs	0	sw.		0	0	cloudy	
Portland, Maine	30.42	772.7	30.46	773.7	31.0	— 0.6	68	n.	4	1.8		0	0			0	0	clear	
Portland, Oregon	29.61	752.1	29.64	752.8	46.0	7.8	93	nw.	6	2.7			10 n		n.	2.78	70.6	light rain	
Portsmouth, N. Carolina					47	8.3	100	ne.	21	9.4			fg		ne.	0.19	4.8	dense fog	
Prescott, Arizona	24.82	630.4	30.18	766.6	29.8	— 1.2	80	s.	3	1.3		0	0			0	0	clear	
Provincetown, Mass.	30.42	772.7	30.45	773.4	36.5	2.5	80	e.	3	1.3		0	0			0	0	clear	
Punta Rassa, Florida	30.00	762.0	30.00	762.0	65	18.3	78	se.	12	5.4		0	0			0	0	clear	
Red Bluff, California	29.78	756.4	30.16	766.1	48.0	8.9	86	s.	16	7.2		0	6 s		s.	inap.	inap.	fair	
Rio Grande City, Texas	29.61	752.1	29.86	758.4	59	15.0	48	n.	3	1.3		5 c	0	calm		0	0	fair	
Rochester, New York	29.42	747.3	30.13	765.3	43	6.1	60	s.	19	8.5		7 cs	0	nw.		0	0	fair	
Roseburg, Oregon	29.28	743.7	29.85	758.2	50.5	10.3	75	s.	9	4.0			10 n		s.	0.99	25.1	light rain	
Sacramento, California	30.19	766.8	30.27	768.8	47.2	8.4	80	se.	6	2.7			9 s			0	0	cloudy	
St. Louis, Missouri	28.89	733.8	29.53	750.0	55.0	12.8	93	s.	10	4.5			10 s		se.	0.20	5.1	threatening.	
St. Paul, Minnesota	28.64	727.4	29.58	751.3	38.3	3.5	90	s.	2	0.9			fg			0.09	2.3	dense fog	
St. Vincent, Minnesota	28.50	723.9	29.46	748.3	28	— 2.2	88	s.	11	4.9		0	5 s		s.	0	0	fair	
Salt Lake City, Utah	25.64	651.2	30.20	767.1	36	2.2	49	se.	4	1.8		0	0			0	0	clear	
San Antonio, Texas	29.09	738.9	29.81	757.2	59.6	15.3	33	s.	12	5.4		0	0			0.15	3.8	clear	
San Diego, California	30.09	764.3	30.16	766.1	45.0	7.2	93	n.	4	1.8		0	0			0	0	clear	
Sandusky, Ohio	29.16	740.7	29.88	758.9	48	8.9	71	se.	16	7.2			10 s			0	0	cloudy	
Sandy Hook, New Jersey	30.33	770.4	30.37	771.4	39.0	3.9	89	ne.	13	5.8		8 c	0	calm		0	0	cloudy	
San Francisco, California	30.18	766.6	30.25	768.3	50	10.0	86	sw.	6	2.7		0	1 s		sw.	0.01	0.3	clear	
Santa Fé, New Mexico	23.14	587.7	30.18	766.6	32	0.0	65	n.	14	6.3		0	0			inap.	inap.	clear	
Savannah, Georgia	29.98	761.5	30.07	763.8	58.5	14.7	83	e.	5	2.2			10 n			0.02	0.5	light rain	
Shreveport, Louisiana	29.28	743.7	29.53	750.0	56	13.3	100	s.	6	2.7			10 s			1.30	33.0	cloudy	
Silver City, New Mexico	24.21	614.9	30.06	763.5	31	— 0.6	65	w.	4	1.8		0	0			0.08	2.0	clear	
Sitka, Alaska	28.84	732.5	28.91	734.3	30	— 1.1	72	e.	8	3.6		5 k	1 s	e.	calm	0.38	9.7	fair	
Smithville, North Carolina	30.10	764.5	30.14	765.5	50	10.0	100	ne.	10	4.5			10 s		ne.	0.05	1.3	cloudy	
Spokane Falls, Wash. Ter.	27.49	698.2	29.62	752.3	38	3.3	100	sw.	12	5.4			10 n			0.45	11.4	light rain	
Springfield, Illinois	28.83	732.3	29.56	750.8	55	12.8	86	se.	2	0.9			10 s		se.	0.09	2.3	cloudy	
Springfield, Massachusetts	30.31	769.9	30.45	773.4	37.1	2.8	82	ne.	2	0.9		10 k	fg			0	0	cloudy	
Springfield, Mo.	28.01	711.4	29.58	751.3	53.6	12.0	80	se.	8	3.6			10 s			0.02	0.5	cloudy	
Stockton, Texas	26.86	682.2	30.00	762.0	45.0	7.2	56	w.	12	5.4		0	0			0	0	clear	
Thatcher's Island, Mass.	30.34	770.6	30.40	772.1	36.5	2.5	75	se.	3	1.3		0	0			0	0	clear	
Toledo, Ohio	29.11	739.4	29.85	758.2	49.8	9.9	61	s.	7	3.1		2 cs	8 s;sk	sw.	sw.	0	0	threatening.	
Tucson, Arizona	27.66	702.6	30.14	765.5	40	4.4	82	sw.	4	1.8		0	0			0	0	clear	
Umatilla, Oregon	29.29	744.0	29.67	753.6	46.7	8.2	81	w.	10	4.5			10 s			0	0	cloudy	
Uvalde, Texas	28.84	732.5	29.84	757.9	52	11.1	47	w.	3	1.3		0	0			0	0	clear	
Vicksburg, Mississippi	29.42	747.3	29.69	754.1	60	15.6	93	w.	21	9.4			10 n		w.	0.55	14.0	light rain	
Visalia, California	29.87	758.7	30.25	768.3	42.5	5.8	82	s.	2	0.9		0	8 s			0	0	cloudy	
Washington, D. C.	30.16	766.1	30.28	769.1	35	1.7	100	ne.	2	0.9			8 s;fg		se.	0	0	cloudy	
West Los Animas, Colorado	25.84	656.3	29.97	761.2	23	— 5.0	51	w.	1	0.4		0	0			0	0	clear	
Wickenburg, Arizona					36.5	2.5	88	nw.			1	0	0			0	0	clear	
Williamsport, Pa.	29.64	752.8	30.27	768.8	38	3.3	82	e.	5	2.2		10 c	0	w.		0	0	cloudy	
Wilmington, N. Carolina	30.10	764.5	30.16	766.1	48	8.9	86	e.	1	0.4		5 c	fg	calm	calm	0.03	0.8	fair	
Winnemucca, Nevada	25.61	650.5	30.13	765.3	38	3.3	57	sw.	18	8.0			10 ks		sw.	0.03	0.8	cloudy	
Wood's Holl, Mass.																			
Yankton, Dakota	28.35	720.1	29.77	756.1	35	1.7	89	n.	7	3.1			10 s			0	0	cloudy	
Yuma, Arizona	29.96	761.0	30.11	764.8	46.7	8.2	67	n.	2	0.9		0	0			0	0	clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.04	559.8			54.0	12.2	79	calm	0	0		6 k	2 s	ne.	w.	0	0	cloudy	Joaquin Gomez.
Bridgetown, Barbados, W.I.	30.09	764.3	30.10	764.5	78	25.6	82	e.				5 k	5 ks	e.	e.	0	0	fair	J. A. Racker.
Buenaventura, U. S. C.	29.97	761.2	29.99	761.7	79	26.1	82	s.	4	1.8		5 c	0	s.		0	0	fair	J. I. Plume.
Guadeloupe, W. I.	29.96	761.0	29.98	761.5	77	25.0	87	e.				3 k	2 ks			0	0	clear	B. Bigar.
Havana, Cuba, W. I.	30.02	762.5	30.07	763.8	71	21.7	82	se.	6	2.7		0	0			0	0	clear	A. Van Caneghem.
Kingston, Jamaica, W. I.																			Robert Johnstone
Navassa, W. I.																			F. M. Everett.
Paramaribo, S. A.	30.07	763.8	30.07	763.8	78	25.6	86	e.			2	5 k	4 s	e.		0	0	fair	Dr. C. J. Hering.
Puerto Berrio, U.S. Col'mba	29.48	748.8	29.94	760.5	83	28.3	80	s.			1		10 s		calm	0	0	foggy	Miss Flora A. Nichols.
Rivas, Nicaragua																			Earl Flint.
Santiago de Cuba, W. I.	30.05	763.3	30.08	764.0	73	22.8	76	calm	0	0		1 c	0			inap.	inap.	fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.01	736.8	29.06	738.1	29.0	— 1.7	94	s.	8	3.6		2 c	2 s	s.	s.	0	0	fair	J. Fortescue & W. Wood.

Stations and Vessels.	Barometer reduced to sea-level. Inch.	Barometer reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind Up'er 0—10	Clouds. Amount and kind Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours Inch.	Rain-fall or melted snow in the past 24 hours Mill	Sea-swell. Character.	Sea-swell. Dir'n from.	Weather.	Observers.
BRITISH NAVAL SERIES.—Furnished by co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary.																			
H. M. S. Agincourt, Gibraltar, Mediterranean	30.33	770.4	61.5	16.4	97	calm			0		4	ssw.						d. clouds	Capt. E. H. Murray.
H. M. S. Albatross																			Capt. A. J. Errington.
H. M. S Alert, N. 2° 32′, E. 59° 16′	29.88	758.9	84.2	29.0	77	ene.			2-3		3							d. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.02	762.5	66	18.9	73	wsw.			5		2	wsw.						d. clouds	Capt. C. F. Hotham.
H. M. S. Bacchante, N. 26° 47′, E. 34° 35′	30.15	765.8	70	21.1	66	nnw.			4-5		0					4	n.	blue sky	Capt. Lord Chas. Scott.
H. M. S. Bonaicen, S. 34° 11′, E. 18° 26′	29.91	759.7	73.5	23.1	63	ese.			5-6		1	calm						squally	Com. Sir F. W. Richards.
H. M. S. Champion																			Capt. G. R. Hope.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Diamond, S 40° 28′, E. 57° 24′	30.10	764.5	59	15.0	81	sse.			2-3		8	s.				2	wsw.	d. clouds	Capt. A. T. Dale.
H. M. S. Dido, N. 12° 18′, W. 60° 24′	30.08	764.0	80	26.7		e.			3-4		6	e.				3	ne.	misty	Capt. C Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.40	772.1	60	15.6	66	nne.			1-2		3	nne.						d. clouds	Capt. T. Barnardiston.
H. M. S. Druid																			Capt. W. R. Kennedy.
H. M. S. Dwarf, S. 34° 54′, W. 56° 10′	29.47	748.5	72	22.2	71	calm			0		0							blue sky	Capt. Sir W. Wiseman.
H. M. S. Eclipse, S. 13° 36′, E. 43° 10′	29.73	755.1	84	28.9		sw.			2-3		7					2	wsw.	d. clouds	Capt. E. St. J. Garforth.
H. M. S. Espiegle																			Capt C. A. G. Bridge.
H. M. S. Fawn, N. 13° 20′ E. 43° 30′	29.93	760.2	76.5	24.7	90	s.			1		3					1	s.	d. clouds	Capt. P. Aldrich.
H. M. S. Flying Fish, N. 34° 41′, E. 135° 12′	30.49	774.4	38	3.3	95	calm			0		10							snowing	Capt. R. F. Hoskyn.
H. M S. Gannet, S. 22° 50′, W. 86° 30′	30.11	764.8	71.5	21.9	80	ese.			4		8					2 2	ese. ssw.	d. clouds	Comm. E. G. Bourke. Capt. L. F. Jones.
H. M. S. Garnet																			
H. M. S. Inconstant, Singapore, Malay Pen	29.93	760.2	77	25.0	90	ne.			2		10							overcast	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 22° 16′, E. 114° 10′	30.14	765.5	70	21.1	84	ene.			1		4	ne.						d. clouds	Capt. R. E. Tracey.
H. M. S. Lark																			Lieut. C. F. Oldham.
H. M. S. Liffey, Coquimbo, Chili	29.99	761.7	62	16.7		n.			1		8								Comm. J. Aylen.
H. M. S. Magpie																			Capt. A. Carpenter.
H. M. S. Malabar																			Capt. H. Hand.
H. M. S. Mutine																			Comm. F. Edwards.
H. M. S. Nelson, S. 42° 53′, E. 147° 21′	29.95	760.7	63	17.2	88	se.			1		5	nw.						d. clouds	Capt. J. E. Erskine.
H. M. S. Northampton, Port Royal, Jamaica, W. I.	29.99	761.7	76	24.4	92	n.			1		4							d. clouds	Capt. E. Drummond.
H. M. S. Orontes, S. 15° 20′, E. 42° 18′	29.76	755.9	82.5	28.1	88	sw.			4		6					3	ssw.	d. clouds	Capt. R. J. Kinahan.
H. M. S. Pelican																			Capt. F. R. Dicken.
H. M. S. Phœnix																			Capt. H. H. Grenfell.
H. M. S. Rambler, Fernando Po, Lower Guinea	29.87	758.7	83	28.3	100	nw.			1		10	calm						hazy	Capt. A. Littleton.
H. M. S. Rendy, Bassorah, Asiatic Turkey	30.13	765.3	69	20.6		wnw.			2		2							d. clouds	Capt. W. H. Edwards.
H. M. S. Rocket, Esquimalt, Vancouver Id	29.40	746.7	41	5.0	91	calm			0		8							showery	Lieut. V. B. Orlebar.
H. M. S. Sea Gull, S. 3° 12′, E. 40° 11′	29.22	742.2	82	27.8	91	ne.			2-4		5	ne.				4	ne.	d. clouds	Capt. E. T. Church.
H. M. S. Thalia, N. 24° 25′, W. 22° 14′	30.33	770.4	70	21.1		ene.			4		0					3	wnw.	blue sky	
H. M. S Triumph, S. 22° 51′, W. 86° 37′	30.13	765.3	72	22.2	80	ese.			3		8	se.				3	se.	d. clouds	Capt. A. H. Markham.
H. M. S. Tyne, N. 2° 49′, E. 100° 55′	29.89	759.2	81	27.2	95	ese.			1		1	ese.						blue sky	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	30.05	763.3	77	25.0		nne.			1		1							blue sky	Com. W. S. Brown.
H. M. S. Woodlark, Bombay, India	29.91	759.7	78.5	25.8	43	wnw.			2-3		0							misty	Capt. T. P. Nesham.
PORTUGUESE NAVAL SERIES.—Furnished by co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory, of the Infante Dom Luiz, at Lisbon.																			
Hengo																			Carlos Candid dos Reis.
Quanza, St. Antonio, Cape Verd Id's	30.12	765.0	74.3	23.5	73	nne.			5		0					4	ne.	blue sky	C. da Silva Costa.
Tamega																			P. I. de Rio Carvallio.
SWEDISH NAVAL SERIES.—Furnished by co-operation of E. Malmburg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Balder, N. 23° 58′, W. 83° 45′	29.96	760.9	74.8	23.8	98	ese.			5		3							d. clouds	Capt. A. L. Broberg.

Stations and Vessels.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES (by authority of the Secretary of the Navy).—Furnished by co-operation of the Navy Department, through Commodore John G. Walker, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	29.80	756.9	67	19.4	89	ese.	10	4.5			10		se.	0	0			misty	
N. Yard, Portsmouth, N. H.	30.47	773.9	29	— 1.7		calm	0	0			0			0	0			clear	
Naval Hospital, Yokohama, Japan	30.27	768.8	39.5	4.2	64	n.			1		10		w.	sli't	sli't			light snow	
Adams, Callao, Peru	29.75	755.6	68	20.0	95	sse.			1		10			0	0	gr'd		cloudy	
Alaska, Valparaiso, Chili	29.84	757.9	61	16.1	71	calm			0		0			0	0	sm'h		clear	
Alert, Sarawak river, Borneo*	29.78	756.4	83	28.3	83	sw.			1		10		calm	0	0	sm'h		cloudy	
Alliance, N. 26° 25′, W. 66° 40′	30.16	766.1	69	20.6	75	e.			1		2			light	light	sm'h		clear	
Ashuelot, Tientsin, China	30.78	781.8	32	0.0	100	e.			2		10		calm					cloudy	
Brooklyn, Sandy Point, Patagonia	29.65	753.1	47	8.3	92	nne.	7	3.1			10			2.10	53.3	light	ne.	drizzling	
Colorado, New York, N. Y.	30.37	771.4	37	2.8	81	ne.	1	0.4			8		e.	0	0			hazy	
Enterprise, Port Royal, S. C.*	30.05	763.3	58	14.4	100	ene.			3		10		calm					cloudy	
Essex, N. 14° 47′, W. 23° 49′	30.08	764.0	78	25.6	52	ne.			4		0					long	e.	hazy	
Franklin, Norfolk, Va	30.24	768.1	47	8.3	92	ne.	4.8	2.1			10			0	0			cloudy	
Galena, Villafranca, France	29.76	755.9	63	17.2	78	se.			1		2					long	s.	fair	
Independence, N. Yard, Mare I'd, Ca'	30.10	764.5	49	9.4	85	calm	0	0			8			0	0			cloudy	
Kearsarge, New Orleans, La	29.69	754.1	70	21.1	90	s.	6	2.7			10		sw.					cloudy	
Lackawanna, Valparaiso, Chili*	29.91	759.7	59	15.0	88	se.			1		0							clear	
Lancaster, Gulf of Kos, Turkey in Asia	30.06	763 5	61	16.1	77	sse.			4		10		s.			sm'h	s.	cloudy	
Marion, S. 33° 54,′ E. 18° 24′	29.73	755.1	73	22.8	81	wnw.			1		2		calm			sm'h		fair	
Michigan, Erie, Pa	29.97	761.2	45	7.2	92	se.			6		10							hazy	
Minnesota, Newport, R. I.	30.44	773.2	37	2.8	71	e.	4	1.8			10		ne.					cloudy	
Monocacy, Yokohama, Japan	30.45	773.4	41	5.0	82	n.			2		10		calm					cloudy	
Nipsic, Vigo, Spain	29.84	757.9	60	15.6	82	sw.			6		10		sw.			mod.		drizzling	
Onward, Callao, Peru†	30.07	763.8	67	19.4	100	se.			2		10					long	w.	cloudy	
Palos, Hong Kong, China	30.17	766.3	66	18.9	84	ese.			2		8		e.					cloudy	
Passaic, Washington, D. C.	30.29	769.4	32	0.0		ne.			2		10							foggy	
Pensacola, Coquimbo, Chili	30.05	763.3	59	15.0	88	nne.	1	0.4			10		calm	0	0	long	s.	cloudy	
Powhatan, Fredericstaed, Santa Cruz.	30.12	765.0	78	25.6	73	e.			1		5		e.					fair	
Quinnebaug, Alexandria, Egypt	30.30	769.6	60	15.6	71	nnw.			1		0							clear	
Ranger, N. 17° 10′, W. 101° 07′*	29.84	757.9	77	25.0	82	e.			3		2		calm	0	0	sm'h		clear	
Richmond, Yeddo, Japan	30.28	769.1	45	7.2	84	n.			2		5?			0.102	2.6	sm'h		cloudy?	
Shenandoah, S. 18° 25′, W. 25° 50′*	30.16	766.1	80	26.7	70	ene.			2		2		ene.			sm'h		clear	
St. Louis, League Island, Pa	30.53	775.4	33	0.6	89	calm	0	0			2			0	0			clear	
Swatara, Yokohama, Japan*	30.23	767.8	43	6.1	67	n.			2		10					sm'h		drizzling	
Tennessee, Fort Monroe, Va	30.20	767.1	46	7.8	92	ne.	5	2.2			10			0	0			hazy	
Vandalia, N. 23° 38′, W. 83° 24′*†	30.13	765.3	75	23.9	81	ese.			4		1		ese.					clear	
Wabash, Boston, Mass.	30.45	773.4	33	0.6	89	n.	2	0.9			8		n.	0	0			hazy	
Wachusetts, Cardalnas Bay, B. C.	28 95	735.3	36	2.2	90	se.			4		10		se.					raining	
Wyoming, Port Royal, S. C.	30.06	763.5	57	13.9	100	ene.	9	4.0			10		calm	0	0			misty	
Yantic, N. 19′ 24′, W. 86° 22′*	29.90	759.4	75	23.9	86	ese.			4.		8					sm'h		cloudy	

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Furnished by co-operation of the owners, agents, &c., of the respective lines and vessels.																	
ALLAN LINE.																	
A. Schumacher & Co., Agents, Baltimore, and H. & A. Allan, Agents, Boston and Portland.																	
S. S. Circassian, Capt. W. H. Smith, N. 43° 35′, W. 48° 35′	30.48	774.2	34	1.1	90	sse.	4	.....	7	.....	s; w.	0	0	3	ne.	d. clouds	C. Gapou, 2d officer.
S. S. Peruvian, Capt. Joseph Ritchie, N. 54° 27′, W. 13° 36′*	29.13	739.9	42	5.6	.....	se.	2	.....	4	.....	e.	0	0	long	w.	clear	B. T. Eastaway.
S. S. Prussian, Capt. J. G. Stephen, N. 42° 51′, W. 67° 08′*	30.41	772.4	32	0.0	.....	n.	1	.....	0	.....	.....	.....	.....	sm'h	.....	clear	J. G. Stephen.
S. S. Waldensian, Capt. R. P. Moore, Portland, Maine*	30.44	773.2	29	—1.7	.....	ne.	3	.....	0	.....	.....	0	0	.....	.....	clear	.....
AMERICAN S. S. CO.																	
Peter Wright & Sons, Agents, Philadelphia.																	
S. S. British Crown, Capt. E. H. Freeth, N. 38° 50, W. 73° 30′*†	30.12	765.0	46	7.8	.....	se.	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	Smith & Jones.
S. S. Illinois, Capt. J. W. Shackford, Philadelphia, Penn	30.18	766.6	40	4.4	82	ene.	2	.....	10	.....	ene.	.....	.....	.....	.....	overcast	Cauffman & Morse.
S. S. Indiana, Capt. R. W. Sargent, N. 43° 36′, W. 41° 32′†	30.25	768.3	46	7.8	69	nw.	3	.....	5?	.....	nw.	sh'rs	shr's	mod.	nw.	clear?	H. C. Fleming, 2d off.
S. S. Ohio, Capt. Henry Morrison, Liverpool, England*†	28.75	730.2	49	9.4	100	e.	6	.....	10	.....	s.	.....	.....	.....	.....	rainy	Worth & Snow.
S. S. Pennsylvania, Capt. G. H. Dodge,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Townshend.
ANCHOR LINE.																	
Henderson Brothers, Agents, New York.																	
S. S. Devonia, Capt. H. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Young.
S. S. Galatia, Capt. J. D. Allison N. 48° 46′, W. 11° 30′†	29.05	737.9	.....	.....	.....	ssw.	6	.....	9	.....	sw.	4 h'r	4 h'r	cross	sw.; nw.	.....	John Dan, 3d officer.
ATLAS LINE.																	
Pim, Forwood & Co., Agents, New York.																	
S. S. Alps, Capt. C. P. Krause,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. P. Krause.
S. S. Alvo, Capt. D. Williams, Savanilla, U. S. C*	29.92	760.0	79	26.1	.....	nne.	2	.....	1	.....	n.	0	0	.....	.....	fine	J. Sandberg.
S. S. Andes, Capt. W. P. Gladwin, N. 28° 45′. W. 74° 22′*†	30.01	762.2	69	20.6	.....	se.	3	.....	.....	.....	.....	0	0	mod.	s.	fine	W. H. Bennett.
S. S. Arden, Capt. R. de Echevarrieta, N. 31° 20′, W. 75° 00′	.....	.....	.....	.....	.....	e.	1	.....	2?	.....	se.	.....	.....	sm'h	se.	raining?	R de Echevarrieta.
S. S. Athos, Capt. C. G. Pearce,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Frasher, 3d officer.
BOSTON & HALIFAX.																	
E. W Nickerson, Agent, Boston.																	
S. S. Carroll, Capt. S. E. Wright, Boston, Mass†	30.33	770.4	55	12.8	.....	ese.	.....	.....	.....	.....	.....	.....	.....	.....	.....	clear	S. E. Wright.
BRITISH METEOROLOGICAL OFFICE.																	
S. Auckland, Capt. A. McDougall, S. 24° 43′, W. 28° 52′	30.09	764.3	78	25.6	.....	var.	1	.....	8	.....	.....	.....	.....	.....	.....	raining	.....
Baroda, Capt. C. J. Russell, S. 36° 59′, W. 18° 53′	30.17	766.3	67.8	19.9	84	ese.	5	.....	7	.....	.....	.....	.....	.....	.....	d. clouds	.....
Caldew, Capt. W. Peterson, S. 24° 37′, W. 25° 40′	30.15	765.8	79.4	26.3	.....	nne.	3	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Cipero, Capt. W. N. Lalley, N. 36° 56′ W. 31° 33′	30.37	771.4	60.1	15.6	70	nw.	4	.....	3	.....	.....	.....	.....	3	nnw.	d. clouds	.....
S. City of Agra, Capt. Thos. Young,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coppename. Capt. James Buchan, N. 23° 20′, W. 57° 20′	30.13	765.3	72	22.2	90	ese.	4	.....	10	.....	.....	.....	.....	.....	.....	raining	.....
Bk. Glaramara, Capt. R. Morton,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glencairn, Capt. R. S. Tannock, N. 15° 50′, E. 89° 20′	29.98	761.5	80	26.7	82	nne.	1-2	.....	0	.....	.....	.....	.....	.....	.....	blue sky	.....
S. S. Gordon Castle, Capt. W. Waring, N. 26° 43′, E. 35° 12′	30.11	764.8	70	21.1	71	nw.	3	.....	1	.....	.....	.....	.....	.....	.....	blue sky	.....
Bg. Hermine, Capt. S. G. Jones, N. 30° 37′, W. 31° 56′	29.95	760.7	74.9	23.8	95	n.	2	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
Hope, Capt. James Campbell,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Humboldt, Capt. A. W. Jeffery,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Lochee, Capt. J. Raeburn, R. N. R., S. 1° 05′, W. 22° 56′	29.94	760.5	80.4	26.9	86	sse.	3	.....	8	.....	.....	.....	.....	.....	.....	showery	.....
May Hulse, Capt. H. Youlden, S. 34° 15′, W. 72° 12′	30.03	762.7	57.5	14.2	87	ssw.	4	.....	2	.....	.....	.....	.....	.....	.....	blue sky	.....
Bk. Mertola, Capt. E. W. Turner,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minho, Capt. J. Lawson, S. 23° 00′, W. 43° 10′	29.94	760.5	79	26.1	78	e.	1	.....	3	.....	.....	.....	.....	.....	.....	d. clouds	.....
Naiad, Capt. John Smith, N. 45° 01′, W. 25° 04′	29.84	757.9	48.5	9.2	71	wnw.	8	.....	4	.....	.....	.....	.....	.....	.....	showery	.....
Pole Star, Capt. F. Norman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Queen of Cambria, Capt. M. Parry, N. 2° 23′, E. 88° 04′	29.84	757.9	86	30.0	75	nne.	3	.....	6	.....	.....	.....	.....	.....	.....	d. clouds	.....
S. S. Strathleven, Capt. C. W. Pearson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Superb, Capt. Berridge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. W. Barker.
BRISTOL CITY LINE.																	
Arkell & Co., Agents, New York.																	
S. S. Brooklyn City, Capt. S. Windham, Hudson River, N. Y*†	30.38	771.6	.....	.....	.....	ne.	3	.....	0	.....	.....	0	0	.....	.....	clear	Wm. Fitt.
CROMWELL LINE.																	
Clark & Seaman, Agents, New York																	
S. S. Hudson, Capt. H. R. Freeman,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Freeman.
S. S. New Orleans, Capt. T. P. C. Halsey, N. 38° 30′, W. 74° 30′*†	30.32	770.1	44	6.7	.....	e.	.....	.....	8	.....	e.	.....	.....	mod.	e.	cloudy	T. P. C. Halsey.
CUNARD LINE.																	
Vernon H. Brown & Co., Agents, New York.																	
S. S. Bothnia, Capt. W. McMickan,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Stembridge, 3d offr
S. S. Gallia, Capt. W. H. P. Hains, N. 48° 20′, W. 30° 48′†	29.97	761.2	45	7.2	92	nnw.	6	.....	5	.....	n.	24 h'r and	rain hail	mod.	n.	squally	J. H. Mills, 3d officer.

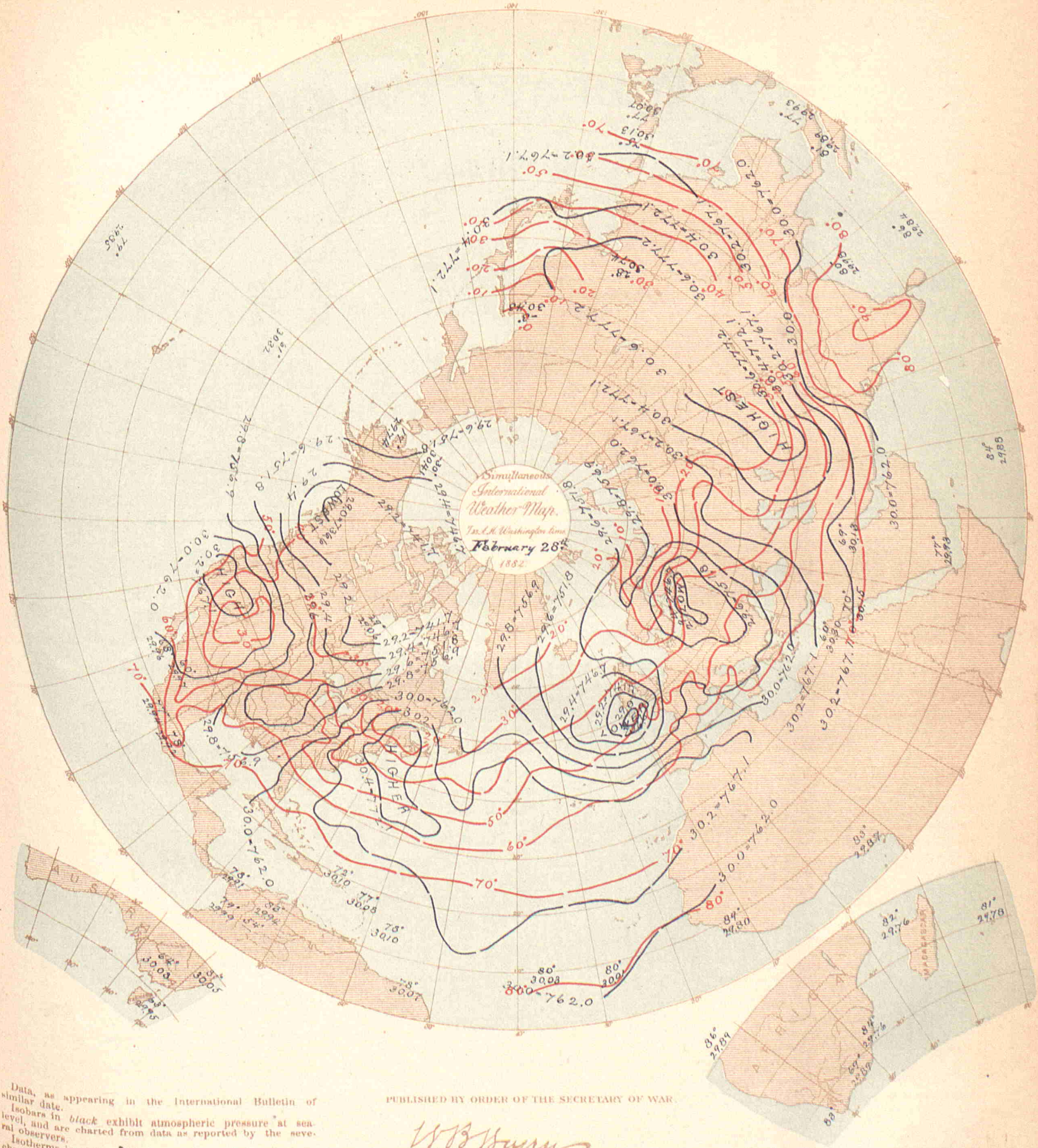
VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
GENERAL TRANS-ATLANTIC CO. *Louis de Beblan, Agent, New York.*																	
S. S. Canada, Capt. E. Frangeul,																	
S. S. France, Capt Périer d'Hauterive,																	
S. S. St. Laurent, Capt. A. Sérvan,																	A. Servan.
HAMBURG AMERICAN PACKET CO. *Kurnhardt & Co., Agents, N. Y.*																	
S. S. Gellert, Capt. Kuhlewein, N. 50° 00′, W. 23° 50′*†	29.33	745.0	41	5.0		nnw.	5		2		nw.	0	0	long	nnw.	fair	
S. S. Silesia, Capt. A. Albers. N. 41° 02′, W. 68° 42′*†	30.46	773.7	35.4	1.9		ene.	3		0			0	0			clear	
S. S. Wieland, Capt. C. Hebich,																	Jorgensen, Wolkowotz
JOHNSTON LINE. *Patterson, Ramsey & Co., Agents, Baltimore.*																	
S. S. Thanemore, Capt. John Inch N. 44° 10′, W. 41° 04′	30.29	769.4				nnw.	4		5?		n.	0	0		ne.	clear.?	John Inch.
LAMPERT & HOLT'S LINE. *Lampert & Holt. Liverpool, England.*																	
S. S. Hevelius, Capt. J. Carroll, N. 8° —′, W. 27° —′*†.	30.18	766.6	80	26.7		ne.	2		10?		n.	0	0	long	nne.	clear?	J. Carroll.
LEYLAND LINE. *Thayer & Lincoln, Agents, Boston.*																	
S. S. Iberian, Capt. E. Parry,																	E. Parry.
MALLORY LINE. *C. H. Mallory & Co., Agents, New York.*																	
S. S. Colorado, Capt. M. B. Crowell, Galveston, Texas*†	29.75	755.6	64	17.8		sw.	3		3		sw.	2 h'r	2 h'r			fine	C. A. Pike, 1st officer.
MERCHANTS' EXPRESS LINE. *Funch, Edye & Co, Agents, New York.*																	
S. S. Freja, Capt. A. C. Struckmann, N. 42° 05′, W. 55° 29′*†	30.20	767.1	45	7.2	84	wnw.	6		8		nw.	1½h'r	1½h'r		wnw.	cloudy	A. C. Struckmann.
NEW YORK AND CUBA MAIL S. S. CO. *Jas. E. Ward & Co., Agents, New York.*																	
S. S. Niagara, Capt. J. B. Baker, Havana, Cuba, W.I.†*	30.14	765.5	84	28.9		calm	0		0			0	0			clear	F. C. Miller, 2d officer.
S. S. Santiago, Capt. S. F. Phillips,																	S. F. Phillips.
N. Y. HERALD WEATHER SERVICE.																	
S. S. Ailsa, Capt. J. W. Sansom, [man																	
S. S. City of Alexandria, Capt. L. F. Timmer- Vera Cruz, Mexico*† [nolds	29.90	759.4	73	22.8		s.	5								ne.	d. clouds	
S. S. City of Washington, Capt. J. W. Rey-																	
S. S. Elbe, Capt. W. Willigerod N. 42° 44′, W. 51° 24′*	30.01	762.2	38.3	3.5		sse.	6							r'gh	s.	light rain	
S. S. Lessing, Capt. B. Voss																	
S. S. Maas, Capt. T. H. Bonjer,																	
S. S. New York, Capt. R. B. Quick, N. 32° 14′ W. 79° 36′*†	30.15	765.8	62	16.7		ene.	1							sm'h		overcast	
S. S. Olbers, Capt. J. Clarke																	
S. S. P. Caland, Capt. E. Deddes,																	
S. S. Schiedam. Capt. E. M. Chevalier, N. 41° 00′, W. 53° 02′	30.03	762.7	49	9.4		nnw.	4								wsw. w.	raining	
S. S. Scythia, Capt. M. Murphy N. 50° 31′, W. 20° 02′			45	7.2		wnw.	3							mod.	ese.		
NORTH GERMAN LLOYD. *A. Schumacher & Co., Agents, Baltimore, and Oelrich & Co., Agents, New York.*																	
S. S. General Werder, Capt. H. Christoffers,																	H. Christoffers.
S. S. Hermann, Capt. H. Baur, N. 49° 00′, W. 18° 58′*†	29.34	745.2	55.4	13.0		nw.	6		7		nw.	0	0	h'vy	nw.		E. Schmidt.
S. S. Hohenzollern, Capt. R. Sander, N. 7° 04′, W. 27° 47′*	30.01	762.2	88.3	31.3		ene.	4		0			0	0	mod.	ene.	clear	G. H. Lose, 3d officer.
S. S. Leipzig, Capt. Fritz. Pfeiffer,																	Sander & Walter.
S. S. Main, Capt. Julius Barre, N. 44° 18′, W. 47° 00′*	30.35	770.9	42.8	6.0		sw.	4		8		sw.	0	0	mod.	sw.	fine	
S. S. Mosel, Capt. F. Hesse, N. 49° 43′, W. 6° 40′	29.19	741.4	50.0	10.0		sse.	8		10		sse.	4¾h'r	4¾hr	cross	sse.	heavy rain	J. Hesse.
S. S. Neckar, Capt. R. Bussius,																	Steinbronn & Tanke.
S. S. Nurnberg, Capt. J. Jaeger,																	
S. S. Oder, Capt. C. Undeutsch, Southampton' England*	29.31	744.5	50.0	10.0		s.	4		9		s.	0	0			cloudy	Moutz & Kohlenbeck.
S. S. Ohio, Capt. Gustave Meyer, N. 40° 43′, W. 57° 51′	30.21	767.3				wnw.	6		7		nw.	1½ hr	1½ hr	r'gh	nw.	fair	Hattensaur & Raetz.
S. S. Strassburg, Capt. O. Heimbruch, N. 41° 30′, W. 64° 50′*	30.46	773.7	37.0	2.8	90	nne.	5		2		ne.	0	0	sm'h	nne.	fair	Schuckmann & von [Goessel.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President, San Francisco.*																	
S. S. Belgic, Capt. H. Davison, Hong Kong, China†	30.17	766.3	64	17.8	89	calm	0		8		ne.	0	0	sm'h		cloudy	J. Jones, 2d officer.
S. S. Gaelic, Capt. E. O. Hallett, N. 36° 33′, W. 167° 48′†*	30.32	770.1	61	16.1	70	e.	3		8		ne.			mod.	nnw.	cloudy	
S. S. Oceanic, Capt. J. Metcalfe, N. 39° 40′, W. 129° 25′*	29.76	755.9	53	11.7	83	wsw.	6		9		sw.			5	wsw.	cloudy	
OCEAN S. S. CO. *George Young, Agent, New York.*																	
S. S. City of Augusta, Capt. K. S. Nickerson, Tybee Roads, Ga*†	29.79	756.7				ne.	1		8		wsw.					smoky	K. S. Nickerson.
S. S. Seminole, Capt. H. K. Hallett Boston, Mass†	30.47	773.9	40	4.4	63	ne.	1		2		e.					fair	H. K. Hallett.

Vessels and Masters.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued																	
OREGON IMPROVEMENT CO. *John L. Howard, Agent, San Francisco.*																	
S. S. Mississippi, Capt. E. W. Holmes, Seattle, Wash. Ter.†	29.57	751.1	45	7.2	84	ssw.	4	.....	8	.....	sw.	.....	.....	.....	.....	fair	E. W. Holmes.
S. S. Willametta, Capt. L. Meyer N. 41° 34′, W. 125° 15′*†	30.00	762.0	50	10.0	100	s.	6	.....	7	.....	s.	½ h'r	½ h'r	long high	wnw.	raining	L. Meyer.
OREGON RAILWAY & NAVIGAT'N CO. *K. Van Otterendorp, Agent, San Francisco.*																	
S. S. City of Chester, Capt. G. Reichmann	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. James, 2d off.
S. S. Columbia, Capt. Fred. Bolles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Irvine.
S. S. Oregon, Capt. E. Polemann, N. 39° 14′, W. 123° 56′†	30.19	766.8	50	10.0	93	sse.	5	.....	10	.....	.....	.....	.....	mod.	sw.	squally	G. Boese.
PACIFIC COAST S. S. CO. *Goodal, Perkins & Co., Agents, San Francisco.*																	
S. S. Ancon, Capt. J. N. Ingalls. N. 33° 42′. W. 118° 14′†	30.12	765.0	46	7.8	92	n.	2	.....	0	.....	.....	.....	.....	sm'h	.....	clear	.....
S. S. Geo. W. Elder, Capt. H. G. Morse,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. S. Idaho, Capt. H. M. Hayward, Seattle, Wash. Ter*†	29.75	755.6	40	4.4	63	s.	6	.....	2	.....	.....	.....	.....	.....	.....	clear	.....
S. S. Orizaba, Capt. Chas. B. Johnson,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harisson & McCallum.
S. S. Senator, Capt. Thos. Wallace. San Francisco, Cal†	30.38	771.6	49	9.4	93	s.	1	.....	10	.....	sw.	.....	.....	.....	.....	drizzling	.....
S. S. State of California, Capt. G. Debney, Portland, Oregon†	29.55	750.6	44	6.7	?	ssw.	4	.....	10	.....	sw.	24 h'r	24 h'r	.....	.....	raining	.....
S. S. Victoria, Capt. W. E. Plummer, N. 40° 30′, W. 124° 55′	.....	.....	49	9.4	93	ssw.	6	.....	10	.....	.....	.....	.....	very h'vy	ssw.	raining	J. C. Hunter.
PACIFIC MAIL S. S. CO. *Williams, Dimond & Co., Agents, San Francisco, and H. J. Bullay, Supt. New York.*																	
S. S. Australia, Capt. A. N. M. Tulloh. N. 3° 13′, W. 166° 00′	29.85	758.2	79	26.1	86	ene.	3	.....	2	.....	ene.	1 h'r	light	mod.	e.	clear	.....
S. S. City of New York, Capt. W. B. Cobb.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Hawes, 2d off.
S. S. City of Rio de Janeiro, Capt. Cavarly Acapulco, Mexico†	30.12	765.0	78	25.6	77	nw.	2	.....	0	.....	.....	0	0	long	ne.	clear	J. M. Dow, 3d officer.
S. S. City of Sydney, Capt. H. C. Dearborn, Sydney, N. S. W.†	30.05	763.3	81	27.2	58	ne.	5	.....	8	.....	ne.	0	0	sm'h	.....	cloudy	E. Le Saik.
S. S. City of Tokio, Com. J. Maury Hong Kong, China†	30.20	767.1	66	18.9	68	ese.	2	.....	10	.....	e.	0	0	.....	.....	cloudy	W. Thaxter.
S. S. Colima, Capt. Robert R. Searle, Panama, Panama..†	29.91	759.7	78	25.6	82	s.	3	.....	5	.....	calm	0	0	.....	.....	fair	.....
S. S. Granada, Capt. M. Connolley, N. 23° 28′, W. 110° 37′†	29.96	761.0	68	20.0	?	nw.	4	.....	0	.....	.....	0	0	large	wnw.	hazy	.....
S. S. South Carolina, Capt. W. J. Russell, Acajutla, San Salvador.†	29.98	761.5	77	25.0	82	ne.	1	.....	0	.....	.....	0	0	sm'h	.....	hazy	A. W. Hart, 2d off.
S. S. Zelandia, Capt. H. Webber, S. 36° 36′, E. 174° 55′	30.06	763.5	71	21.7	85	nw.	3	.....	10	.....	nw.	.....	.....	sm'h	.....	rainy	.....
QUEBEC S. S. CO. *R. A. Outerbridge & Co., Agents, New York.*																	
S. S. Burmuda, Capt. F. M Faircloth.. Aguadilla, Porto Rico. W. I†	30.15	765.8	79	26.1	.....	e.	1	.....	1	.....	e.	0	0	sm'h	.....	fine	F. M. Faircloth.
S. S. Muriel, Capt. Geo. S. Locke, N. 11° 30′, W. 61° 00′	.....	.....	.....	.....	.....	e.	3	.....	0	.....	.....	0	0	mod.	ne.	fair	G. S. Locke.
RED STAR LINE. *Peter Wright & Sons, Agents, New York and Philadelphia.*																	
S. S. Belgenland, Capt. J. Stokes, N. 49° 35′. W. 9° 11′*†	28.73	729.7	49	9.4	.....	sse.	6	.....	9	.....	.....	4 h'r	driz.	cross	sw.	rainy	.....
S. S. Nederland, Capt. J. Uberweg, N. 42° 50′, W. 54° 52†*	30.67	779.0	37	2.8	.....	wnw.	4	.....	10	.....	wnw.	2 h'r	rain snow	short	wsw.	overcast	Albrecht & Bull.
S. S. Rhynland, Capt. W. G. Randle, Antwerp, Belgium*	29.67	753.6	45	7.2	76	ne.	1	.....	10	.....	ne.	0.1	3.	.....	.....	overcast	U. H. Grant, 2d off.
S. S. Switzerland, Capt. J. C. Jamison, N. 40° 45′. W. 62° 23′†	30.34	770.6	.....	.....	.....	nnw.	5	.....	10	.....	nnw.	0	0	mod.	nnw.	cloudy	.....
S. S. Vaderland, Capt. W. A. Beynon N. 49° 19′ W. 19° 38′*	29.16	740.7	47	8.3	.....	nw.	5	.....	8	.....	nnw.	0	0	long	nnw.	cloudy	Egmond & Ludder.
S. S. Waesland, Capt. H. Nickels, Jersey City, N. J*	30.19	766.8	39	3.9	.....	ene.	4	.....	0	.....	.....	0	0	.....	.....	clear	Olsen & Assfeld.
ROTTERDAM LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. W. A. Scholten, Capt. G. I. Vis, N. 49° 35′, W. 80 00′*	28.90	734.0	53.2	11.8	97	s.	4	.....	10	.....	ssw.	10 h'r	10 h'r	mod.	se.	rainy	.....
THINGVALLA LINE. *Funch, Edye, & Co., Agents, New York.*																	
S. S. Thingvalla, Capt. S. T. Laub, Brooklyn, N. Y.†	30.44	773.2	36.5	2.5	.....	n.	1	.....	5?	.....	n.	0	0	.....	.....	clear?	J. T. Elberling.
WARREN LINE. *Warren & Co., Agents, Boston.*																	
S. S. Iowa, Capt. S. Walters	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Walters.
WHITE STAR LINE. *R. J. Cortis, Agents, New York.*																	
S. S. Adriatic, Capt. J. W. Jennings	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moore.
S. S. Britannic, Capt. H. H. Perry, N. 42° 12′. W. 51° 48′*†	29.88	758.9	46	7.8	.....	sse.	2	.....	10	.....	.....	5 h'r	hv'y	mod.	sw.	raining	W. Brownless, 4th off.
S. S. Celtic, Capt. Benjamin Gleadell, Liverpool, Eng.*†	29.32	744.7	41	5.0	.....	se.	5	.....	10	.....	se.	8 h'r	light	.....	.....	hazy	B. Gleadell.
S. S. Germanic, Capt. C. W. Kennedy, N. 47° 04′, W. 39° 28′*†	30.35	770.9	46	7.8	.....	nnw.	4	.....	5	.....	nw.	sh's	sh's	sm'h	nw.	d. clouds	H. Day, 4th officer.
S. S. Republic, Capt. P. J. Irving.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Goulden, 4th officer
WILSON LINE. *Sanderson & Sons, Agents, New York.*																	
S. S. Romano, Capt. Joseph Mitchell, New York, N. Y.*	30.16	766.1	40	4.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaw & Smith.

VESSELS AND MASTERS.	Barometer reduced to sea-level.		Temperature of the air.		Rel. Hum.	Wind.		Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea Swell.		Weather.	Observers.
						Direction.	Force	Amount and kind.		Direction.							
								Up'er	Lo'er	Upper.	Lower.			Character.	Direction.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
MERCHANT-MARINE SERIES.—Continued.																	
MISCELLANEOUS.																	
Sch. Addie Fuller, Capt. James Jorgensen, Cedar Keys, Florida†	30.08	764.0	60.5	15.8	94	e.	3	4 cs	0	w.		0	0			fair	J. Jorgensen.
Bk. Adelaide, Capt. Thos. Bailey, N. 16° 22′, W. 36° 57′*†	30.16	766.1	73	22.8		e.	4		1		e.	0	0	r'gh	e.	clear	C. Bailey.
Bk. Alpha, Capt. O. Grönn, N. 20° 40′, W. 63° 10′.*†	30.15	765.8	71	21.7		nne.	3		10		n.	4 h'r	light	mod.	nw.	light rain	Ole Grönn.
Sch. Annie M. Law, Capt. F. S. Crosby, N. 42° 33′, W. 37° 01′*†	30.30	769.6	55	12.8	73	calm	0		2		nnw.	2 h'r	light	con.	n	fine	C. McCarthy
Schr Annie R. Lewis, Capt. L. L. Lewis. N. 28° 20′, W. 70° 57′*†	30.22	767.6	68	20.0		ene.	1		0			0	0	r'gh	ne.	clear	L. L. Lewis.
Bk. Antioch, Capt. H. J. Hemingway, S. 19° 40′ W. 37° 42′*†	29.95	760.7	85	29.4		n.	4		3		ne.	0	0	sm'h	se.	clear	H. J. Hemingway.
Bk. Bergenseren, Capt. J. R. Mortensen, N. 31° 04′, W. 67° 40′†	30.24	768.1				ese.	4				se.	0	0	mod.	ene.	overcast	J. R. Mortensen.
Bk. Celestina, Capt. G. Carniglia., N. 33° 56′, W. 56° 01′*†	30.47	773.9				w.	1		5		wsw.	0	0	sm'h	n.		G. Carniglia.
S. E. J. Spicer, Capt. Geo. D. Spicer, N. 39° 54′, W. 64° 16′*†	30.22	767.6				nne.	3				n.	½ h'r	light	mod.	nne.	cloudy	G. D. Spicer.
Bk. E. L. Pettengill, Capt. A. J. Pettingill. S. 56° 10′ W. 78° 36′†	29.70	754.4				ne.	3		8		ne.	0	0	mod.	ne.		A. J. Pettengill
S. Enoch Train, Capt. H. D. Chapman. Bremerhaven, Germany*	29.52	749.8				nw.	1		5		nnw.	10 h'r	10 h'r			fine	H. D. Chapman.
S. Festina Lente, Capt. J. C. Andersen, Jr.,																	J. C. Andersen, Jr.
U. S. F. C. S. FishHawk, Lt. Tanner, U.S.N., N. 38° 23′, W. 76° 19′†	30.34	770.6	43	6.1	83	e.	3		10		e.	0	0			cloudy	C. H. Cleaveland.
S. Frank N. Thayer, Capt. G. D. Morrison																	G. D. Morrison.
Bk. Freya, Capt. J. R. Blaouw, N. 20° 33′, W. 57° 22′			76	24.4		e.	2		5		ne.	0	0	sm'h		fair	
Bk. Gamaliel, Capt. D. J. Anthony,																	
Bk. Geo. Booth, Capt. D. Williams, S. 20° 48′, W. 30° 43′*†	29.90	759.4	84	28.9		e.	3					0	0	sm'h			D. Williams.
Bk. Granville, Capt. R. Bonney, N. 14° 35′, W. 36° 00′*†	30.29	769.4	74	23.3		ene.	3				ene.	0	0	rg'h	ene.	clear	
Schr Henry Denison, Capt. Jno. Fehring, N. 27° 48′, W. 65° 06′†	30.24	768.1				se.	5		3		se.	0	0	high	se.	fair	J. Fehring
Bk. Johanne Auguste, Capt. H. Schmidt, S. 35° 53′, E. 78° 10′*†	30.11	764.8				calm	0		2		nne. se.	0	0	sm'h		fair	G. Kaswurm.
Bk. Kate Cann, Capt. Geo. E. Cann, N. 38° 41′, W. 58° 02′						nne.	4		10			0	0	mod	n.	hazy	G. E. Cann.
Bkt. Kryolith, Capt. Adam Smith, N. 34° 43′, W. 61° 30′*†	30.35	770.9				wsw.	3–4		2		wsw.	0	0	sm'h	n.	clear	A. Smith.
Schr. Moravian, Capt. Geo. T. L. Compte																	G. T. L. Compte.
Bk. New York, Capt. J. E. Sorensen,																	Sorensen & Arvesen.
Bk. Pawashick, Capt. Edwin Fry, N. 17° 21′ W. 47° 21′*†	30.45	773.4	74	23.3	90	e.	6		2		e.			h'vy	e.	fine	E. Fry.
Bk. Peppina, Capt. Giov. S. d'Ancona, N. 43°, 35′ E. 15° 13′†	29.74	755.4	61	16.1	82	nw.	1		8		sw.			sm'h		cloudy	G. S. d'Ancona.
Bk. Pilgrim, Capt. J. Connolly, S. 39° 30′, W. 1° 15′*†	30.15	765.8				wsw.			2		wsw.	0	0			clear	J. Connolly.
Schr. S. B. Hubbard, N. 31° 08′ W. 81° 10½†.	30.11	764.8	71	21.7		e.	1		0			0	0	long	e.	fine	H. Mehaffey, 2d mate
Bk. Stella, Capt. H. N. T. Sommer, S. 38° 45′, W. 50° 58′*	29.69	754.1	65.3	18.5	94	wsw.	5		0					mod.	w.	blue sky	H. N. T. Sommer.
Bk. Sunbeam, Capt. Joseph Hand, N. 21° 24′. W. 48° 17′*†	30.26	768.6	78	25.6	86	e.	5		0			0	0	mod.	e.	clear	J. Green.
Bg. Wanburn, Capt. I. W. Covert,																	
S. Wm. Woodbury Capt. H. T. Schmidt, N. 53° 48′, E. 8° 10′*†	29.45	748.0	54	12.2	73	ne.	2				wnw.			sm'h		clear	H. T. Schmidt.
Bk. Winifred, Capt. N. P. Dutton,																	N. P. Dutton.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Heliotype Printing Co Boston

SUMMARY AND REVIEW

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

FEBRUARY, 1882.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for February, 1882.																			Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.														
						Actual.		Reduced.					Directions.									Total Movement.					
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
Algerian Series.	° ′	° ′																									
Nemours	N. 35 06	W. 1 50	0.00 m.	13	4	.....	.....	30.32	770.2	64.8	18.2	81.0	.....	1	13	9	.....	.....	2	3	.....	.....	.....	1	2.06	52.4
Algiers	N. 36 47	E. 3 04	0.20 p.m.	72	22	.....	.....	30.34	770.5	50.3	13.5	76.7	7	2	4	2	1	1	1	10	.....	.....	.....	3	2.94	74.6
La Calle	N. 36 54	E. 8 26	0.42 p.m.	36	11	.....	.....	30 33	770.3	57.7	14.3	71.0	2	5	2	5	2	6	4	2	.....	.....	.....	4	2.05	52.1
Tunis	N. 36 42	E. 10 13	0.49 p.m.	46	14	.....	.....	30.32	770.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sfax	N. 34 44	E. 10 40	0.51 p.m.	?	?	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1.29	32.8
Saida	N. 34 51	E. 0 10	0.09 p.m.	2844	867	.....	.....	30.35	770.8	52.7	11.5	63.0	9	6	2	4	.....	1	.....	6	.....	.....	.....	6	0.04	1.0
Tebessa	N. 35 24	E. 8 06	0.40 p.m.	2890	881	.....	.....	30.34	770 7	49.5	9.7	55.0	9	9	.....	1	2	4	1	1	1	.....	.....	5	1.99	50.5
Geriville	N. 33 45	E. 1 10	0.13 p.m.	4285	1306	.....	.....	.....	.....	48.0	8.9	51.0	4	4	4	2	5	.....	1	8	.....	.....	.....	2	1.28	32.4
Laghouat	N. 33 48	E. 2 53	0.20 p.m.	2559	780	.....	.....	30.40	772.1	52.3	11.3	53.7	6	1	2	4	6	1	5	2	1	.....	.....	5	0.24	6.2
Biskra	N. 34 51	E. 5 41	0.31 p.m.	410	125	.....	.....	30.38	771.6	62.4	16.9	42.0	10	2	.....	2	2	12	.....	.....	.....	.....	.....	.....	.....	.....
Australian Series.																											
Melbourne	S. 37 50	E. 144 58	9.47 p.m.	91	28	29.80	757.0	29.89	759.3	61.3	16.3	72.0	2	.....	2	3	8	11	1	1	.....	.....	.....	4	0.29	7.4
Sub-Series.																											
Austro-Hungarian Series.																											
Agram	N. 45 48	E. 15 53	1.12 p.m.	536	163	29.77	756.1	30.34	770.6	43.5	6.4	56.1	.....	1	1	5	4	10	3	4	.....	.....	.....	3	0.87	22.2
Cracow	N. 50 04	E. 20 00	1.28 p.m.	722	220	29.52	749.7	30.25	768.3	37.2	2.9	79.2	3	5	11	7	.....	.....	2	.....	.....	.....	.....	7	0.94	23.8
Eperies	N. 48 58	E. 21 15	1.33 p.m.	820	250	29.32	744.6	30.23	767.9	32.0	0.0	72.5	8	5	.....	.....	7	1	.....	.....	7	.....	.....	6	0.52	13.2
Gratz	N. 47 04	E. 15 28	1.10 p.m.	1171	357	29.02	737.0	30.31	769.8	42.3	5.7	49	1	4	3	4	10	4	2	.....	.....	.....	.....	3	0.38	9.7
Hermannstadt	N. 45 47	E. 24 13	1.45 p.m.	1352	412	28.77	730.8	30.27	768.9	35.6	2.0	78	6	9	5	1	.....	7	.....	.....	.....	.....	.....	6	inap.	inap.
Kremsmünster	N. 48 03	E. 14 08	1.04 p.m.	1260	384	28.94	735.1	30.34	770.7	36.1	2.3	75.6	.....	3	3	7	.....	.....	3	8	4	.....	.....	4	1.04	26.4
Lemberg	N. 49 50	E. 24 00	1.44 p.m.	978	298	29.12	739.6	30.16	766.0	34.3	1.3	69.4	.....	13	.....	9	1	1	1	6	.....	.....	.....	7	2.39	60.7
Pola	N. 44 52	E. 13 51	1.04 p.m.	105	32	30.21	767.3	30.33	770.3	47.5	8.6	68.4	.....	3	12	1	4	1	5	2	.....	.....	.....	3	1.17	29.8
Szathmar	N. 47 46	E. 22 53	1.39 p.m.	430	131	29.76	756.0	30.23	767.9	36.9	2.7	64	1	5	4	4	5	.....	8	1	.....	.....	.....	6	0.22	5.7
Szegedin	N. 46 15	E. 20 10	1.29 p.m.	256	78	29.98	761.6	30.27	768.9	42.1	5.6	71.3	5	4	4	5	3	1	.....	1	5	.....	.....	3	0.34	8.7
Trieste	N. 45 39	E. 13 46	1.04 p.m.	85	26	30.24	768.2	30.35	770.8	47.3	8.5	55.6	.....	.....	.....	.....	.....	.....	3	5	25	.....	.....	3	0.66	16.7
Vienna	N. 48 12	E. 16 22	1.14 p.m.	663	202	29.58a	751.3a	30.32a	770.2a	40.8a	4.9a	57	2	9	5	.....	1	5	.....	.....	6	.....	.....	4	0.78	19.8
Belgian Series.																											
Brussels	N. 50 51	E. 4 22	0.26 p.m.	187	57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Furnes	N. 51 04	E. 2 40	0.19 p.m.	20	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maeseyck	N. 51 06	E. 5 48	0.32 p.m.	115	35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British Series.																											
Aberdeen	N. 57 10	W. 2 06	0.00 m.	89	27	29.90	759.4	30.00	762.0	45.3	7.4	70.9	.....	2	5	8	10	2	.....	1	.....	.....	.....	6	0.98	24.9
Armagh	N. 54 21	W. 6 39	11.42 a.m.	207	63	29.85	758.2	30.10	764.5	46.5	8.1	81.1	.....	2	5	6	9	5	.....	1	.....	.....	.....	7	.....	.....
Bidston	N. 53 24	W. 3 04	11.56 a.m.	197	60	.....	.....	30.18	766.0	45.2	7.3	83.2	.....	.....	7	7	.....	12	1	1	.....	.....	.....	8	.....	.....
Bolton	N. 53 35	W. 2 28	11.58 a.m.	500	152	29.60	751.8	30.14	765.5	43.4	6.3	85.3	1	4	4	6	3	8	1	1	.....	.....	.....	9	.....	.....
Bradford d.	N. 53 48	W. 1 47	0.01 p.m.	366	111	29.74	755.4	30.13	765.3	45.8	7.7	83.7	.....	.....	4	12	5	3	.....	.....	.....	.....	.....	8	2.21	56.1
Bridgetown	N. 13 04	W. 59 37	8.10 a.m.	28	9	30.01	762.2	30.04	763.0	80.2	26.8	69.1	.....	.....	.....	.....	.....	.....	.....	28	.....	.....	.....	4	.....	.....
Cardington	N. 52 08	W. 0 27	0.06 p.m.	109	33	.....	.....	30.19	766.8	45.2	7.3	82.1	1	6	4	8	5	2	1	1	.....	.....	.....	8	.....	.....
Chatham	N. 51 25	E. 0 33	0.10 p.m.	120	37	30.13	765.3	30.26	768.6	45.3	7.4	79.5	1	3	1	12	3	1	2	1	4	.....	.....	4	.....	.....
Falmouth	N. 50 09	W. 5 04	11.48 a.m.	211	64	30.02	762.5	30.25	768.3	48.2	9.0	79.6	1	3	6	3	4	6	4	1	.....	.....	.....	7	.....	.....
Fort Napier	S. 30 00	E. 31 00	2.12 p.m.	2200	671	27.61	701.3	29.82	757.4	83.8	28.8	45.5	.....	.....	.....	.....	.....	7	5	5	11	.....	.....	2	.....	.....
Free Town	N. 8 30	W. 13 14	11.15 a.m.	224	68	29.60	751.8	29.82	757.4	88.1	31.2	65.2	.....	13	10	1	.....	.....	.....	3	1	.....	.....	3	.....	.....
Galway	N. 53 15	W. 9 03	11.32 a.m.	32	10	.....	.....	30.02b	762.5b	47.9k	8.8k	82.4k	1a	.....	2	9	13	1	.....	1	.....	.....	.....	9a	1.25	31.7
Gibraltar	N. 36 09	W. 5 21	11.47 a.m.	50	15	30.30	769.6	30.36	771.1	61.0	16.1	82.5	.....	.....	2	4	.....	.....	9	13	.....	.....	.....	5	.....	.....
Glasgow	N. 55 53	W. 4 17	11.51 a.m.	184	56	29.82	757.4	30.03	762.7	45.4	7.4	79.0	1	2	8	8	4	2	1	2	.....	.....	.....	8	.....	.....
Greenwich	N. 51 29	0 00	0.08 p.m.	159	48	30.07	763.8	30.25	768.3	44.6	7.0	80.8	3	3	2	9	6	2	3	.....	.....	.....	.....	6	.....	.....
Guernsey	N. 49 27	W. 2 41	11.58 a.m.	275	84	29.98	761.5	30.28	769.1	46.3	7.9	83.8	3	3	3	5	2	6	2	4	.....	.....	.....	7	.....	.....
Kew	N. 51 28	W. 0 19	0.07 p.m.	34	10	30.22	767.6	30.25	768.3	44.9	7.2	75.4	2	2	6	4	4	3	6	1	.....	.....	.....	9	.....	.....
Leicester	N. 52 39	W. 1 08	0.04 p.m.	245	75	29.95	760.7	30.21	767.3	46.2	7.9	83.0	.....	4	.....	20	1	2	.....	.....	1	.....	.....	7	.....	.....
Malta	N. 36 00	E. 14 30	1.06 p.m.	70	21	30.20	767.1	30.27	768.8	57.4	14.1	74.5	4	6	1	4	.....	2	.....	11	.....	.....	.....	6	.....	.....
Nassau	N. 25 04	W. 77 22	6.58 a.m.	44	13	30.22	767.6	30.26	768.6	71.7	22.1	82.7	1	.....	1	3	1	4	3	15	.....	.....	.....	.....	.....	.....
Oscott	N. 52 28	W. 1 55	0.00 m.	483	147	.....	.....	.....	.....	.....	.....	.....	.....	2	1	5	7	5	2	1	1	.....	.....	8	.....	.....
Oxford	N. 51 46	W. 1 17	0.03 p.m.	210	64	30.00	762.0	30.23	767.8	44.5	6.9	79.8	.....	2	3	3	5	4	7	2	.....	.....	.....	8	.....	.....
Plymouth	N. 50 22	W. 4 10	11.51 a.m.	69	21	30.17	766.3	30.25	768.3	48.0	8.9	85.0	2	3	3	5	4	7	2	.....	1	.....	.....	7	.....	.....
Sandwick Manse	N. 59 05	W. 3 20	11.54 a.m.	94	29	.....	.....	29.86	758.4	43.4	6.3	86.6	2	2	7	6	5	3	1	1	1	.....	.....	6	.....	.....
Scutari Cemet'y	N 41 00	E. 29 03	2.04 p.m.	60	18	30.14	765.5	30.21	767.3	41.4	5.2	72.2	5	1	2	10	3	.....	1	5	1	.....	.....	7	1.47	37.3
Sheffield	N. 53 23	W. 1 28	0.02 p.m.	260	79	29.87	758.7	30.15	765.8	46.3	7.9	81.2	1	2	2	12	4	4	.....	1	2	.....	.....	8	2.42	61.5
Silloth Rectory	N. 54 52	W. 3 22	11.54 a.m.	28	9	30.05	763.3	30.08	764.0	45.2	7.3	85.4	1	5	6	8	4	.....	.....	3	1	.....	.....	9	.....	.....
Stonyhurst	N. 53 51	W. 2 28	11.58 a.m.	361	110	.....	.....	30.15	765.8	43.9	6.6	83.1	1	3	8	6	6	2	1	1	.....	.....	.....	5	.....	.....
Stratfield Turgiss	N. 51 17	W. 0 53	0.04 p.m.	197	60	30.03	762.7	30.25	768.3	45.7	7.6	78.9	.....	4	8	4	3	6	.....	1	2	.....	.....	7	.....	.....
Truro	N. 50 16	W. 5 04	11.53 a.m.	43	13	30.16	766.1	30.21	767.3	51.7	10.9	76.7	2	5	4	3	3	7	4	.....	.....	.....	.....	9	.....	.....
Valencia	N. 51 55	W. 10 18	11.27 a.m.	23	7	30.10	764.5	30.13	765.3	49.3	9.6	81.0	1	3	4	3	4	10	3	.....	.....	.....	.....	.....	.....	.....

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Met'rs	Result of Simultaneous Observations for February, 1882. Mean Barometer. Actual. Inch.	Mill.	Reduced. Inch.	Mill.	Mean Temperature. Fah.	Cent	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	NE	C	Total Movement. Miles	Kil.	Average Cloudiness. 0-10	Total Precipitation. Inch.	Mill.
Canadian Series	° ′	° ′																								
Bathurst	N. 47 39	W. 65 43	7.45 a.m.	35	11	.....	.....	.....	.....	11.8d	−11.2d	.....	1c	6	.....	2	.....	.....	.....	4	12	.....	.....	6c	0.80	20.3
Charlottetown	N. 46 14	W. 63 10	7.55 a.m.	38	12	29.94	760.5	29.99	761.7	14.1	− 9.9	97.0	3	7	1	3	4	2	1	4	3	7235	11643	7	6.36	161.5
Chatham	N. 47 03	W. 65 29	7.45 a.m.	56	17	29.99	761.7	30.06	763.5	8.7	−12.9	93.8	4	7	4	2	3	.....	2	1	5	4245	6832	6	2.78	70.6
Cornwall	N. 45 01	W. 74 43	7.09 a.m.	175	53	29.87	758.7	30.08	764.0	17.7	− 7.9	93.6	2	6	6	1	.....	1	11	1	.....	.....	.....	7	1.50	38.1
Dalhousie	N. 48 04	W. 66 21	7.32 a.m.	150	46	29.87	758.7	30.05	763.3	8.6	−13.0	.....	.....	.....	16	.....	.....	.....	5	.....	7	.....	.....	6	1.56	39.6
Father Point	N. 48 31	W. 68 28	7.34 a.m.	20	6	30.04	763.0	30.06	763.5	10.0	−12.2	89.4	3	3	4	7	1	.....	.....	9	1	10863	17482	8	1.12	28.4
Fort Garry	N. 49 51	W. 97 07	5.39 a.m.	754	230	29.13	739.9	30.05	763.3	0.8	−17.3	98.1a	4	3	4	2	3	6	.....	3	3	6171	9931	3	1.78	45.2
Fredericton	N. 45 57	W. 66 39	7.41 a.m.	59	18	29.99	761.7	30.06	763.5	10.5	−11.9	89.0	5	4	10	1	.....	4	2	.....	2	.....	.....	7	2.88	73.2
Granton	N. 43 12	W. 81 21	6.43 a.m.	1015	309	28.92	734.6	30.09	764.3	25.4	− 3.7	96.9	2	3	3	3	2	5	1	.....	9	.....	.....	6	0.87	22.1
Halifax	N. 44 39	W. 63 36	7.53 a.m.	122	37	29.86	758.4	30.00	762.0	19.6	− 6.9	94.3	1	7	6	2	.....	3	1	6	2	.....	.....	6	5.87	149.1
Hamilton	N. 43 16	W. 79 53	6.49 a.m.	358	109	29.65	753.1	30.07	763.8	29.0	− 1.7	80.0	.....	.....	9	12	.....	.....	3	4	.....	.....	.....	6	1.72	43.7
Kingston	N. 44 14	W. 76 30	7.02 a.m.	307	94	29.74	755.4	30.10	764.5	21.8	− 5.7	83.2	4	1	3	5	4	.....	1	9	1	5672	9130	7	2.50	63.5
Little Glace Bay	N. 46 12	W. 59 58	8.08 a.m.	34	10	29.87c	758.7c	29.91c	759.7c	17.6a	−8.0a	86.6a	1	8	5	4	2	2	3	3	.....	.....	.....	7	4.39	111.5
Montreal	N. 45 31	W. 73 33	7.13 a.m.	187	57	29.88	758.9	30.10	764.5	17.0	− 8.3	80.1	7	1	9	2	2	.....	5	2	.....	.....	.....	6	2.29	58.2
Moose Factory	N. 51 16	W. 80 56	6.44 a.m.	30	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Parry Sound	N. 45 19	W. 80 01	6.48 a.m.	635	194	29.32	744.7	30.06	763.5	19.0	− 7.2	82.5	4	3	2	1	2	6	8	.....	2	7464	12012	6	2.13	54.1
Peterborough	N. 44 17	W. 78 20	6.54 a.m.	688	210	29.32	744.7	30.12	765.0	23.2	− 4.9	83.0	2	7	3	.....	1	.....	2	.....	13	.....	.....	5	2.10	53.3
Port Dover	N. 42 47	W. 80 13	6.47 a.m.	635	194	29.37	746.0	30.10	764.5	28.1	− 2.2	91.3	1	7	.....	5	5	2	.....	3	5	4630	7451	6	2.08	52.8
Port Stanley	N. 42 40	W. 81 13	6.43 a.m.	592	180	29.41	747.0	30.09	764.3	27.9	− 2.3	87.6	2	2	10	1	3	1	8	1	.....	.....	.....	6	1.89	48.1
Quebec	N. 46 48	W. 71 12	7.23 a.m.	293	89	29.72	754.9	30.07	763.8	12.6	−10.8	90.0	2	7	4	1	.....	7	2	5	.....	.....	.....	5	4.72	119.9
Rockliffe	N. 46 10	W. 77 48	6.57 a.m.	418	127	29.58	751.3	30.08	764.0	10.6	−11.9	84.8	.....	6	1	.....	.....	6	3	.....	12	.....	.....	6	3.58	90.9
Saugeen	N. 44 30	W. 81 21	6.42 a.m.	656	200	29.29	744.0	30.04	763.0	24.7	− 4.1	89.8	3	2	2	5	7	3	2	2	2	9836	15829	8	1.58	40.1
St. Andrews	N. 43 04	W. 81 06	6.34 a.m.	47	14	29.96	761.0	30.01	762.2	18.3	− 7.6	87.6	4	6	3	5	1	1	2	4	2	.....	.....	5	5.03	127.8
St. John, N.B.	N. 45 17	W. 66 03	7.44 a.m.	150	46	29.84	757.9	30.02	762.5	18.2	− 7.7	92.4	7	2	2	4	3	1	3	6	.....	.....	.....	6	6.79	172.5
Stratford	N. 43 23	W. 81 00	6.44 a.m.	1182	360	28.72	729.5	30.07	763.8	24.9	− 3.9	90.6	.....	5	3	8	.....	6	1	.....	5	.....	.....	8	1.88	47.8
Sydney	N. 46 08	W. 60 10	8.07 a.m.	37	11	29.88	758.9	29.95	760.7	15.2	− 9.3	93.2	8	4	1	6	4	.....	2	.....	3	9109	14659	7	5.36	136.1
Toronto	N. 43 39	W. 79 23	6.50 a.m.	350	107	29.70	754.4	30.10	764.5	26.4	− 3.1	87.9	3	4	8	4	1	1	5	2	.....	8061	12973	8	1.62	41.1
Windsor	N. 44 59	W. 63 58	7.53 a.m.	87	26	29.88	758.9	29.98	761.5	17.7	− 7.9	94.4	7a	1	9	3	4	.....	3	.....	.....	.....	.....	7	5.80	147.3
Woodstock	N. 43 08	W. 80 47	6.48 a.m.	980	299	28.97	735.8	30.09	764.3	26.5	− 3.1	73.9	.....	2	3	4	4	3	4	1	7	.....	.....	7	1.64	41.7
Yarmouth	N. 43 50	W. 66 02	7.44 a.m.	61	19	29.91	759.7	29.98	761.5	24.6	− 4.1	81.4	7	1	.....	4	3	3	3	5	2	8012	12894	7	7.77	197.4
Sub-Series.																										
St. Johns, N. F.	N. 47 34	W. 52 42	8.37 a.m.	230	70	29.73	755.1	29.99	761.7	20.4	− 6.4	.....	.....	1	7	2	1	3	3	11	.....	.....	.....	6	6.80	172.7
St. Pierre	N. 46 47	W. 56 08	8.24 a.m.	?	?	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Colony Series.																										
Cape St. Francis	S. 34 10	E. 24 50	1.47 p.m.	25	7	29.92	760.0	29.94	760.5	72.7	22.6	82.7	.....	.....	4	7	.....	2	12	3	.....	.....	.....	6	0.64	16.3
Cape Town	S. 34 02	E. 18 29	1.22 p.m.	27	8	29.90c	759.4c	29.94c	760.5c	82.8d	28.2d	52.1d	1a	7	4	.....	13	2	.....	.....	.....	.....	.....	2b	0.19	4.8
Chinese Series.																										
Sub Series.																										
Hankow	N. 30 34	E. 114 20	7.45 p.m.	260	79	30.30	769.6	30.59	777.0	40.4	4.7	76.6h	5	6	1	1	.....	.....	2	4	4	.....	.....	7	5.90	149.9
Sung-shu-chwang	N. 36 07	E. 103 56	7.04 p.m.	4987	1520	24.75	628.7	.....	.....	25.3	− 3.7	.....	.....	.....	.....	.....	.....	.....	1	.....	27	.....	.....	4	5.08	129.
Zi-Ka-Wei	N. 31 12	E. 121 26	8.14 p.m.	23	7	30.34	770.7	30.37	771.3	39.4	4.1	84.6	3	4	2	.....	.....	1	6	12	.....	.....	.....	7	2.25	57.2
Costa Rican Series.																										
San José	N. 9 56	W. 84 00	6.15 a.m.	3757	1145	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Danish Series.																										
Copenhagen	N. 55 41	E. 12 36	0.58 p.m.	43	13	29.99	761.8	30.04	763.0	41.0	5.0	82	1	6	10	8	2	1	.....	.....	.....	.....	.....	8	.....	.....
Fanöe	N. 55 27	E. 8 24	0.42 p.m.	20	6	30.06	763.6	30.08	764.1	39.4	4.1	89	.....	3	10	9	5	.....	.....	1	.....	.....	.....	8	.....	.....
Godthaab	N. 64 11	W. 51 46	8.41 a.m.	36	11	29.54	750.2	29.58	751.3	11.1	−11.6	85g	10	2	.....	2	4	.....	2	7	1	.....	.....	6	.....	.....
Stykkisholm	N. 65 05	W. 22 46	10.37 a.m.	36	11	29.44	747.8	29.48	748.9	24.6	− 4.1	.....	.....	.....	2	4	6	3	5	6	2	.....	.....	8	.....	.....
Thorshavn	N. 62 02	W. 6 44	11.41 a.m.	29	9	29.69	754.1	29.72	755.0	40.3	4.6	79	3	1	5	9	3	1	2	3	1	.....	.....	7	.....	.....
Vestervig	N. 56 47	E. 8 20	0.41 p.m.	82	25	29.89	759.3	29.98	761.6	40.3	4.6	85	2	4	7	6	8	1	.....	.....	.....	.....	.....	7	.....	.....
French Series.																										
Agen	N. 44 12	E. 0 38	0.11 p.m.	604	184	29.69	754.2	30.37	771.5	49.3	9.6	79.7	.....	4	2	1	1	9	.....	2	9	.....	.....	.....	1.02	25.9
Alençon	N. 48 26	E. 0 05	0.09 p.m.	476	145	29.80	756.9	30.35	770.9	41.5	5.3	93.1	.....	2	2	5	9	1	.....	9	.....	.....	.....	.....	0.68	17.4
Arras	N. 50 18	E. 2 46	0.19 p.m.	239	73	30.03	762.7	30.30	769.5	42.4	5.8	85.3	.....	3	1	7	.....	7	4	.....	.....	.....	.....	.....	0.72	18.2
Avignon	N. 43 57	E. 4 48	0.27 p.m.	65	20	30.28	769.0	30.35	771.0	51.3	10.7	51.8	18	1	.....	1	1	3	1	3	.....	.....	.....	3	0.34	8.5
Bar-sur-Seine	N. 48 07	E. 4 22	0.25 p.m.	518	158	29.79	756.7	30.37	771.3	42.8	6.0	73.2	1	1	.....	5	9	9	2	1	.....	.....	.....	5	0.86	21.9
Beauvais	N. 49 26	E. 2 05	0.16 p.m.	246	75	30.07	763.8	30.36	771.2	42.6	5.9	77.2	1	3	5	3	4	2	7	3	.....	.....	.....	8	1.15	29.2
Besançon	N. 47 14	E. 6 01	0.32 p.m.	846	258	.....	.....	30.36	771.2	40.6	4.8	90.0	.....	.....	.....	5	10	1	.....	12	.....	.....	.....	8	0.82	20.7
Bordeaux	N. 44 50	E. 0 32	0.06 p.m.	243	74	30.07	763.8	30.34	770.7	48.6	9.2	65 8	5	3	.....	7	2	6	4	1	.....	.....	.....	5	1.16	29.4
Bourges	N. 47 10	E. 2 26	0.17 p.m.	510	156	29.78	756.4	30.34	770.7	45.7	7.6	71.3	10	.....	2	5	4	1	.....	6	.....	.....	.....	.....	0.64	16.3
Brest	N. 48 24	W. 4 30	11.50 a.m.	210	64	30.06	763.4	30.30	769.6	48.9	9.4	80.0	2	1	4	4	4	3	4	4	2	.....	.....	7	1.11	28.2
Caen	N. 49 11	W. 0 21	0.07 p.m.	69	21	30.23	767.9	30.31	769.9	45.7	7.6	79.8	.....	4	3	3	5	4	5	3	1	.....	.....	5	0.61	15.5
Châlons-sur-Marne	N. 48 57	E. 4 21	0.25 p.m.	294	90	29.96	761.0	30.29	769.4	43.3	6.3	81.2	.....	.....	2	5	9	8	1	1	2	.....	.....	5	1.12	28.5
Charleville	N. 49 46	E. 4 49	0.27 p.m.	476	145	29.82	757.4	30.35	770.8	42.3	5.7	73.7	1	4	2	5	5	2	4	5	.....	.....	.....	6	1.54	39.
Clermont-Fd.	N. 45 46	E. 3 05	0.20 p.m.	1273	388	28.95	735.2	30.33	770.4	47.8	8.8	53.6	5	6	4	3	4	4	1	1	.....	.....	.....	4	1.30	33.1
Cluny	N. 46 26	E. 4 39	0.27 p.m.	787	240	29.50	749.4	30.41	772.3	42.3	5.7	75.7	9	5	.....	2	7	2	2	1	.....	.....	.....	.....	1.18	30.0
Commercy	N. 48 46	E. 5 35	0.30 p.m.	797	243	29.47	748.5	30.37	771.4	42.1	5.6	74.6	.....	1	6	5	3	4	3	6	.....	.....	.....	5	0.99	25.2
Gap	N. 44 33	E. 6 05	0.32 p.m.	2427	740	27.76	705.0	30.34	770.7	48.6	9.2	43.1	4	4	4	1	2	1	1	.....	11	.....	.....	.....	1.59	40.4
Gréasque	N. 43 25	E. 5 37	0.31 p.m.	1056	322	29.17	741.0	30.32	770.0	52.9	11.6	42.8	2	.....	.....	.....	2	12	7	5	.....	.....	.....	3	0.39	10.0
Grenoble	N. 45 12	E. 5 43	0.31 p.m.	715	218	29.58	751.4	30.38	771.6	44.2	6.8	60.3	1	2	3	1	2	4	14	1	.....	.....	.....	.....	1.24	31.4
Guéret	N. 46 10	E. 1 52	0.16 p.m.	1486	453	28.71	729.3	30.35	771.0	44.8	7.1	58.9	.....	.....	1	14	2	5	4	2	.....	.....	.....	1	1.55	39.3
Lamballe	N. 48 28	W. 2 31	11.58 a.m.	252	77	30.03	762.8	30.31	769.9	45.7	7.6	82.1	2	.....	4	3	7	2	8	2	.....	.....	.....	5	1.12	28.4
Lescar	N. 43 20	W. 0 26	0.06 p.m.	525	160	29.76	756.0	30.34	770.5	56.1	13.4	55.4	4	3	7	4	.....	.....	3	7	.....	.....	.....	.....	0.93	23.6
Lorient	N. 47 45	W. 3 21	11.55 a.m.	86	26	30.23	767.9	30.34	770.5	48.2	9.0	83.3	3	.....	2	6	3	7	2	5	.....	.....	.....	6	1.46	37.1
Lyon	N. 45 41	E. 2 30	0.25 p.m.	981	299	29.31	744.4	30.41	772.4	41.2	5.1	70.0	5	5	1	.....	7	2	7	1	.....	.....	.....	.....	0.24	6.2
Mans	N. 48 01	E. 0 12	0.09 p.m.	285	87	30.03	762.8	30.35	771.0	41 4	5.2	79.8	.....	5	2	7	3	3	4	4	.....	.....	.....	6	0.54	13.8
Marseille	N. 43 18	E. 5 23	0.29 p.m.	246	75	30.06	763.4	30.33	770.3	55.4	13.0	46.0	1	4	5	8	2	4	3	1	.....	.....	.....	.....	0.29	7.4
Mont-Louis	N. 42 30	E. 2 07	0.16 p.m.	5203	1586	25.00	634.9	29.84	757.9	38.8	3.8	50.2	1	2	4	7	1	4	6	3	.....	.....	.....	2	0.33	8.3
Montpellier	N. 43 37	E. 3 53	0.24 p.m.	102	31	30.22	767.6	30.34	770.7	52.7	11.5	60.7	14	.....	.....	.....	.....	5	2	7	.....	.....	.....	2	0.43	11.0
Nancy	N. 48 42	E. 6 11	0.33 p.m.	725	221	29.56	750.9	30.37	771.5	41.9	5.5	75.3	3	4	3	9	5	2	.....	2	.....	.....	.....	4	0.87	22.1
Nantes	N. 47 13	W. 1 33	0.02 p.m.	134	41	30.20	767.1	30.36	771.2	47.5	8.6	72.2	2	2	2	4	6	2	5	5	.....	.....	.....	7	1.45	36.9
Nice	N. 43 41	E. 7 16	0.37 p.m.	29	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Perpignan	N. 42 42	E. 2 53	0.19 p.m.	105	32	30.23	767.9	30.35	770.8	53.4	11.9	56.7	6	2	.....	2	1	13	.....	4	.....	.....	.....	4	1.73	43.9
Pic du Midi (Sum-	N. 42 56	W. 0 08	0.08 p.m.	9380	2859	21.32	541.5	.....	.....	24.1	− 4.4	.....	1	1	1	5	6	7	1	6	.....	.....	.....	.....	2.35	59.7
Privas ..... [mit.)	N. 44 45	E. 4 36	0.26 p.m.	997	304	29.29	744.0	30.40	772.1	44.2	6.8	74.4e	12	1	.....	.....	12	.....	.....	.....	3	.....	.....	2	0.52	13.2
Puy de Dome	N. 45 46	E. 2 58	0.20 p.m.	4813	1467	25.32	643.2	.....	.....	33.6	0.9	73.4	2	2	2	6	7	5	1	3	.....	.....	.....	5	1.74	44.2
Rochefort	N. 45 56	W. 0 58	0.04 p.m.	29	9	30.32	770.2	30.35	771.0	47.5	8.6	83.1	.....	.....	3	3	8	3	2	8	1	.....	.....	6	0.76	19.2
Roche-sur-Yon	N. 46 40	W. 1 26	0.02 p.m.	198	60	30.08	764.0	30.30	769.6	46.0	7.8	73.5	3	3	1	4	7	1	6	.....	.....	.....	.....	5	0.87	22.2
Rodez	N. 44 21	E. 2 34	0.18 p.m.	2050	625	28.15	715.0	30.35	771.0	44.2	6.8	57.8	.....	9	5	2	.....	1	8	3	.....	.....	.....	0	1.05	26.6
Rouen	N. 49 26	E. 1 05	0.12 p.m.	39	12	30.28	769.0	30.32	770.2	43.2	6 2	80.0	2	1	2	5	6	2	10	.....	.....	.....	.....	7	1.09	27.6
Saint Lô	N. 49 06	W. 1 05	0.04 p.m.	134	41	30.17	766.2	30.32	770.0	45.1	7.3	76.4	1	4	4	4	4	1	8	1	1	.....	.....	5	1.48	37.6
Saint Maur	N. 48 48	E. 2 21	0.17 p.m.	162	49	30.18	766.5	30.34	770.7	42.8	6.0	75.6	1	2	4	5	8	1	2	5	.....	.....	.....	7	0.56	14.3
Toulouse	N. 43 37	E. 1 27	0.14 p.m.	636	194	29.66	753.4	30.39	772.0	51.3	10.7	68.4	.....	8	3	.....	1	14	1	1	.....	.....	.....	3	1.03	26.1
Tours	N. 47 24	E. 0 41	0.11 p.m.	171	52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Versailles	N. 48 48	E. 2 07	0.16 p.m.	445	136	29.83	757.6	30.32	770.1	42.4	5.8	75.6	2	3	2	6	5	.....	5	5	.....	.....	.....	7	1.05	26.7
Sub Series.																										
Paris, Montsouris	N. 48 50	E. 2 20	0.17 p.m.	256	78	30.06	763.6	30.35	771.0	43.2	6.2	76.3	1	3	3	2	8	3	4	4	.....	.....	.....	7	0.70	17.8

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Met'rs	Result of Simultaneous Observations for February, 1882. Mean Barometer. Actual. Inch.	Mill.	Reduced. Inch.	Mill.	Mean Temperature. Fah.	Cent.	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	NE	C	Total Movement. Miles	Kil.	Average Cloudiness. 0-10	Total Precipitation. Inch.	Mill.
GERMAN SERIES.	° ′	° ′																								
Bamberg	N. 49 54	E. 10 54	0.51 p.m.	787	240	29.45	748.0	30.31	769.9	39.6	4.2	64.9	3	7	1	4	4	5	2	1	1	.....	.....	4	1.14	29.0
Berlin	N. 52 30	E. 13 23	1.02 p.m.	164	50	30.01	762.2	30.19	766.8	41.0	5.0	69.9	2	4	4	9	3	5	.....	1	.....	.....	.....	7	0.91	23.0
Breslau	N. 51 07	E. 17 02	1.17 p.m.	482	147	29.71	754.5	30.24	768.1	38.5	3.6	69.2	1	5	11	2	4	3	1	.....	1	.....	.....	7	0.58	14.7
Carlsruhe	N. 49 01	E. 8 25	0.42 p.m.	404	123	29.91	759.7	30.37	771.4	39.7	4.3	73.4	.....	.....	2	14	3	8	1	5	.....	.....	.....	6	1.38	35.1
Cassel	N. 51 19	E. 9 28	0.46 p.m.	669	204	29.50	749.4	30.21	767.4	40.1	4.5	77.0	2	2	4	3	16	1	.....	.....	.....	.....	.....	5	1.74	44.2
Frankfort on M.	N. 50 08	E. 8 41	0.43 p.m.	338	103	29.92	759.9	30.28	769.2	41.4	5.2	70.4	2	2	3	6	8	1	5	1	.....	.....	.....	6	0.94	24.0
Friedrichshafen	N. 47 39	E. 9 29	0.46 p.m.	1355	413	28.90	734.1	30.41	772.3	36.1	2.3	80.0	.....	1	5	9	8	2	.....	3	.....	.....	.....	7	0.65	16.6
Hamburg	N. 53 33	E. 9 58	0.48 p.m.	85	26	30.10	764.5	30.19	766.9	39.6	4.2	83.6	.....	3	8	8	4	4	.....	1	.....	.....	.....	8	1.19	30.2
Kiel	N. 54 19	E. 10 04	0.48 p.m.	13	4	30.11	764.9	30.13	765.3	40.1	4.5	79.8	.....	2	9	11	4	1	.....	1	.....	.....	.....	8	2.94	74.8
Leipsic	N. 51 20	E. 12 24	0.58 p.m.	390	119	29.84	757.8	30.28	769.0	40.6	4.8	69.1	.....	3	5	11	8	.....	1	.....	.....	.....	.....	7	0.77	19.6
Magdeburg	N. 52 09	E. 11 37	0.54 p.m.	177	54	30.04	762.9	30.24	768.0	41.5	5.3	74.1	2	2	10	3	5	3	2	1	.....	.....	.....	7	0.51	12.9
Memel	N. 55 43	E. 21 07	1.32 p.m.	39	12	29.95	760.7	30.00	761.9	34.9	1.6	83.5	1	9	7	8	3	.....	.....	.....	.....	.....	.....	8	.....	.....
Munich	N. 48 09	E. 11 34	0.54 p.m.	1732	528	28.47	723.2	30.35	771.0	37.4	3.0	64.8	3	12	.....	2	.....	1	3	5	2	.....	.....	4	0.22	5.5
Neufahrwasser	N. 54 24	E. 18 40	1.25 p.m.	16	5	30.06	763.5	30.08	763.9	38.3	3.5	71.1	1	8	6	8	5	.....	.....	.....	.....	.....	.....	7	0.76	19.2
Neustadt	N. 49 21	E. 8 08	0.41 p.m.	479	146	29.80	756.9	30.33	770.4	39.9	4.4	74.4	.....	1	9	4	2	.....	5	2	5	.....	.....	6	1.19	30.2
Stuttgart	N. 48 47	E. 9 11	0.45 p.m.	833	254	29.37	746.0	30.30	769.6	41.4	5.2	69.4	10	3	6	3	1	.....	5	.....	.....	.....	.....	5	0.70	19.4
Wustrow	N. 54 21	E. 12 24	0.58 p.m.	23	7	30.11	764.8	30.13	765.4	39.0	3.9	91.2	1	2	6	11	4	4	.....	.....	.....	.....	.....	7	0.32	8.2
GREEK SERIES.																										
Athens	N. 37 58	E. 23 44	1.43 p.m	360	110	29.84	758.0	30.25	768.3	49.1	9.5	.....	2	1	.....	4	3	1	2	15	.....	.....	.....	7	1.11	28.1
INDIAN SERIES.																										
Kurachee	N. 24 47	E. 67 04	4.36 p.m.	49	15	29.95	760.7	30.00	762.0	75.1	23.9	57.	.....	2	12	13	.....	.....	.....	1	.....	.....	.....	2	0	0
Deesa	N. 24 16	E. 72 14	4.57 p.m.	465	142	29.43	747.5	29.90	759.4	81.0	27.2	27.	4	6	9	5	1	2	.....	1	.....	.....	.....	2	0	0
Bombay	N. 18 54	E. 72 49	5.00 p.m.	37	11	29.87	758.7	29.91	759.7	79.8	20.6	62.	6	19	3	.....	.....	.....	.....	.....	.....	.....	.....	1	0.04	1.0
Poona	N. 18 28	E. 74 10	5.05 p.m.	1849	564	28.01	711.4	29.84	757.9	86.6	30.3	21.	.....	7	12	3	.....	2	1	3	.....	.....	.....	0	0	0
Belgaum	N. 15 52	E. 74 42	5.07 p.m.	2550	777	27.34	694.4	29.84	757.9	83.5	28.6	28.	1	1	7	8	3	1	3	4	.....	.....	.....	1	0	0
Lahore	N. 31 34	E. 74 20	5.05 p.m.	732	223	29.21	741.9	29.98	761.5	64.3	17.9	46.	4	7	7	.....	.....	.....	2	1	7	.....	.....	3	1.81	46.0
Roorkee	N. 29 52	E. 77 56	5.20 p.m.	887	270	29.01	736.8	29.94	760.5	66.0	18.9	51.	.....	14	5	3	.....	5	.....	.....	1	.....	.....	4	1.41	35.8
Agra	N. 27 10	E. 78 05	5.20 p.m.	555	169	29.37	746.0	29.95	760.7	73.7	23.2	28.	3	8	12	.....	1	.....	.....	3	1	.....	.....	2	0	0
Nagpur	N. 21 09	E. 79 11	5.24 p.m.	1025	312	28.83	732.3	29.87	758.7	85.8	29.9	23.	2	4	3	6	.....	.....	1	3	9	.....	.....	0	0.02	0.5
Jubulpore	N. 23 09	E. 79 59	5.28 p.m.	1351	412	28.58	725.9	29.95	760.7	70.0	24.4	30.	2	4	3	.....	.....	.....	1	6	12	.....	.....	1	0.02	0.5
Lucknow	N. 26 50	E. 81 00	5.32 p.m.	369	112	29.55	750.6	29.94	760.5	73.6	23.1	33.	.....	2	9	3	1	1	.....	2	10	.....	.....	2	0.11	2.8
Alahabad	N. 25 26	E. 81 52	5.35 p.m.	307	94	29.61	752.1	29.93	760.3	72.9	22.7	39.	2	4	6	.....	.....	.....	1	1	14	.....	.....	1	0.13	3.3
Patna	N. 25 37	E. 85 08	5.49 p.m.	183	56	29.74	755.4	29.93	760.3	71.4	21.9	47.	1	11	9	.....	.....	.....	2	2	3	.....	.....	1	0.09	2.3
Hazaribagh	N. 24 00	E. 85 24	5.50 p.m.	2007	612	27.88	708.1	29.93	760.3	72.2	22.3	26.	9	13	4	1	1	.....	.....	.....	.....	.....	.....	1	0.61	15.5
Cuttack	N. 20 29	E. 85 54	5.52 p.m.	80	24	29.82	757.4	29.90	759.5	81.8	27.7	51.	.....	3	2	6	6	3	2	1	5	.....	.....	2	0.65	16.5
Calcutta	N. 22 33	E. 88 21	6.01 p.m.	21	7	29.89	759.2	29.91	759.7	75.4	24.1	58.	2	9	6	3	5	1	1	1	.....	.....	.....	2	3.42	86.9
Dhubri	N. 26 07	E. 89 50	6.08 p.m.	118	36	29.79	756.7	29.92	760.0	69.3	20.7	59.	.....	2	1	.....	.....	.....	1	1	23	.....	.....	1	1.85	47.0
Chittagong	N. 22 21	E. 91 50	6.15 p.m.	87	26	29.85	758.2	29.94	760.5	73.4	23.0	64.	1	4	13	4	2	.....	.....	1	3	.....	.....	3	0.12	3.0
Sibsagar	N. 26 59	E. 94 40	6.27 p.m.	333	112	29.61	752.1	29.96	761.0	66.1	18.9	80.	1	.....	.....	1	.....	1	.....	25	.....	.....	.....	6	2.82	71.6
Jeypore	N. 26 55	E. 75 50	5.05 p.m.	1431	436	28.48	723.4	29.94	760.5	72.5	22.5	26.	6	8	3	4	1	.....	2	4	.....	.....	.....	3	0	0
Zanzibar (a)	S. 6 10	E. 39 11	2.45 p.m.	23	7	29.80	756.9	.....	.....	84.8	29.3	68.6	11	4	.....	2	.....	.....	.....	10	.....	.....	.....	5	2.80	71.1
Trichinopoly	N. 10 50	E. 78 44	5.23 p.m.	275	84	29.64	752.8	.....	.....	80.9	30.5	40.	.....	.....	.....	.....	1	2	14	7	4	.....	.....	3	0	0
Bellary	N. 15 09	E. 76 57	5.16 p.m.	1455	444	28.39	721.1	.....	.....	90.5	32.5	18.	.....	7	3	1	.....	6	9	2	.....	.....	.....	2	0	0
ITALIAN SERIES.																										
Udine	N. 46 04	E. 13 14	1.01 p.m.	381	116	29.92	760.0	30.34	770.7	47.5	8.6	46.	3	.....	3	2	3	2	1	3	11	.....	.....	2	1.87	47.4
Milan	N. 45 28	E. 9 11	0.45 p.m.	482	147	29.82	757.5	30.35	770.9	45.5	7.5	61.	1	4	5	7	2	6	3	.....	.....	.....	.....	3	0.65	16.4
Padua	N. 45 24	E. 11 53	0.56 p.m.	102	31	30.23	767.9	30.35	770.8	44.8	7.1	61.	6	5	.....	1	3	5	3	4	1	.....	.....	4	1.28	32.5
Moncalieri	N. 45 00	E. 7 42	0.39 p.m.	853	260	29.41	747.0	30.35	770.9	44.1	6.7	64.	2	.....	1	.....	5	5	8	7	.....	.....	.....	2	0.18	4.5
Genoa	N. 44 25	E. 8 55	0.44 p.m.	157	48	30.13	765.4	30.34	770.5	52.5	11.4	52.	6	1	.....	11	5	1	1	3	.....	.....	.....	3	1.76	44.8
Mondovi	N. 44 22	E. 7 48	0.39 p.m.	1824	556	28.37	720.6	30.36	771.2	43.2	6.2	50.	2	2	14	1	.....	1	2	6	.....	.....	.....	2	0.18	4.5
Pesaro	N. 43 55	E. 12 53	1.00 p.m.	46	14	30.28	769.2	30.34	770.5	45.1	7.3	69.	16	2	.....	4	.....	.....	.....	6	.....	.....	.....	4	0.64	16.2
Florence	N. 43 46	E. 11 14	0.53 p.m.	240	73	30.07	763.8	30.34	770.5	49.6	9.8	47.	7	6	3	2	1	.....	1	8	.....	.....	.....	3	0.70	17.8
Leghorn	N. 43 32	E. 10 18	0.49 p.m	79	24	30.20	767.1	30.29	769.3	50.7	10.4	58.	3	1	3	3	2	.....	4	12	.....	.....	.....	4	0.73	18.6
Rome	N. 41 54	E. 12 29	0.58 p.m.	164	50	30.12	765.0	30.30	769.0	53.8	12.1	42.	9	7	5	3	2	.....	.....	2	.....	.....	.....	3	0.30	7.5
Lecce	N. 40 21	E. 18 12	1.21 p.m.	236	72	30.00	762.1	30.26	768.7	52.7	11.5	55.	8	7	1	2	.....	2	2	6	.....	.....	.....	3	0.24	6.0
Cosenza	N. 39 13	E. 16 15	1.13 p.m.	840	256	29.38	746.2	30.30	769.5	50.5	10.3	73.	1	7	5	1	1	7	4	2	.....	.....	.....	4	2.36	60.0
Cagliari	N. 39 13	E. 9 10	0.45 p.m.	180	55	30.08	763.9	30.27	768.9	56.1	13.4	53.	.....	7	3	1	2	9	1	.....	5	.....	.....	4	0.66	16.9
Palermo	N. 38 07	E. 13 22	1.02 p.m.	236	72	30.06	763.4	30.32	770.0	55.8	13.2	52.	4	1	1	1	.....	1	5	15	.....	.....	.....	4	1.56	39.5
Syracuse	N. 37 03	E. 15 18	1.09 p.m.	43	13	30.22	767.5	30.27	768.7	54.9	12.7	62.	1	2	5	4	1	.....	9	6	.....	.....	.....	6	0.71	18.0
Sub-Series.																										
Naples	N. 40 52	E. 14 18	1.05 p.m.	489	149	29.75	755.6	30.28	769.2	52.7	11.5	56.0	2	.....	2	6	2	1	3	12	.....	.....	.....	3	0.50	12.6
Stelvio	N. 46 32	E. 10 26	0.50 p.m.	8343	2543	22.25	565.2	.....	.....	23.0	—5.0	45.8	.....	.....	1	3	6	7	5	6	.....	.....	.....	2	0.90	22.9
Valdobbia	N. 45 47	E. 7 54	0.40 p.m.	8360	2548	22.30	566.4	.....	.....	20.6	—3.0	47.3	9	2	.....	.....	.....	7	6	4	.....	.....	.....	2	4.72	120.0
JAPANESE SERIES.																										
Aomori	N. 40 51	E. 140 45	9.31 p.m.	32	10	30.06	763.5	30.10	764.4	29.7	—1.3	82.3	1	.....	8	1	7	3	8	.....	.....	5036	8104	8	2.94	74.7
Hakodate	N. 41 47	E. 140 44	9.31 p.m.	10	3	30.07	763.6	30.08	763.9	30.1	—1.1	69.	7	.....	5	1	.....	.....	4	7	4	7239	11650	6	3.52	89.4
Hiroshima	N. 34 20	E. 132 27	8.58 p.m.	14	4	30.15	765.8	30.17	766.2	40.5	4.7	77.9	13	12	1	.....	.....	.....	1	.....	1	3681	5924	6	3.23	82.0
Kanazawa	N. 36 33	E. 136 40	9.14 p.m.	95	29	30.21	767.2	30.31	770.0	37.0	2.8	86.1	4	.....	11	6	3	1	1	2	.....	3820	6148	8	6.10	154.9
Kioto	N. 35 01	E. 135 46	9.11 p.m.	162	49	29.97	761.3	30.16	766.0	38.9	3.8	81.0	6	.....	1	.....	.....	.....	7	14	.....	2761	4443	7	2.25	57.2
Kochi	N. 33 33	E. 133 34	9.02 p.m.	20	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nagasaki	N. 32 44	E. 129 52	8.47 p.m.	189	58	29.99	761.8	30.21	767.2	43.1	6.1	77.1	7	10	3	1	1	.....	1	3	2	3588	5774	5	2.91	73.8
Nemuro	N. 43 21	E. 145 35	9.50 p.m.	58	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Niigata	N. 37 55	E. 139 03	9.24 p.m.	32	10	30.10	764.5	30.14	765.4	37.5	3.1	78.	6	.....	3	6	2	2	8	1	.....	5787	9313	8	4.13	104.8
Nobiru	N. 38 23	E. 141 12	9.32 p.m.	15	5	30.06	763.6	30.08	764.1	34.8	1.6	82.	12	1	2	.....	1	.....	4	8	.....	8558	13772	6	3.98	101.0
Supporo	N. 43 04	E. 141 23	9.33 p.m.	61	19	.....	.....	.....	.....	25.9	—3.4	82.	.....	1	3	5	3	.....	3	7	6	4783	7697	7	2.11	53.6
Tokei	N. 35 40	E. 139 45	9.27 p.m.	63	19	30.01	762.1	30.08	763.9	39.7	4.3	75.5	16	2	1	.....	1	.....	4	3	1	4814	7747	6	2.99	75.9
Wakayama	N. 34 14	E. 135 09	9.09 p.m.	48	15	30.10	764.6	30.16	766.0	41.6	5.3	77.2	7	3	8	1	1	.....	.....	5	3	3865	6220	7	2.26	57.3
MAURITIUS SER'S.																										
Mauritius	S. 20 06	E. 57 33	3.58 p.m.	181	55	29.67	753.6	29.86	758.4	80.5	26.9	72.2	.....	2	.....	3	2	1	13	7	.....	.....	.....	7	8.28	210.3
MEXICAN SERIES.																										
Guanajuato	N. 21 01	W. 100 48	5.24 a.m.	6683	2037	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leon	N. 21 07	W. 101 35	5.22 a.m.	5902	1799	24.44	621.0	30.25	768.4	50.2	10.1	75.	5	13	.....	6	1	.....	.....	3	.....	.....	.....	1	0	0
Mazatlan	N. 23 11	W. 106 17	5.03 a.m.	249	76	29.78	756.6	30.05	763.3	61.6	16.4	83.	1	13	.....	.....	.....	1	8	2	3	.....	.....	2	0	0
Mexico	N. 19 26	W. 99 00	5.32 a.m.	7490	2283	23.14	587.8	30.30	769.7	47.5	8.6	67.	.....	.....	.....	.....	.....	.....	.....	.....	28	.....	.....	1	0	0
Morelia	N. 19 42	W. 101 06	5.22 a.m.	6247	1940	24.35	618.5	30.54	775.6	53.1	11.7	73.	.....	.....	.....	5	7	14	.....	2	.....	.....	.....	2	0	0
Pabellon	N. 22 04	W. 102 04	5.20 a.m.	6312	1924	24.00	609.6	30.11	764.9	40.8	8.4	63.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0
Puebla	N. 19 02	W. 98 03	5.36 a.m.	7113	2168	23.44	595.7	30.53	775.4	44.0	6.9	77.	.....	1	.....	.....	.....	.....	.....	2	25	.....	.....	0	0	0
San Luis Potosi	N. 22 10	W. 100 51	5.25 a.m.	6211	1893	24.23	615.5	30.33	770.3	53.4	11.9	63.	1	.....	1	5	2	10	9	.....	.....	.....	.....	4	Inap.	Inap.
Tlacotalpam	N. 18 37	W. 95 32	5.46 a.m.	13	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zacatecas	N. 22 44	W. 102 26	5.18 a.m.	8100	2469	22.58	573.6	30.30	769.7	48.4	9.1	65.	b1	4	3	11	2	.....	1	4	.....	.....	.....	0	0.12	3.0

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Met'rs	Result of Simultaneous Observations for February, 1882. Mean Barometer. Actual. Inch.	Mill.	Reduced. Inch.	Mill.	Mean Temperature. Fah.	Cent.	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	NE	C	Total Movement. Miles	Kil.	Average Cloudiness. 0–10	Total Precipitation. Inch.	Mill.
NETHERLANDS SERIES.	° ′	° ′																								
Flushing	N. 51 24	E. 3 35	0.22 p.m.	0	0	30.26	768.6	30.26	768.6	42.3	5.7	.....	.....	3	3	7	8	3	3	1	.....	.....	.....	.....	0.06	1.48
Groningen	N. 53 12	E. 6 34	0.34 p.m.	?	?	30.19	766.7	30.20	767.0	40.8	4.9	.....	1	4	5	9	3	2	.....	1	.....	.....	.....	.....	1.80	45.6
Helder	N. 52 58	E. 4 45	0.27 p.m.	0	0	30.19	766.8	30.19	766.8	40.3	4.6	.....	3	2	2	6	10	3	2	.....	.....	.....	.....	.....	1.67	42.4
Hellevoetsluis	N. 51 49	E. 4 08	0.25 p.m.	0	0	30.22	767.5	30.22	767.5	41.7	5.4	82.6	.....	2	1	10	8	3	4	.....	.....	.....	.....	.....	1.02	25.9
Utrecht	N. 52 05	E. 5 07	0.29 p.m.	43	13	30.20	767.1	30.25	768.3	42.3	5.7	79.8	.....	2	1	7	10	5	2	1	.....	.....	.....	7	1.26	31.9
NORWEGIAN SERIES.																										
Bergen	N. 60 24	E. 5 20	0.29 p.m.	56	17	29.77	756.2	29.84	757.8	38.8	3.8	80.3	3	3	3	2	8	9	.....	.....	.....	.....	.....	9	10.97	278.7
Brono	N. 65 28	E. 12 14	0.57 p.m.	34	10	29.52	749.9	29.56	750.9	32.0	0.0	68.7	2	6	5	9	3	1	.....	2	.....	.....	.....	8	3.74	95.0
Christiania	N. 59 55	E. 10 45	0.51 p.m.	134	41	29.66	753.4	29.81	757.2	33.3	0.7	72.5	.....	5	2	6	8	.....	2	2	3	.....	.....	7	0.89	22.6
Gjæsvær	N. 71 07	E. 25 22	1.49 p.m.	23	7	29.19	741.4	29.21	742.0	22.6	−5.2	.....	3	3	4	1	7	2	2	5	1	.....	.....	9	.....	.....
Lodingen	N. 68 24	E. 16 01	1.12 p.m.	43	13	29.33	745.0	29.38	746.2	26.1	−3.3	83.1	3	4	2	8	3	.....	2	.....	6	.....	.....	9	6.66	169.2
PORTUGUESE SERIES.																										
Angra	N. 38 39	W. 27 14	10.19 a.m.	144	44	29.58	751.3	29.74	755.3	58.8	14.9	82.0	1	3	9	2	3	6	4	.....	.....	.....	.....	5	2.06	52.4
Campo Major	N. 39 02	W. 6 59	11.40 a.m.	945	288	29.32	744.6	30.33	770.3	57.6	14.2	55.6	1	.....	1	1	6	.....	8	10	1	.....	.....	4	1.30	33.0
Funchal	N. 32 38	W. 16 55	11.00 a.m.	82	25	30.23	767.9	30.32	770.2	63.7	17.6	62.8	.....	.....	2	9	1	5	6	2	3	.....	.....	4	1.76	44.7
Lisbon	N. 38 42	W. 9 08	11.31 a.m.	335	102	30.00	761.9	30.33	771.2	55.2	12.9	70.4	5	.....	.....	5	2	3	2	11	.....	.....	.....	4	2.58	65.6
Ponta Delgada	N. 37 45	W. 25 41	10.25 a.m.	66	20	30.15	765.7	30.22	767.5	61.0	16.1	76.7	.....	3	2	6	7	1	8	.....	1	.....	.....	4	2.01	60.3
St. Paul de Loanda	S. 8 49	E. 13 07	1.00 p.m.	193	59	29.69	754.2	29.89	759.2	82.4	28.0	78.3	5	11	7	5	.....	.....	.....	.....	.....	.....	.....	4	1.24	31.6
Serra da Estralla	N. 40 25	W. 7 35	11.37 a.m.	4728	1441	25.47	647.0	30.34	770.6	39.0	3.9	76.1	.....	3	3	1	.....	19	2	.....	.....	.....	.....	5	15.84	402.2
RUSSIAN SERIES.																										
Akmolinski	N. 51 12	E. 71 23	4.54 p.m.	843?	306?	28.88	733.5	30.06	763.4	7.3	−13.7	.....	.....	.....	.....	18	6	4	.....	.....	.....	.....	.....	7	0.35	8.9
Archangel	N. 64 33	E. 40 32	2.50 p.m.	16	5	29.33	744.9	29.35	745.4	15.8	−9.0	84.6	2	4	5	6	3	2	5	1	.....	.....	.....	8	1.03	26.2
Astrakhan	N. 46 21	E. 48 02	3.20 p.m.	‖ 68	‖ 21	30.17	766.2	30.08	764.1	25.0	−3.9	74.1	2	1	9	9	1	2	.....	1	3	.....	.....	8	0.69	17.5
Barnaul	N. 53 20	E. 83 47	5.43 p.m.	459?	140?	29.70	754.4	30.24	768.2	14.2	−9.9	76.3	.....	.....	1	14	.....	1	.....	1	11	.....	.....	7	0.23	5.8
Dorpat	N. 58 23	E. 26 43	1.55 p.m.	223	68	29.50	749.3	29.75	755.7	30.6	−0.8	77.7	3	6	9	6	3	.....	1	.....	.....	.....	.....	8	0.90	24.3
Ekaterinburg	N. 56 49	E. 60 38	4.10 p.m.	894?	272?	28.66	728.0	29.69	754.1	14.2	−9.9	70.1	.....	1	8	11	5	2	1	.....	.....	.....	.....	8	0.18	4.7
Kasan	N. 55 47	E. 49 08	3.24 p.m.	249	76	29.41	746.9	29.69	754.2	15.4	−9.2	77.2	1	2	5	9	6	3	.....	.....	2	.....	.....	8	0.43	10.9
Kertch	N. 45 21	E. 36 29	2.34 p.m.	18?	6?	30.10	764.5	30.12	765.0	32.5	0.3	75.4	4	7	5	2	4	3	.....	1	2	.....	.....	6	0.24	6.2
Kieff	N. 50 27	E. 30 30	2.10 p.m.	600	183	29.34	745.1	30.00	762.0	31.1	−0.5	64.9	4	10	4	6	2	1	1	.....	.....	.....	.....	7	0.41	10.5
Lugan	N. 48 35	E. 39 20	2.45 p.m.	188?	57?	29.78	756.4	30.00	761.9	27.1	−2.7	72.9	2	4	9	7	3	1	1	1	.....	.....	.....	8	0.13	3.3
Moscow	N. 55 46	E. 37 40	2.39 p.m.	448	136	29.14	740.1	29.64	752.9	25.7	−3.5	71.2	7	.....	.....	.....	11	6	.....	4	.....	.....	.....	8	0.00	15.2
Nikolaiev	N. 46 58	E. 31 58	2.16 p.m.	62	19	30.10	764.4	30.17	766.2	34.7	1.4	69.2	6	5	4	7	2	.....	.....	2	2	.....	.....	5	0.07	1.8
Nikolaievsk ...b..	N. 53 08	E. 140 45	9.31 p.m.	75?	23?	30.12	765.0	30.20	767.2	1.9	−16.7	82.8	.....	4	2	.....	.....	.....	.....	.....	20	.....	.....	4	0.24	6.2
Pekin	N. 39 57	E. 116 28	7.54 p.m.	123?	38?	30.28	769.0	30.42	772.6	31.6	−0.2	48.4	1	5	.....	1	.....	1	.....	1	19	.....	.....	2	0.19	4.9
St. Petersburg	N. 59 56	E. 30 16	2.09 p.m.	15	5	29.60	751.9	29.62	752.3	27.0	−2.8	78.4	1	9	11	4	2	1	.....	.....	.....	.....	.....	7	0.83	21.1
Tashkend	N. 41 19	E. 69 16	4.45 p.m.	1493?	455?	28.59	726.2	30.24	768.1	34.5	1.4	75.3	2	1	.....	.....	.....	.....	.....	5	20	.....	.....	5	1.61	40.9
Tiflis	N. 41 43	E. 44 47	3.07 p.m.	1343	409	28.68	728.5	30.16	766.0	37.2	2.9	51.7	4	15	.....	1	2	.....	1	.....	5	.....	.....	4	0.66	16.8
Vladivostock	N. 43 09	E. 132 00	8.56 p.m.	59?	18?	30.22	767.7	30.29	769.4	15.3	−9.3	72.5	17	.....	.....	.....	.....	.....	.....	.....	11	.....	.....	3	0.26	6.6
Warsaw	N. 52 13	E. 21 02	1.32 p.m.	392	119	29.70	754.5	30.15	765.7	35.6	2.0	72.7	1	6	8	6	5	2	.....	.....	.....	.....	.....	9	.....	.....
Wilna	N. 54 41	E. 25 18	1.49 p.m.	388	118	29.54	750.4	29.98	761.5	32.2	0.1	73.5	1	6	8	9	4	.....	.....	.....	.....	.....	.....	9	0.41	10.3
Yeniseisk	N. 58 27	E. 92 06	6.16 p.m.	262?	80?	29.96	761.0	30.27	768.9	14.2	−9.9	74.0	.....	1	5	4	3	1	10	.....	4	.....	.....	5	0.77	19.5
SCOTTISH SERIES.																										
Leith	N. 55 58	W. 3 10	11.55 a.m.	83	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Monach L.t. House	N. 57 31	W. 7 42	11.37 a.m.	150	46	.....	.....	29.90	759.4	45.0	7.2	89.3	.....	1	5	8	9	1	1	3	.....	.....	.....	10	3.7	94.
North Unst	N. 60 51	W. 0 53	0.04 p.m.	230	70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SPANISH SERIES.																										
Barcelona	N. 41 23	E. 2 11	0.16 p.m.	98	30	30.20	767.0	30.30	769.6	55.0	12.8	65	.....	.....	3	8	7	4	5	1	.....	1212	1951	4	2.54	64.4
Bilbao	N. 43 15	W. 2 56	11.56 a.m.	52	16	30.30	769.6	30.36	771.1	58.3	14.6	63	.....	3	1	2	7	11	1	3	.....	2258	3634	5	1.86	47.2
Burgos	N. 42 20	W. 3 46	11.53 a.m.	2821	860	27.34	694.3	30.39	771.8	46.8	8.2	59	4	.....	1	8	2	1	.....	12	.....	5338	8591	3	1.15	29.3
Madrid	N. 40 25	W. 3 42	11.53 a.m.	2152	656	28.08	713.3	30.36	771.2	52.5	11.4	56.7	.....	2	1	7	.....	2	8	4	4	4978	8012	4	1.05	26.7
Murcia	N. 37 59	W. 1 10	0.03 p.m.	141	43	30.19	766.7	30.32	770.1	49.1	9.5	72	.....	4	4	1	2	6	7	4	.....	1123	1807	5	1.30	33.1
Santiago	N. 42 53	W. 8 28	11.34 a.m.	863	263	29.34	745.2	30.25	768.3	55.6	13.1	63.9	1	1	.....	6	1	4	1	4	10	696	1120	5	4.57	110.1
Sub-Series.																										
Havana	N. 23 08	W. 82 28	7.39 a.m.	62	19	30.10	764.6	30.17	766.3	68.8	20.4	81.6	2	.....	.....	2	.....	7	9	2	6	.....	.....	2	0.16	3.7
Manilla	N. 14 35	E. 121 00	8.12 p.m.	56	17	29.95	760.7	30.00	762.1	77.1	25.1	72.5	3	.....	.....	.....	.....	6	14	5	.....	.....	.....	2	1.10	28.0
San Fernando	N. 36 28	W. 6 13	11.43 a.m.	95	29	30.26	768.5	30.36	771.1	60.5	15.8	60	1	.....	2	3	.....	5	14	1	2	.....	.....	4	1.14	28.9
San Juan de Porto Rico	N. 18 30	W. 66 10	7.44 a.m.	82	25	30.05	763.3	30.14	765.6	72.1	22.3	92	.....	.....	.....	.....	.....	7	6	.....	15	.....	.....	4	7.93	201.5
Tuguegarao	N. 17 37	E. 121 30	8.15 p.m.	125	38	30.01	762.2	30.06	763.5	73.5	25.7	78.3	2	18	1	.....	3	3	1	.....	.....	.....	.....	6	0.09	2.3
SWEDISH SERIES.																										
Haparanda	N. 65 47	E. 24 03	1.44 p.m.	29	9	29.45	747.9	29.48	748.9	19.2	−7.1	84	7	1	4	10	2	1	.....	1	2	.....	.....	5	0.62	15.7
Umea	N. 63 50	E. 20 17	1.29 p.m.	39	12	29.51	749.5	29.56	750.8	27.9	−2.3	78	3	8	3	8	1	.....	.....	5	.....	.....	.....	6	0.82	20.7
Hernosand	N. 62 32	E. 17 57	1.20 p.m.	46	14	29.58	751.3	29.63	752.6	31.3	−0.4	59	4	2	6	3	6	.....	.....	1	6	.....	.....	5	0.75	19.1
Stockholm	N. 59 20	E. 18 04	1.20 p.m.	144	44	29.61	752.1	29.79	756.6	32.7	0.4	69	2	5	8	10	1	.....	.....	2	.....	.....	.....	6	1.04	26.3
Wisby	N. 57 39	E. 18 19	1.20 p.m.	52	16	29.82	757.3	29.87	758.8	35.2	1.8	81	5	3	9	9	1	.....	.....	1	.....	.....	.....	6	1.05	26.7
Sub-Series.																										
Upsala	N. 59 51	E. 17 37	1.19 p.m.	79	24	29.76	755.8	29.84	758.0	32.2	0.1	68.9	3	6	3	11	5	.....	.....	.....	.....	.....	.....	7	0.65	16.6
SWISS SERIES.																										
Geneva	N. 46 12	E. 6 08	0.33 p.m.	1338	408	28.93	734.7	30.39	772.0	39.9	4.4	66.9	12	1	.....	4	3	1	2	5	.....	.....	.....	.....	0.66	16.7
Zurich	N. 47 22	E. 8 40	0.43 p.m.	1542	470	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
TURKISH SERIES.																										
Constantinople	N. 41 00	E. 28 59	2.04 p.m.	230	70	.....	.....	30.25	768.3	41.0	5.0	70	7	3	2	7	2	2	.....	5	.....	.....	.....	6	1.88	47.8
Valona	N. 40 27	E. 19 27	1.25 p.m.	105	32	.....	.....	30.26	768.7	54.0	12.2	.....	3	14	7	2	2	.....	.....	.....	.....	.....	.....	3	1.8	45.
Sub-Series.																										
Beurut	N. 33 54	E. 35 28	2.30 p.m.	111	34	.....	.....	30.07	763.8	56.5	13.6	67.7	7	3	1	11	1	1	1	3	.....	.....	.....	5	10.18	258.6

‖ Below sea level.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea		Result of Simultaneous Observations for February, 1882.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
U. S. SERIES.	° ′	° ′																								
Albany	N. 42 40	W. 73 45	7.13 a.m.	75	23	30.06	763.5	30.15	765.8	30.2	-1.0	70.8	6	4	2	2	6	1	1	3	3	3441	5538	6	3.31	84.1
Alpena	N. 45 05	W. 83 28	6.34 a.m.	609	185	29.34	745.2	30.06	763.5	24.8	-4.0	79.8	1	5	7	4	3	6	2	......	......	8048	12952	7	2.56	65.0
Atlanta	N. 33 45	W. 84 23	6.31 a.m.	1131	345	28.99	736.3	30.21	767.3	46.7	8.2	77.5	.....	7	3	2	4	2	10	......	......	7741	12458	7	10.29	261.4
Atlantic City	N. 39 22	W. 74 25	7.11 a.m.	13	4	30.16	766.1	30.17	766.3	34.7	1.5	81.5	3	6	6	3	3	2	3	1	1	7041	11331	5	4.37	111.0
Augusta	N. 33 28	W. 81 54	6.41 a.m.	183	56	30.06	763.5	30.26	768.6	49.1	9.5	77.3	.....	3	4	......	3	2	5	2	9	2890	4651	6	3.95	100.3
Baltimore	N. 39 18	W. 76 38	7.02 a.m.	45	14	30.15	765.8	30.20	767.1	37.1	2.8	72.8	4	6	1	1	4	1	2	4	5	3567	5740	5	3.73	94.7
Barnegat	N. 39 48	W. 74 09	7.12 a.m.	20	6	30.14	765.5	30.16	766.1	33.9	1.1	82.5	3	7	8	3	2	1	4	......	......	9848	15849	5	8.91	226.1
Bismarck	N. 46 48	W. 100 38	5.26 a.m.	1694	516	28.09	713.5	30.07	763.8	13.9	-10.1	80.0	.....	10	2	......	......	3	5	2	6	5787	9313	4	0.30	7.6
Boise City d	N. 43 46	W. 116 06	4.24 a.m.	2750	838	27.22	691.4	30.18	766.6	22.8	-5.1	88.1	2	4	5	......	......	4	3	4	2	3537	5692	8	1.73	43.9
Boston	N. 42 21	W. 71 04	7.23 a.m.	142	43	29.93	760.2	30.09	764.3	25.6	-3.6	77.0	.....	11	7	7	1	......	......	2	......	8095	13027	6	4.77	121.2
Brownsville	N. 26 00	W. 97 30	5.38 a.m	43	13	30.01	762.2	30.06	763.5	64.6	18.1	90.8	2	3	1	1	7	8	1	1	4	6873	11061	6	1.24	31.5
Buffalo	N. 42 53	W. 78 55	6.52 a.m.	696	212	29.32	744.7	30.12	765.0	30.6	-0.8	79.3	2	2	5	7	6	3	......	3	......	8387	13497	6	2.16	54.9
Burlington	N. 44 29	W. 73 13	7.15 a.m.	268	82	29.80	756.9	30.11	764.8	21.8	-5.7	78.1	7	3	1	......	10	2	3	2	......	6229	10024	7	1.10	27.9
Cairo	N. 37 00	W. 89 12	6.11 a.m.	377	115	29.74	755.4	30.16	766.1	45.1	7.3	82.8	4	3	4	1	10	5	......	1	......	6676	10744	7	10.14	257.6
Campo ...c	N. 32 22	W. 116 08	4.22 a.m.	2500	762	27.48	698.0	30.12	765.0	30.7	-0.7	78.5	.....	......	2	7	1	......	10	3	2	3446	5546	4	4.57	116.1
Camp Thomas	N. 32 04	W. 110 06	4.49 a.m.	2710	826	27.30	693.4	30.12	765.0	35.0	1.7	87.3	.....	6	1	......	......	8	......	......	13	....	....	4	1.01	25.7
Cape Henry	N. 36 56	W. 76 00	7.04 a.m.	16	5	30.20	767.1	30.22	767.6	43.1	6.2	75.4	2	5	2	9	3	3	......	4	......	8952	14407	5	4.17	105.9
Cape May...c	N. 38 56	W. 74 58	7.08 a.m.	27	8	30.14	765.5	30.18	766.6	37.4	3.0	77.6	4	6	5	1	3	2	3	......	1	12003	19316	4	3.23	82.0
Castroville	N. 29 25	W. 98 50	5.33 a.m.	780	238	29.26	743.2	30.10	764.5	54.3	12.4	82.6	1	13	......	......	2	5	2	......	5	4573	7359	5	1.29	32.8
Cedar Keys	N. 29 12	W. 83 02	6.36 a.m.	22	7	30.20	767.1	30.22	767.6	57.7	14.3	80.0	7	1	1	......	5	3	6	5	......	5564	8954	3	1.02	25.9
Champaign	N. 40 07	W. 88 14	6.15 a.m.	767	234	29.23	742.4	30.10	764.5	34.4	1.3	76.6	2	3	2	4	7	4	......	5	1	7305	11756	6	5.49	139.4
Charleston	N. 32 45	W. 79 55	6.49 a.m.	52	16	30.18	766.6	30.24	768.1	52.3	11.3	82.1	2	3	4	5	1	1	1	9	2	5468	8800	4	1.09	27.7
Charlotte	N. 35 13	W. 80 51	6.45 a.m.	808	246	29.32	744.7	30.21	767.3	43.8	6.6	80.6	5	4	1	8	3	3	1	3	......	4329	6967	5	5.35	135.9
Chattanooga	N. 35 04	W. 85 15	6.27 a.m.	783	239	29.36	745.7	30.22	767.6	45.6	7.6	78.7	3	3	2	5	5	3	2	4	1	5296	8523	6	7.24	183.9
Cheyenne	N. 41 12	W. 104 42	5.09 a.m.	6089	1856	23.91	607.3	30.16	766.1	24.3	-4.3	54.2	1	13	11	2	1	......	......	......	......	8540	13744	3	0.05	1.3
Chicago	N. 41 52	W. 87 35	6.18 a.m.	661	201	29.32	744.7	30.06	763.5	34.0	1.1	82.3	.....	6	7	6	5	2	....	2	......	6625	10062	5	2.24	56.9
Chincoteague	N. 37 55	W. 75 20	7.06 a.m.	18	5	30.17	766.3	30.19	766.8	39.3	4.1	83.4	5	7	2	6	2	3	1	......	2	8545	13752	6	3.82	97.0
Cincinnati	N. 39 06	W. 84 26	6.30 a.m.	620	189	29.46	748.3	30.15	765.8	42.4	5.8	71.1	4	3	4	1	6	6	3	1	......	4643	7472	7	7.04	178.8
Cleveland	N. 41 30	W. 81 47	6.42 a.m.	690	210	29.35	745.5	30.14	765.5	34.0	1.1	79.5	3	......	4	5	8	5	1	1	1	7772	12508	6	2.83	71.9
Coleman City...e	N. 31 55	W. 99 10	5.32 a.m.	1709	521	28.24	717.3	30.12	765.0	47.5	8.6	88.1	3	4	1	1	4	7	1	1	1	4899	7884	6	3.90	99.1
Columbus	N. 39 57	W. 83 03	6.36 a.m.	805	245	29.25	742.9	30.15	765 8	37.5	3.1	73.5	3	2	4	4	8	4	1	2	......	9865	15876	7	5.94	150.9
Concho	N. 31 22	W. 100 20	5.26 a.m.	1900	579	28.12	714.2	30.14	765.5	47.4	8.6	88.4	1	3	5	5	5	......	......	1	8	6747	10858	6	4.14	105.2
Davenport	N. 41 32	W. 90 30	6.06 a.m.	615	187	29.37	746.0	30.07	763.8	35.1	1.7	69.0	.....	8	4	5	4	2	2	3	......	6469	10411	5	0.62	15.7
Dayton	N. 46 23	W. 117 50	4.16 a.m.	1660	506	28.30	718.8	30.11	764.8	28.2	-2.1	77.3	1	......	......	18	4	2	1	......	2	4282	6891	6	6.16	156.5
Deadwood	N. 44 22	W. 103 34	5.14 a.m.	4600	1402	25.23	640.8	30.15	765.8	22.5	-5.3	75.6	.....	1	......	14	8	1	......	2	2	4051	6519	3	0.21	5.3
Decatur...a	N. 33 10	W. 97 30	5.38 a.m.	1129	344	....	....	....	....	48.0	8.9	70.6	1	5	2	......	11	5	1	2	......	7229	11634	5	5.24	133.1
Del. Breakwater	N. 38 48	W. 75 05	7.08 a.m.	20	6	30.16	766.1	30.18	766.6	37.1	2.8	86.5	5	5	4	2	7	3	1	1	......	1258	2024	5	2.14	54.4
Denison	N. 33 50	W. 96 40	5.41 a.m.	767	234	29.26	743.2	30.10	764.5	48.1	8.9	65.0	6	3	2	3	7	6	......	......	1	5437	8751	6	5.66	143.8
Denver	N. 39 45	W. 105 04	5.08 a.m.	5294	1614	24.67	626.6	30.19	766.8	29.3	-1.5	59.2	5	4	......	1	13	3	......	2	......	5879	9461	3	0.20	5.1
Des Moines	N. 41 35	W. 93 40	5.53 a.m.	849	259	29.11	739.4	30.08	764.0	30.2	-1.0	76.4	3	9	3	4	1	5	......	2	1	5470	8803	4	1.21	30.7
Detroit	N. 41 21	W. 83 07	6.36 a.m.	661	201	29.36	745.7	30.11	764.8	37.5	3.1	78.8	2	3	5	6	7	1	3	1	......	7854	12640	4	1.92	48.8
Dodge City	N. 37 39	W. 100 08	5.27 a.m.	2512	766	27.38	695.4	30.12	765.0	28.3	-2.1	78.6	6	3	5	3	4	1	......	2	4	6819	10974	3	0.22	5.6
Dubuque	N. 42 30	W. 90 44	6.05 a.m.	665	203	29.28	743.7	30.04	763.0	29.0	-1.7	69.9	.....	4	6	3	10	2	1	2	......	4246	6833	4	0.59	15.0
Duluth	N. 46 48	W. 92 08	6.00 a.m.	644	184	29.25	742.9	30.01	762.2	21.8	-5.7	79.0	1	4	6	7	......	1	......	6	3	5661	9110	7	2.02	51.3
Eagle Pass	N. 28 40	W. 100 15	5.26 a.m.	780	238	29.29	744.0	30.13	765.3	54.7	12.6	85.8	1	6	......	2	2	15	.. ...	2	......	4384	7055	6	1.60	40.0
Eagle Rock	N. 43 30	W. 112 04	4.40 a.m.	4650	1415	25.28	642.1	30.18	766.6	5.9	-14.5	78.1	13	......	......	11	1	......	. ....	1	2	7414	11931	6	1.25	31.7
Eastport	N. 44 55	W. 66 54	7.40 a.m.	61	18	29.95	760.7	30.02	762.5	20.6	-6.3	78.8	4	7	......	8	2	1	1	5	......	10314	16498	6	4.94	125.5
Edinburg	N. 26 03	W. 98 03	5.36 a.m.	....	....	....	....	....	....	....	....	....	.....	......	......	......	......	......	......	......	......	....	....	......	....	....
El Paso	N. 31 46	W. 106 32	5.02 a.m.	3760	1146	26.30	668.0	30.18	766.6	37.8	3.2	75.7	.....	6	13	1	......	......	......	......	8	4298	6917	3	0.78	19.8
Erie	N. 42 07	W. 80 10	6.47 a.m.	681	208	29.35	745.5	30.12	765.0	34.4	1.3	80.9	2	5	3	5	8	3	......	1	1	7631	12282	7	3.12	79.2
Escanaba	N. 45 46	W. 87 14	6.20 a.m.	612	186	29.30	744.2	30.02	762.5	23.2	-4.9	82.1	3	3	6	3	9	2	......	2	......	6252	10061	7	2.30	58.4
Florence	N. 33 03	W. 111 17	4.43 a.m.	1480	451	....	....	....	....	....	....	....	.....	......	......	......	......	......	......	......	......	....	....	......	....	....
Fort Apache	N. 33 47	W. 109 58	4.49 a.m.	5050	1539	25.06	636.5	30.16	766.1	27.6	-2.4	67.6	.....	1	1	3	1	2	3	16	1	4400	7081	5	2.85	72.4
Fort Assinnaboine	N. 48 37	W. 109 43	4.49 a.m.	2710	826	27.03	686.5	30.07	763.8	19.9	-6.7	55.6	1	2	2	16	1	1	2	2	1	9446	15192	5	0.24	6.1
Fort Bennett	N. 44 42	W. 100 38	5.26 a.m.	1510	457	28.36	720.3	30.09	764.3	18.9	-7.3	71.3	3	7	3	1	......	4	......	1	9	3611	5811	4	0.83	21.1
Fort Benton	N. 47 51	W. 110 40	4.45 a.m.	2700	823	27.08	687.8	30.08	764.0	20.3	-6.5	64.3	.....	......	......	15	......	.. ..	......	3	10	9134	14699	5	0.38	9.7
Fort Buford	N. 48 03	W. 103 58	5.12 a.m.	1900	579	27.92	709.2	30.10	764.5	13.2	-10.4	62.4	4	......	9	2	6	1	3	2	1	5848	9311	3	0.29	7.4
Fort Custer	N. 45 48	W. 107 38	4.58 a.m.	3040	927	26.74	679.2	30.10	764.5	19.7	-6.8	67.4	1	4	1	2	5	8	2	......	5	5693	9162	4	0.02	0.5
Fort Davis	N. 30 30	W. 103 45	5.13 a.m.	4940	1506	25.16	639.1	30.12	765.0	39.5	4.2	80.7	3	2	......	5	8	2	......	1	7	3917	6304	4	0.36	9.1
Fort Elliott	N. 35 31	W. 100 27	5.28 a.m.	2650	808	27.23	691.6	30.13	765.3	31.0	-0.6	52.8	3	7	......	4	4	4	......	3	3	7117	11454	3	0.16	4.1
Fort Gibson	N. 35 43	W. 95 16	5.48 a.m.	540	165	29.48	748.8	30.08	764.0	44.0	6.7	81.9	7	......	3	......	3	8	4	......	3	5881	9464	6	3.45	87.6
Fort Grant	N. 32 25	W. 109 56	4.49 a.m.	4860	1481	25.25	641.3	30.11	764.8	37.0	2.8	71.2	2	4	......	4	1	3	6	7	1	4022	6474	4	1.20	32.0
Fort Griffin	N. 32 53	W. 99 21	5.33 a.m.	1260	384	28.77	730.7	30.14	765.5	45.9	7.7	80.0	5	1	......	3	7	3	2	2	5	5270	8481	6	2.33	59.2
Fort Keogh	N. 46 17	W. 105 55	5.05 a.m.	2372	723	27.41	696.2	30.09	764.3	17.2	-8.2	66.6	3	2	3	9	2	5	......	3	1	5392	8677	4	0.18	4.6
Fort Macon	N. 34 42	W. 76 40	7.01 a.m.	11	3	30.21	767.3	30.22	767.6	47.0	8.3	85.2	7	8	4	3	2	1	......	3	......	7995	12866	5	2.85	72.4
Fort McKavett	N. 30 48	W. 99 58	5.28 a.m.	2240	683	27.81	706.4	30.19	766.8	48.3	9.1	77.8	3	2	......	13	3	3	1	......	3	5933	9548	5	2.19	55.6
Fort Missoula	N. 46 50	W. 114 01	4.32 a.m.	3140	957	26.66	677.2	30.09	764.3	20.0	-6.7	87.5	2	6	3	9	1	2	......	4	1	2818	4535	7	0.80	20.3
Fort St. Michael	N. 63 48	W. 162 00	1.20 a.m.	30	9	29.80	756.9	29.84	757.9	-16.5	-26.9	99.5	2	1	1	9	4	3	2	5	1	5122	8243	4	0.40	10.2
Fort Shaw	N. 47 29	W. 111 46	4.41 a.m.	3550	1082	26.23	666.2	30.08	764.0	22.2	-5.4	70.6	1	1	10	14	1	......	1	......	......	12189	19617	4	0.23	5.8
Fort Sill	N. 34 40	W. 98 30	5.34 a.m.	1200	366	28.80	731.5	30.11	764.8	40.6	4.8	80.7	7	3	1	......	7	1	......	. ....	9	7950	12794	6	1.66	42.2
Fort Stevenson	N. 47 36	W. 101 23	5.22 a.m.	1750	534	28.04	712.2	30.06	763.5	10.9	-11.7	80.2	2	13	3	1	1	1	1	3	3	5723	9210	5	0.54	13.7
Fort Verde	N. 34 24	W. 111 53	4.38 a.m.	?	?	....	....	....	....	32.1	0.1	72.2	6	7	5	3	3	4	......	.... .	......	....	....	4	0.93	23.6
Fort Washakie	....	....	....	....	....	....	....	....	....	....	....	....	.....	......	......	......	......	......	......	......	......	....	....	......	....	....
Fredericksburg	N. 30 20	W. 98 40	5.33 a.m.	1700	518	28.30	718.8	30.10	764.5	52.6	11.4	84.1	2	2	6	5	3	......	1	1	8	5246	8442	6	3.20	81.3
Galveston	N. 29 18	W. 94 50	5.49 a.m.	48	15	30.08	764.0	30.11	764.8	60.5	15.8	87.5	1	2	2	3	10	3	4	2	1	7804	12559	6	5.57	141.5
Grand Haven	N. 43 05	W. 86 18	6.23 a.m.	620	189	29.34	745.2	30.05	763.3	32.7	0.4	84.5	1	2	4	2	6	3	7	3	......	9447	15203	6	3.09	78.5
Hatteras	N. 35 14	W. 75 30	7.06 a.m.	19	6	30.19	766.8	30.21	767.3	48.5	9.2	81.1	1	7	1	6	......	2	1	9	1	11285	18161	6	5.26	133.6
Helena	N. 46 33	W. 112 02	4.40 a.m.	4100	1250	25.69	652.5	30.09	764.3	20.2	-6.6	61.9	.....	......	8	11	......	1	......	1	7	4860	7821	7	0.37	9.4
Henrietta ...c	N. 33 42	W. 98 00	5.36 a.m.	980	300	29.08	738.6	30.13	765.3	45.0	7.2	84.7	3	2	......	1	7	6	......	1	5	6041	9722	6	1.91	48.5
Huron	N. 44 21	W. 98 17	5.35 a.m.	1305	398	28.57	725.7	30.09	764.3	17.8	-7.9	71.0	1	8	4	1	2	10	......	2	......	7679	12358	5	0.25	6.3
Indianapolis	N. 39 47	W. 86 06	6.24 a.m.	753	229	29.26	743.2	30.11	764.8	37.3	2.9	78.4	6	1	2	5	5	7	1	1	......	4651	7485	6	7.28	184.9
Indianola	N. 28 32	W. 96 38	5.42 a.m.	26	8	30.06	763.5	30.09	764.3	62.5	16.9	87.0	1	1	2	1	8	10	3	2	......	9807	15783	6	1.01	25.7
Jacksboro	N. 33 10	W. 98 00	5.35 a.m.	1120	341	28.89	733.8	30.13	765.3	45.7	7.6	84.7	3	4	2	4	5	9	......	......	1	5585	8988	6	4.04	102.6
Jacksonville	N. 30 24	W. 81 40	6.41 a.m.	43	13	30.19	766.8	30.24	768.1	55.6	13.1	80.9	2	1	6	2	2	4	3	7	1	5103	8212	3	1.09	27.7
Keokuk	N. 40 23	W. 91 25	6.02 a.m.	618	188	29.37	746.0	30.07	763.8	34.5	1.4	78.2	.....	6	2	7	3	3	3	2	2	5492	8838	3	1.54	39.1
Key West	N. 24 32	W. 81 48	6.41 a.m.	27	8	30.16	766.1	30.19	766.8	70.4	21.3	78.8	5	......	......	1	......	7	8	6	1	7398	11906	3	0.40	10.2
Kitty Hawk	N. 36 00	W. 75 23	7.05 a.m.	22	7	30.20	767.1	30.22	767.6	45.4	7.4	80.6	1	6	4	5	1	......	3	7	1	10353	16661	5	4.83	122.7
Knoxville	N. 35 56	W. 83 58	6.32 a.m.	980	299	29.14	740.1	30.22	767.6	41.8	5.4	85.7	3	2	3	6	......	......	2	10	2	4801	7726	7	6.10	154.9
La Crosse	N. 43 48	W. 91 23	6.03 a.m.	725	221	29.18	741.2	30.02	762.5	28.7	-1.8	71.3	2	2	5	3	11	2	.....	1	2	5578	8977	4	1.11	28.2
La Mesilla	N. 32 17	W. 106 48	5.01 a.m.	3900	1189	26.16	664.5	30.17	766.3	34.9	1.6	75.4	1	2	2	......	......	......	......	2	21	1900	3085	3	1.36	34.5
Leavenworth	N. 39 19	W. 94 57	5.48 a.m.	842	256	29.16	740.7	30.11	764.8	35.6	2.0	71.3	5	4	......	......	5	2	......	1	11	5163	8309	4	1.17	29.7
Lewiston	N. 46 25	W. 116 59	4.20 a.m.	780	238	29.26	743.2	30.13	765.3	29.9	-1.2	66.2	...	2	3	3	......	4	7	6	3	2712	4364	6	0.78	19.8
Little Rock	N. 34 40	W. 92 12	5.59 a.m.	298	91	29.77	756.1	30.10	764.5	49.2	9.6	85.5	1	3	1	3	5	5	2	2	6	4047	6513	5	12.74	323.6
Los Angeles	N. 34 03	W. 118 16	4.15 a.m.	371	113	29.77	756.1	30.17	766.3	42.2	5.7	76.5	8	7	......	......	2	......	2	9	......	3897	6272	3	2.66	67.6
Louisville	N. 38 18	W 85 52	6.25 a.m.	530	162	29.52	749.8	30.11	764.8	43.7	6.5	77.5	7	... ..	2	4	7	5	2	1	......	6648	10699	6	9.69	246.1
Lynchburg	N. 37 30	W. 79 02	6.52 a.m.	652	199	29.48	748.8	30.20	767.1	40.9	4.9	69.4	.....	5	2	4	3	......	......	3	11	2600	4184	4	3.66	93.0
Mackinac City	....	....	....	....	....	....	....	....	....	....	....	....	.....	......	......	......	......	......	......	......	......	....	....	......	....	....
Madison	N. 43 03	W. 89 30	6.10 a.m.	949	289	28.97	735.8	30.06	763.5	28.3	-2.1	78.5	1	4	5	3	7	5	1	2	......	8008	12887	4	1.74	44.2
Marquette	N. 46 33	W. 87 36	6.19 a.m.	673	205	29.22	742.2	30.00	762.0	25.1	-3.8	75.5	1	3	9	6	4	2	......	2	1	7275	11708	8	3.41	86.6
Mason ...a	N. 30 42	W. 99 02	5.32 a.m.	1620	494	28.40	721.3	30.13	765.3	51.8	11.0	76.5	3	2	5	7	4	......	......	1	5	5731	9223	6	2.93	74.4
Memphis	N. 35 07	W. 90 07	6.08 a.m.	321	98	29.80	756.9	30.14	765.5	48.4	9.1	82.7	2	3	1	3	1	9	2	2	5	3109	5003	6	9.92	252.0
Milwaukee	N. 43 03	W. 87 54	6.17 a.m.	697	212	29.25	742.9	30.05	763.3	31.2	-0.4	82.6	3	1	7	7	5	4	......	......	1	8851	14244	7	2.11	53.6
Mobile	N. 30 42	W. 87 59	6.16 a.m.	41	12	30.16	766.1	30.20	767.1	53.5	11.9	84.3	3	1	3	3	1	3	5	4	5	3649	5872	6	4.54	115.3
Montgomery	N. 32 22	W. 86 23	6.23 a.m.	219	66	29.97	761.2	30.21	767.3	51.1	10.6	79.7	3	1	3	2	3	7	5	......	4	4136	6656	6	9.27	235.5
Moorhead	N. 46 52	W. 96 40	5.41 a.m.	923	281	28.95	735.3	30.05	763.3	11.4	-11.4	84.3	4	5	3	1	5	3	......	2	5	6668	10731	7	0.80	20.3
Morgantown	N. 39 36	W. 79 52	6.48 a.m.	963	293	29.14	740.1	30.21	767.3	38.6	3.7	75.5	.....	2	3	7	1	1	......	2	12	3397	5467	6	5.41	137.4
Mt. Washington	N. 44 16	W. 71 16	7.22 a.m.	6279	1914	23.47	596.1	30.09	764.3	9.9	-12.3	79.7	1	19	3	......	......	......	......	5	......	27334	43987	5	5.94	150.9

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Altitude of Barometer above sea. Met'rs	Mean Barometer. Actual. Inch.	Mean Barometer. Actual. Mill.	Mean Barometer. Reduced. Inch.	Mean Barometer. Reduced. Mill.	Mean Temperature. Fah.	Mean Temperature. Cent.	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	N-E	C	Wind. Total Movement. Miles	Wind. Total Movement. Kil.	Average Cloudiness. 0-10	Total Precipitation. Inch.	Total Precipitation. Mill.
U.S. SERIES—*Continued.*	° ′	° ′																								
Nashville	N. 36 11	W. 86 53	6.21 a.m.	507	154	29.59	751.6	30.15	765.8	46.8	8.2	76.9	....	2	4	3	6	6	2	3	2	3843	6185	6	8.58	217.9
New Haven	N. 41 17	W. 72 57	7.16 a.m.	107	32	30.02	762.5	30.14	765.5	27.8	—2.3	79.8	8	4	3	2	....	....	....	4	7	5576	8974	6	4.52	114.8
New London	N. 41 22	W. 72 09	7.19 a.m.	47	14	30.10	764.5	30.15	765.8	30.2	—1.0	76.1	6	7	4	3	1	....	....	3	4	5380	8658	6	5.26	133.6
New Orleans	N. 29 58	W. 90 07	6.08 a.m.	52	16	30.10	764.5	30.16	766.1	58.1	14.5	82.4	1	4	....	1	2	8	7	4	1	5662	9112	4	4.04	102.6
Newport	N. 41 29	W. 71 19	7.23 a.m.	44	13	30.06	763.5	30.11	764.8	30.6	—0.8	78.1	5	8	5	8	....	....	1	1	....	7621	12265	6	5.89	149.6
New River .g.	N. 34 30	W. 77 23	6.58 a.m.	....	....	....	....	....	....	42.9	6.1	77.5	3	4	2	4	....	1	....	5	2	....	....	4	2.47	62.7
New Shoreham	N. 41 10	W. 71 37	7.22 a.m.	27	8	30.08	764.0	30.12	765.0	32.3	0.2	76.6	5	6	3	7	....	1	2	1	3	11417	19738	5	9.73	247.1
New York	N. 40 43	W. 74 00	7.12 a.m.	164	50	29.98	761.7	30.17	766.3	31.9	—0.1	83.3	3	....	9	7	3	....	3	3	....	6835	11000	6	4.36	110.7
Norfolk	N. 36 51	W. 76 19	7.03 a.m.	30	9	30.18	766.6	30.21	767.3	43.8	6.6	73.4	2	6	3	5	1	3	1	5	2	5336	8587	5	3.58	90.9
North Platte .a.	N. 41 08	W. 100 53	5.24 a.m.	2841	866	27.06	687.3	30.16	766.1	22.7	—5.2	70.7	2	7	10	1	1	....	2	....	4	5868	9554	3	0.13	3.3
Olympia	N. 47 02	W. 122 56	3.56 a.m.	36	11	29.98	761.5	30.02	762.5	33.9	1.1	88.1	2	2	....	3	17	2	....	1	1	4458	7174	8	9.60	243.8
Omaha	N. 41 16	W. 96 00	5.45 a.m.	1113	339	28.84	732.5	30.11	764.8	30.5	—0.8	71.0	4	5	1	4	7	4	....	1	2	6993	11253	3	0.60	15.2
Ooglaamie	N. 71 17	W. 156 40	1.41 a.m.	17	5	29.71	754.6	29.73	755.1	-27.2	-32.9	76.7	6	....	2	9	9	....	....	1	1	7952	12797	4	0.04	1.0
Oswego	N. 43 29	W. 76 35	7.01 a.m.	304	93	29.75	755.6	30.10	764.5	29.3	—1.5	71.8	2	5	1	2	9	7	1	1	....	6629	10668	6	3.33	84.6
Palestine .j.	N. 31 45	W. 95 40	5.45 a.m.	523	162	29.52	749.8	30.10	764.5	56.9	13.8	78.8	1	2	....	3	9	2	....	....	1	5441	8756	6	3.08	93.5
Pensacola	N. 30 25	W. 87 12	6.19 a.m.	30	9	30.17	766.3	30.20	767.1	54.8	12.7	83.1	5	2	2	3	2	5	3	5	1	5590	8996	5	4.67	118.6
Philadelphia	N. 39 57	W. 75 10	7.07 a.m.	92	28	30.09	764.3	30.20	767.1	35.9	2.2	76.8	3	6	4	8	1	1	3	2	....	5589	8994	5	4.22	107.2
Pikes Peak	N. 38 48	W. 104 59	5.07 a.m.	14134	4308	17.49	444.2	30.21	767.3	3.8	-15.7	73.6	1	8	1	14	....	....	....	3	1	14257	22945	4	0.36	9.1
Pioche	N. 37 57	W. 114 26	4.30 a.m.	6110	1862	24.04	610.6	30.20	767.1	21.5	—5.8	68.9	3	6	2	3	14	....	....	....	....	4670	7516	2	0.55	14.0
Pittsburg	N. 40 32	W. 80 02	6.48 a.m.	762	232	29.31	744.5	30.17	766.3	36.0	2.2	75.9	3	4	5	2	5	....	3	6	....	4432	7132	6	3.14	79.8
Port Eads	N. 29 00	W. 89 15	6.11 a.m.	7	2	30.17	766.3	30.18	766.6	57.7	14.3	89.4	4	2	....	....	4	9	....	8	1	6694	10773	5	5.14	130.6
Port Huron	N. 42 58	W. 82 29	6.38 a.m.	633	193	29.36	745.7	30.09	764.3	28.9	—1.7	82.5	1	4	1	8	9	3	1	1	....	7099	11424	7	2.23	56.6
Portland, Maine	N. 43 40	W. 70 16	7.27 a.m.	45	14	30.01	762.2	30.06	763.5	25.0	—3.9	72.9	7	9	1	8	....	....	....	2	1	6772	10898	7	4.58	116.3
Portland, Oregon	N. 45 30	W. 122 28	3.57 a.m.	67	20	30.04	763.0	30.10	764.5	35.2	1.8	85.8	2	1	....	1	13	2	2	....	7	4606	7412	7	10.49	266.4
Portsmouth	N. 35 02	W. 76 04	7.04 a.m.	40	12	....	....	....	....	48.7	9.3	40.4	5	3	4	4	1	2	1	8	....	11337	18245	6	2.69	68.3
Prescott	N. 34 29	W. 112 13	4.38 a.m.	5340	1628	24.76	628.9	30.12	765.0	23.9	—4.5	69.3	....	1	1	5	13	3	1	2	2	3810	6132	3	2.04	51.8
Provincetown	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Punta Rassa	N. 26 36	W. 82 10	6.40 a.m.	13	4	30.19	766.8	30.20	767.1	62.5	16.9	79.6	5	1	....	....	2	2	8	10	....	7314	11770	3	0.20	5.1
Red Bluff	N. 40 10	W. 122 16	3.59 a.m.	350	106	29.78	756.4	30.16	766.1	39.6	4.2	83.0	9	6	1	4	1	4	....	....	3	4632	7454	5	3.94	100.1
Rio Grande City	N. 26 22	W. 98 45	5.33 a.m.	230	70	29.82	757.4	30.08	764.0	61.5	16.4	79.2	2	4	1	....	2	14	3	1	1	5054	8133	5	0.11	2.8
Rochester	N. 43 08	W. 77 51	6.58 a.m.	621	189	29.39	746.5	30.10	764.5	29.2	—1.6	80.9	1	5	6	8	2	2	1	....	3	6017	9683	7	1.25	31.7
Roseburg	N. 43 10	W. 123 16	3.55 a.m.	511	156	29.57	751.1	30.14	765.5	35.4	1.9	87.4	1	4	...	1	5	....	3	2	12	2044	3289	8	6.21	157.7
Sacramento	N. 38 35	W. 121 31	4.02 a.m.	70	21	30.08	764.0	30.16	766.1	40.7	4.8	83.6	7	1	....	1	3	15	1	....	....	5176	8330	4	2.40	61.0
Saint Louis	N. 38 37	W. 90 15	6.07 a.m.	568	173	29.48	748.8	30.12	765.0	38.9	3.8	80.6	5	3	3	1	10	2	2	1	1	7803	12556	6	8.94	227.1
Saint Paul	N. 44 53	W. 93 05	5.56 a.m.	811	247	29.07	738.4	30.01	762.2	23.8	—4.6	80.2	....	4	5	4	2	9	2	1	1	6071	9769	5	2.35	59.7
Saint Vincent	N. 48 58	W. 97 03	5.40 a.m.	804	245	29.07	738.4	30.04	763.0	1.6	-16.9	95.0	6	7	1	....	7	5	....	2	....	8335	13413	6	0.83	21.1
Salt Lake City	N. 41 10	W. 112 00	4.40 a.m.	4348	1325	25.66	651.8	30.22	767.6	22.9	—5.1	55.0	....	3	....	2	....	8	1	....	14	2952	4751	4	0.42	10.7
San Antonio	N. 29 28	W. 98 22	5.34 a.m.	673	205	29.37	746.0	30.09	764.3	54.5	12.5	83.8	1	3	....	....	3	4	1	8	8	4324	6959	6	2.18	55.4
San Diego .a.	N. 32 32	W. 117 08	4.20 a.m.	67	20	30.06	763.5	30.13	765.3	45.8	7.7	78.3	2	....	2	3	1	....	1	17	1	4772	7680	4	2.55	64.8
Sandusky	N. 41 27	W. 82 43	6.37 a.m.	639	195	29.40	746.7	30.12	765.0	35.9	2.2	78.3	1	3	5	6	8	2	....	3	....	10029	16124	6	3.79	96.3
Sandy Hook	N. 40 28	W. 74 01	7.12 a.m.	28	8	30.12	765.0	30.16	766.1	33.8	1.0	80.4	3	5	9	4	1	2	1	3	....	10829	17414	5	4.85	123.2
San Francisco	N. 37 48	W. 122 26	3.58 a.m.	60	18	30.09	764.3	30.16	766.1	45.2	7.3	77.9	2	5	4	8	3	5	....	1	....	5944	9566	4	2.96	75.2
Santa Fé	N. 35 41	W. 106 10	5.04 a.m.	7064	2153	23.20	589.3	30.24	768.1	24.6	—4.1	67.5	8	....	1	4	1	6	2	5	1	4410	7097	2	0.06	1.5
Savannah	N. 32 05	W. 81 08	6.44 a.m.	87	26	30.15	765.8	30.24	768.1	52.2	11.2	75.0	5	5	3	2	6	1	4	2	....	5422	8726	5	0.78	19.8
Shreveport	N. 32 30	W. 93 45	5.54 a.m.	227	69	29.87	758.7	30.12	765.0	51.8	11.0	87.8	1	3	....	....	14	3	4	1	2	4521	7276	6	8.71	221.2
Silver City	N. 32 48	W. 108 15	4.55 a.m.	5890	1795	24.24	615.7	30.10	764.5	31.0	—0.6	72.8	2	12	8	1	2	....	....	....	3	2641	4250	4	2.06	52.3
Sitka	N. 57 03	W. 135 19	3.07 a m.	63	19	29.40	746.7	29.47	748.5	30.5	—0.8	78.8	1	....	5	2	1	5	8	5	1	9342	15034	8	16.35	415.3
Smithville	N. 33 55	W. 78 01	6.56 a.m.	34	10	30.19	766.8	30.23	767.8	47.5	8.6	86.2	2	7	3	4	1	2	....	8	1	6583	10594	4	1.64	41.7
Spokane Falls	N. 47 39	W. 117 24	4.18 a.m.	1910?	582?	27.97	710.4	30.10	764.5	21.2	—6.0	81.6	....	2	3	10	4	1	1	3	4	5017	8074	8	2.25	57.1
Springfield, Ill.	N. 39 48	W. 89 48	6.10 a.m.	644	196	29.38	746.2	30.11	764.8	37.5	3.1	73.0	1	5	3	2	10	4	1	2	....	6899	11103	5	7.92	201.2
Springfield, Mass.	N. 42 06	W. 72 36	7.18 a.m.	120	37	30.00	762.0	30.14	765.5	26.8	—2.9	77.8	3	3	5	1	7	....	3	3	3	3569	5744	6	5.29	134.4
Springfield, Mo.	N. 37 12	W. 93 18	5.55 a.m.	1351	412	28.61	726.7	30.18	766.6	40.9	4.9	76.8	2	4	2	1	10	5	1	3	....	6995	11257	6	7.29	185.2
Stockton	N. 30 50	W. 102 50	5.16 a.m.	3010	917	27.02	686.3	30.15	765.8	42.1	5.6	88.2	....	3	2	7	4	2	....	....	10	5300	8529	5	1.21	30.7
Thatcher's Island	N. 42 36	W. 70 34	7.26 a.m.	48	15	30.02	762.5	30.08	764.0	28.6	—1.9	87.4	8	5	6	4	1	1	1	1	1	12277	19758	5	4.69	119.1
Toledo	N. 41 40	W. 83 32	6.34 a.m.	651	198	29.37	746.0	30.11	764.8	35.5	1.9	75.7	2	1	6	4	11	1	1	....	2	6498	10457	6	2.40	61.0
Tucson	N. 32 14	W. 110 56	4.44 a.m.	2369	722	27.62	701.5	30.10	764.5	41.1	5.1	81.6	....	1	1	1	2	16	5	....	2	2799	4504	4	1.64	41.7
Umatilla	N. 45 55	W. 119 21	4.11 a.m.	340	103	29.77	756.1	30.15	765.8	31.2	—0.4	77.3	1	....	5	7	2	7	3	2	1	5587	8991	7	0.73	18.5
Uvalde .k.	N. 29 13	W. 99 40	5.29 a.m.	930	283	29.09	738.9	30.09	764.3	58.0	14.4	82.5	2	....	1	....	1	5	4	....	4	1920	3090	5	0.71	18.0
Vicksburg	N. 32 23	W. 90 54	6.04 a.m.	244	74	29.90	759.4	30.17	766.3	53.7	12.1	78.5	....	2	3	....	5	9	6	1	2	4157	6690	6	7.15	181.6
Visalia	N. 36 20	W. 119 16	4.11 a.m.	348	105	29.76	755.9	30.14	765.5	37.9	3.3	82.5	1	5	2	3	4	11	1	1	....	2239	3603	4	1.86	47.2
Washington, D. C.	N. 38 53	W. 77 01	7.00 a.m.	106	32	30.09	764.3	30.21	767.3	35.6	2.0	80.2	6	7	....	....	3	....	1	5	6	3460	5568	5	5.09	129.3
W. Las Animas	N. 38 04	W. 103 07	5.16 a.m.	3905	1190	26.00	660.4	30.13	765.3	19.0	—7.2	74.6	....	10	10	3	....	....	....	3	2	4473*b*	7198*b*	2	0.02	0.5
Wickenburg .b.	N. 33 58	W. 112 42	4.37 a.m.	?	?	....	....	....	....	34.0	1.1	86.0	....	8	4	....	....	....	....	....	14	....	....	4	0.69	17.5
Williamsport	N. 41 15	W. 77 03	7.00 a.m.	561	171	29.54	750.3	30.17	766.3	31.4	—0.3	79.2	3	7	9	1	1	1	4	2	....	3764	6057	7	3.74	95.0
Wilmington	N. 34 11	W. 78 10	6.56 a.m.	52	16	29.17	766.3	30.23	767.8	48.6	9.2	76.6	2	5	4	3	2	1	3	5	3	5368	8478	5	1.92	48.8
Winnemucca	N. 41 00	W. 119 21	4.17 a.m.	4327	1319	25.64	651.2	30.16	766.1	18.1	—7.7	70.9	2	....	....	7	1	2	....	16	....	5650	9093	5	1.50	38.1
Wood's Holl	N. 41 33	W. 70 40	7.26 a.m.	35	11	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yankton	N. 42 45	W. 97 30	5.38 a.m.	1228	374	28.69	728.7	30.11	764.8	22.1	—5.5	72.4	4	5	4	6	3	1	1	2	2	5602	9015	3	0.09	2.3
Yuma	N. 32 44	W. 114 36	4.30 a.m.	141	43	29.94	760.5	30.09	764.3	46.4	8.0	60.1	10	8	....	4	....	2	1	3	....	4250	6840	2	0.01	0.3
Sub-Series.																										
Bogota	N. 4 36	W. 74 14	7.41 a.m.	8655	2638	22.04	559.8	....	....	52.2	11.2	81	3	....	....	2	....	3	2	....	18	....	....	8	3.52	89.4
Bridgetown	N. 13 12	W. 59 35	8.10 a.m.	?	?	30.07	763.8	30.08	764.0	77.2	25.1	82.5	....	....	....	....	....	....	28	....	....	....	....	9	2.96	75.2
Buenaventura	N. 3 50	W. 76 55	7.00 a.m.	18	5	30.00	762.0	30.02	762.5	77.0	25.0	86.9	1	....	....	4	5	2	....	....	16	....	....	9	5.95	151.1
Guadeloupe	N. 16 12	W. 61 40	8.01 a.m.	?	?	30.00	762.0	30.02	762.5	74.4	23.6	89.1	....	....	....	....	....	....	27	1	....	....	....	4	3.55	90.2
Havana	N. 23 09	W. 82 22	6.39 a.m.	50	15	30.16	766.1	30.21	767.3	72.4	22.4	79.8	3	....	....	....	1	13	5	2	4	2480	3991	3	0.15	3.8
Kingston	N. 18 58	W. 76 48	7.01 a.m.	10	3	30.10	764.5	30.11	764.8	69.0	20.6	85	16	....	....	....	....	1	....	....	11	2285	3677	2	0.28	7.1
Navassa	N. 18 25	W. 75 03	7.43 a.m.	77	23	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Paramaribo	N. 5 50	W. 55 13	8.27 a.m.	6	2	30.05	763.3	30.05	763.3	76.8	24.9	85.7	....	....	....	....	....	....	27	1	....	....	....	9	11.64	295.7
Puerto Berrio	N. 6 32	W. 74 28	7.10 a.m.	542	165	29.52	749.8	29.98	761.5	81.0	27.2	80	3	1	....	....	1	....	1	....	22	....	....	8	4.76	120.9
Rivas .e.	N. 11 26	W. 85 47	6.25 a.m.	150	46	....	....	....	....	....	....	95.0	....	....	....	....	....	....	....	23	....	....	....	3	0.10	2.5
Santiago de Cuba	N. 19 55	W. 75 50	7.04 a.m.	21	6	30.11	764.8	30.14	765.5	71.0	21.7	72.4	13	2	....	....	....	....	....	2	11	....	....	2	0.59	15.0
St. Thomas	N. 18 20	W. 64 56	7.48 a.m.	110	33	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
York Factory	N. 57 02	W. 92 26	5.58 a.m.	51	15	29.98	761.5	30.03	762.7	—21.5	-29.7	....	3	2	3	5	5	1	6	3	....	....	....	4	0.28	7.1

Ocean Square Data for February, 1882.

Location of Centre of each Square.		No. of days.	No. of ob's.	Barometer.		Temperature.		Wind Frequency.										Wind force 0–10.
				Inch.	Mill.	Fah.	Cent.	N.	NW.	W.	SW.	S.	SE.	E.	NE.	Calm.	Blank.	
N. 2.5°	W. 37.5°	1	1															
2.5	42.5	2	2															
2.5	47.5	2	2															
7.5	27.5	5	9															
7.5	32.5	2	2															
7.5	42.5	1	1															
7.5	47.5	2	2															
12.5	22.5	2	3	29.99	761.7	78.1	25.6							1	27			1.8
12.5	27.5	6	7	30.02	762.5	77.9	25.5							1	27			2.0
12.5	32.5	3	3	30.04 a	763.0 a	77.8b	25.4b						1	5	20		2	1.8
12.5	37.5	2	2															
12.5	52.5	2	3															
12.5	57.5	7	7															
17.5	22.5	2	3	30.10	764.5	74.4	23.6						2	2	24			2.1
17.5	27.5	5	5	30.12	765.0	74.4	23.6						4		24			1.9
17.5	32.5	1	1	30.13 d	765.3 d	74.0d	23.7d	1					2	5	16		4	2.1
17.5	37.5	10	11	30.11 g	764.8 g	74.5f	23.6f		2					9	10		7	2.2
17.5	42.5	8	8	30.17 h	766.3 h	74.1h	23.4h						3	7	9		9	2.0
17.5	47.5	6	6	30.17 l	766.3 l	73.9 l	23.3 l	1					3	3	9		12	2.4
17.5	52.5	4	5	30.16 i	766.1 i	73.7i	23.2 i					1	1	6	10		10	1.9
17.5	57.5	5	8	30.15 f	765.8 f	73.9f	23.3f					3	14	5			6	1.5
22.5	22.5	3	3	30.18	766.6	71.6	22.0						9	5	14			2.4
22.5	27.5	5	5	30.18 b	766.6 b	72.1	22.3	1			1		10	2	13			2.6
22.5	32.5	10	11	30.18 b	766.6 b	72.1	22.3		1		1		8	6	10		2	2.6
22.5	37.5	15	19	30.19 c	766.8 c	72.1b	22.3b	2	4		1	2	1	7	9		2	1.7
22.5	42.5	7	9	30.20 b	767.1 b	72.2	22.3	1	3				5	7	12			2.0
22.5	47.5	11	11	30.20 e	767.1 e	71.8	22.1	4	1		1	2	2	5	9		4	2.3
22.5	52.5	2	2	30.22 h	767.6 h	71.3f	21.8f	1	4		3			2	11		7	1.9
22.5	57.5	3	4	30.20 e	767.1 e	71.2e	21.8e	1	4		2		4	1	11		5	1.6
22.5	62.5	5	5	30.18 b	766.6 b	71.5b	21.9b	1	2		1		2	2	18		2	1.6
22.5	67.5	11	12	30.18 a	766.6 a	72.4b	22.4b	1	3		1		4	4	13		2	1.7
22.5	72.5			30.19 d	766.8 d	72.2d	22.3d	1	2			1	3	5	12		4	1.8
27.5	22.5	6	6	30.25 b	768.3 b	68.0	20.0		1		3	1	11	3	8		1	2.5
27.5	27.5	5	5	30.22 c	767.6 c	68.3	20.2	1			6	2	9	3	6		1	2.4
27.5	32.5	4	4	30.19 c	766.8 c	67.6a	19.8a	2	3		6		9	2	5		1	2.2
27.5	37.5	4	5	30.19 b	766.8 b	67.8a	19.9a	2	9		5	4		4	3		1	2.1
27.5	42.5	10	11	30.19 c	766.8 c	66.6	19.2	4	5	4	3	3		2	4	2	1	2.2
27.5	47.5	1	1	30.18 c	766.6 c	65.7	18.7	1	8	5	5	1	1	1	4		2	2.2
27.5	52.5	4	4	30.18 e	766.6 e	64.8e	18.2e	1	7	1	4				11		4	2.1
27.5	57.5			30.19 d	766.8 d	65.0	18.3	1	7	2	1	1	2	1	9		4	1.7
27.5	62.5			30.20 b	767.1 b	65.3	18.5	2	10		2	2	1	2	8		1	2.0
27.5	67.5	8	10	30.20 a	767.1 a	66.7a	19.3a	2	9		5		2	2	7		1	1.9
27.5	72.5	8	12	30.22	767.6	66.4	19.1	1	5		4	1	4	3	10			2.0
27.5	77.5	3	3	30.24 a	768.1 a	63.9	17.7	1	6		2	1	5	4	9			1.9
32.5	12.5	4	6	30.30	769.6	63.8	17.7		3	1	3		6	3	12			1.7
32.5	17.5	10	12	30.30	769.6	63.8	17.7			1	6	2	12	5	1	1		1.7
32.5	22.5	10	10	30.26 a	768.6 a	65.1	18.4		3	9	2	11	1	2				2.5
32.5	27.5			30.20 a	767.1 a	65.2	18.4		5	1	10	3	9					2.3
32.5	32.5	3	3	30.18 a	766.6 a	64.5	18.1	1	4	1	11	5	4	1	1			2.4
32.5	37.5	9	9	30.15 a	765.8 a	63.1	17.3	2	5	4	9	4	1	1	1		1	2.3
32.5	42.5	8	8	30.13 a	765.3 a	61.8	16.6	1	8	4	10		2		2		1	2.8
32.5	47.5	9	10	30.10 a	764.5 a	59.5	15.3	4	11	3	6	2			2			2.7
32.5	52.5	3	3	30.12 a	765.0 a	59.3	15.2	7	9	3	4	2	1		2			2.2
32.5	57.5	6	7	30.13	765.3	59.3	15.2	4	13	1	5		1		4			2.6
32.5	62.5	7	9	30.16	766.1	60.5	15.8	4	9		9	1	1		4			1.7
32.5	67.5	12	16	30.18	766.6	60.2	15.7	4	11	1	6	1	2		3			2.6
32.5	72.5	13	25	30.21	767.3	57.0	13.9	2	7	2	3	5	2	1	6			2.7
32.5	77.5	9	17	30.23	767.8	55.0	12.8	2	10		5	3	2	1	4		1	1.9
37.5	12.5	6	6	30.33	770.4	58.8	14.9	1	2	3	6	3	6	1	6			2.2
37.5	17.5	6	7	30.28	769.1	60.1	15.6		3	2	10	1	8	1	3			2.4
37.5	22.5	3	3	30.23	767.8	60.5	15.8		2	3	11	2	10					2.5
37.5	27.5	3	3	30.16	766.1	60.3	15.7	1	2	4	9	4	8					2.7
37.5	32.5	9	9	30.08	764.0	58.7	14.8		4	5	10	6	3					2.9
37.5	37.5	3	3	30.02	762.5	55.5	13.1	1	6	4	11	3	3					3.1
37.5	42.5	1	1	30.01 a	762.2 a	52.3	11.3	2	10	3	8	2	2				1	3.3
37.5	47.5	1	1	29.97	761.2	48.8	9.3	2	12	2	9	2			1			3.4
37.5	52.5	3	3	29.96 a	761.0 a	47.0	8.3	2	15	3	5	2	1					3.6
37.5	57.5	10	10	29.98	761.5	45.6	7.6	5	15	1	6	1						3.6
37.5	62.5	8	10	30.01	762.2	44.6	7.0	3	12	5	6	2						3.6
37.5	67.5	10	15	30.09	764.3	43.4	6.3	4	12	3	6	1	1		1			3.2
37.5	72.5			30.13	765.3	41.3	5.2	4	10	1	8		4		1			2.4
42.5	12.5	3	4	30.29	769.4	56.7	13.7	1	1	3	7	4	6	1	5			2.6
42.5	17.5	5	5	30.22	767.6	57.2	14.0		2	2	10	7	6	1				2.8
42.5	22.5	7	9	30.17	766.3	57.5	14.2		5	1	10	3	9					2.9
42.5	27.5	2	2	30.07	763.8	56.4	13.6		5	2	11	4	6					3.4
42.5	32.5	8	8	29.98	761.5	54.6	12.6	1	4	5	7	9	2					3.6
42.5	37.5	7	7	29.92	760.0	51.0	10.6	2	8	2	9	5	2					3.8
42.5	42.5	12	17	29.90	759.4	47.3	8.3	2	10	2	10	2	1		1			4.0
42.5	47.5	22	34	29.87	758.7	42.5	5.8	3	11	1	5	2	4		1		1	3.4
42.5	52.5	27	61	29.89	759.2	39.9	4.4	3	14	1	5	3	2					4.0
42.5	57.5	27	57	29.91	759.7	36.2	2.3	3	12	3	2	8						3.9
42.5	62.5	23	52	29.94	760.5	34.0	1.1	4	8	4	7	4	1					3.9
42.5	67.5	20	46	30.03	762.7	32.8	0.4	4	12	2	7	2			1			3.2
47.5	12.5	19	32	30.18	766.6	52.6	11.4		5	3	7	8	4		1			3.8
47.5	17.5	20	33	30.11	764.8	52.4	11.3		5	3	9	6	5					3.7
47.5	22.5	17	32	30.04	763.0	51.8	11.0		4	3	11	7	2	1				3.7
47.5	27.5	22	34	29.93	760.2	49.7	9.8	1	5	5	6	7	3	1				4.0
47.5	32.5	26	48	29.84	757.9	47.5	8.6	2	5	3	4	10	4					4.3
47.5	37.5	22	48	29.76	755.9	43.6	6.4	2	8	2	5	5	4	1	1			4.3
47.5	42.5	30	36	29.75	755.6	38.6	3.7	2	7	3	7	2	5	1	1			3.7
52.5	47.5	19	25	29.75	755.6	29.8	— 1.2	3	5	3	6	1	4	2	4			3.1
52.5	12.5	19	27	30.10	764.5	50.1	10.1		6	4	7	7	2		2			3.5
52.5	17.5	12	17	30.02	762.5	49.4	9.7	2	4	1	13	5	2		1			4.0
52.5	22.5	14	20	29.96	761.0	48.7	9.3	1	5		11	6	4		1			3.7
52.5	27.5	12	14	29.86	758.4	45.8	7.7	2	5	3	9	4	3	1	1			3.9
52.5	32.5	6	6	29.80	756.9	43.6	6.4	1	5	5	6	4	6		1			3.6
52.5	37.5	5	6	29.76	755.9	38.4	3.6	2	6	5	3	3	7		2			3.6
52.5	42.5	2	2	29.70	754.4	33.7	0.9	2	6	4	5	2	6	1	2			2.9
52.5	47.5			29.72	754.9	26.5	— 3.1	1	11	1	3	1	2	3	5		1	2.8
57.5	12.5			29.81	757.2	41.9	5.5		5	3	10	3	4	1	2			3.5
57.5	17.5	2	2	29.78	756.4	39.1	3.9		5	3	10	3	3	1	3			2.5
57.5	22.5			29.76	755.9	37.0	2.8	3	4	9	4	3	1	4				3.4
57.5	27.5			29.76	755.9	34.2	1.2	2	8	2	9	1	1	2	3			3.2
57.5	32.5			29.66	753.4	32.1	0.1	2	6	4	4		7	2	3			3.1
57.5	37.5			29.65	753.1	28.4	— 2.0	1	9	3	2	2	2	4	5			2.9
57.5	42.5			29.59	751.6	25.0	— 3.9	1	7	5	1	1	4	3	5		1	2.3
57.5	47.5			29.62	752.3	20.3	— 6.5	3	10	2	1	1			11			2.4

NOTE.—See General Remarks, page 9.

REVIEW.

INTERNATIONAL METEOROLOGY.

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

In addition to chart iv., for the month of February, 1882, the present SUMMARY contains the international storm-track chart v., for the month of February, 1881, being a continuation of the series begun in November, 1877, and heretofore described in the MONTHLY WEATHER REVIEW.

The following descriptions relate to chart iv., for the months of February and March, 1881, (which charts were issued with the SUMMARY for the respective months), and present a brief summary of the meteorological conditions which prevailed over the northern hemisphere during these months. Chart iv. continues the series of international charts begun in January, 1877, and exhibits the mean pressure, mean temperature, and prevailing directions of the wind over the northern hemisphere, and at certain isolated stations in the southern hemisphere, as determined from one observation taken simultaneously each day at 7 a. m., Washington, or 0.8 p. m., Greenwich mean time.

For the description of these charts much valuable information has been obtained from the "Monatliche Uebersicht der Witterung," published by Professor Dr. G. Neumayer, director of the German Marine Observatory, Hamburg, Germany, and from the "Bulletin Mensuel," published by M. Marc Dechrevens, of Zi-Ka-Wei, China.

For the month of February, 1881, no very marked areas of low mean pressure appear on the chart. The region of least pressure is indicated by the isobarometric line of 29.8 (756.9), and extends from the southern part of Greenland southward to the fifty-first parallel, and eastward to the western coast of Ireland. The isobar of 29.9 (759.4) extends from Newfoundland eastward over the Atlantic, and incloses within its limits the British Isles and northwestern Europe, while a small area of mean pressures, inclosed by the isobarometric line of 29.9 (759.4), covers the southern part of Italy and the Mediterranean.

The areas of barometric maxima are distributed as follows: The first area of high barometer, indicated by the isobar of 30.4 (772.1), occupies southeastern Siberia and the northern frontier of China. Eastward of that region, the atmospheric pressure decreases somewhat rapidly, until the isobar of 29.9 (759.4), which occupies the region near the Sea of Okhotsk, is reached. The pressure decreases very slowly in a southerly and southeasterly direction, the isobars of 30.1 (764.5) and 30.2 (767.1) covering Japan and the southern part of the Chinese Empire. In Europe, the pressure is highest in the northern part of the continent, and in Russia; it increases slowly to the eastward, and decreases in a southerly direction. Over the north Atlantic ocean, the region of barometric maxima covers the Azores and the Madeira islands, thence southward to the twentieth parallel and westward to the forty-third meridian. The isobar of 30.1 (764.5) also extends from the coast of the United States eastward as far as N. 22°, W. 62°. In the North American continent, the atmospheric pressure is generally high; the region of greatest pressure in the United States is shown over the New England and middle Atlantic states, where the mean barometric readings range from 30.2 (767.1) to 30.25 (768.3). In the interior of the United States, including the Florida peninsula and the Gulf states, the pressures range from 30.1 (764.5) to 30.2 (767.1). On the Pacific coast, the region of greatest mean pressure is inclosed by the isobar of 30.1 (764.5) and covers the states of California, Oregon, and western Idaho.

Compared with the preceding month, (January, 1881,) there has been a general increase of pressure over Europe, except in the British Isles, where the mean barometric readings were slightly lower than in January. The most marked increase of pressure occurred in the Scandinavian peninsula and in Russia, where it averages .25 inch above the means of the preceding month. In Asia, the mean pressure has experienced no marked change, except in southeastern Siberia and in British India, where the means are about .05 and .08 inch, respectively, below those of the preceding month. Over the Atlantic ocean, the atmospheric pressure has greatly increased; the area of low mean barometer, 29.5 (749.3), which, in January, 1881, occupied mid-ocean, being now entirely dissipated and replaced by pressures ranging from 29.8 (756.9) to 30.1 (764.5). In the United States, the pressure has decreased, the region of greatest pressures having diminished in size, while it has gradually drawn to the eastward. On the Pacific coast, the changes are very marked, especially in the northern portions, where the pressure has decreased about .15 inch. In Canada, there has been a general increase of pressure in all parts of the dominion; over the region near Hudson's bay, the increase averages .25 inch.

Compared with the corresponding month of previous years, the mean atmospheric pressure over the United States is above the normal over the country from South Carolina northwestward to Lake Superior, the greatest departures occurring in the New England states. In the Gulf states, the pressure was slightly below the normal. In Canada, it was everywhere above the normal.

The following table shows the mean pressure and the mean temperature, with corresponding departures, for the month of February, 1881, in the several countries of Europe and Asia, compared with the means as determined from observations taken during the years 1877, 1878, 1879, and 1880:—

Countries.	Mean pressure.			Mean temperature.		
	Feb., 1877, 1878, 1879, 1880.	February, 1881.	Departure.	Feb., 1877, 1878, 1879, 1880.	February, 1881.	Departure.
				°	°	°
Algeria	30.15	30.00	−0.15	58.8	60.2	+1.4
Austria	29.98	30.01	+0.03	38.0	34.7	−3.3
British Isles	29.79	29.83	+0.04	42.9	40.5	−2.4
Denmark	29.78	29.90	+0.12	34.1	28.0	−6.1
France	30.03	29.92	−0.11	46.7	47.6	+0.9
Germany	29.91	29.92	+0.01	37.2	35.9	−1.3
India *	29.95	29.95	Normal.	73.7	77.5	+3.8
Italy	30.01	29.93	−0.08	51.2	48.5	−2.7
Norway	29.62	29.98	+0.36	32.0	27.4	−4.6
Portugal	30.20	30.00	−0.20	54.8	54.9	+0.1
Russia	29.97	30.12	+0.15	26.3	24.2	−2.1
Spain	30.11	29.96	−0.15	54.9	57.4	+2.5
Sweden	29.71	30.07	+0.36	25.0	15.6	−9.4

* Means for three years only.

The accompanying table shows the deviations in pressure and temperature at isolated stations during the month of February, 1881, as compared with the means of four years:—

Station.	Mean pressure.			Mean temperature.		
	Feb., 1877, '78, '79, '80.	Feb., 1881.	Departure.	Feb., 1877, '78, '79, '80.	Feb., 1881.	Departure.
				°	°	°
San José, Costa Rica, C. A.*	.....	.....	.....	64.7	61.9	−2.8
Gibraltar	30.16	30.01	−0.15	59.9	61.6	+1.7
Malta, Mediterranean Sea	30.04	29.86	−0.18	58.8	59.7	+0.9
Sandwick Manse, Orkney Islands	29.64	29.85	+0.21	40.6	36.1	−4.5
Bridgetown, Barbadoes	30.00	29.98	−0.02	79.7	81.1	+1.4
Cape Town, Cape Good Hope	30.01	29.96	−0.05	78.7	81.2	+2.5
Fort Napier, Natal, South Africa	29.83	29.80	−0.03	77.9	75.0	−2.9
Free Town, Sierra Leone	29 84	29.85	+0.01	78.7	86.0	+7.3
Mauritius, Indian Ocean	29.91	30.01	+0.10	81.4	80.6	−0.8
Melbourne, New South Wales	30.02	30.05	+0.03	65.2	63.4	−1.8
Nassau, Bahamas*	30.11	30.10	−0.01	71.1	71.0	−0.1
Godthaab, Greenland	29.50	29.71	+0.21	14.0	17.6	+3.6
Stykkisholm, Iceland	29.45	29.85	+0.40	31.7	14.5	−17.2
Thorshavn, Faroe Islands	29.55	29.93	+0.38	39.5	37.2	−2.3
Zi-Ka-Wei, China	30.32	30.26	−0.06	38.1	41.0	+2.9
Athens, Greece	30.04	29.94	−0.10	55.3	51.4	−3.9
Cagliari, Sardinia, Italy	30.00	29.87	−0.13	56.7	58.5	+1.8
Tokei, Japan*	30.13	30.06	−0.07	40.7	37.4	−3.3
Angra, Azores	30.15	.....	.....	57.6	.....	.....
Funchal, Madeira Islands	30.24	30.12	−0.12	64.1	63.3	−0.8
Ponta Delgado, Azores	30.20	30.17	−0.03	60.5	58.6	−1.9
Archangel, Russia	29.73	30.09	+0.36	10.0	10.2	+0.2
Tiflis, Russia	30.10	30.06	−0.04	43.6	46.0	+3.2
Astrakhan, Russia	30.11	30.19	+0.08	26.5	26.4	−0.1
Ekaterinburg, Russia	30.01	30.18	+0.17	10.3	12.0	+1.7
Nukuss, Toorkistan, Asia	30.19	30.04	−0.15	36.8	38.1	+1.3
Tashkend, Toorkistan, Asia	30.34	30.17	−0.17	36.3	45.3	+9.0
Barnaul, Siberia, Asia	30.32	30.36	+0.04	4.6	−2.1	−6.7
Pekin, China	30.35	30.31	−0.04	27.9	25.5	−2.4
Nikolaievsk on the Amoor, Asia	.....	.....	.....	−6.5	−1.8	+4.7
San Juan de Puerto Rico, W. I.*	30.07	30.06	−0.01	75.5	72.7	−2.8
Beirut, Turkey in Asia	30.06	29.90	−0.16	61.3	61.0	−0.3
Mexico, Mexico*	30.23	30.26	+0.03	46.1	45.9	−0.2
Havana, Cuba, W. I.	30.05	30.09	+0.04	70.6	70.9	+0.3
Paramaribo, D. Guiana, S. A.	30.02	29.98	−0.04	79.7	77.5	−2.2
York Factory, B. A	30.04	30.22	+0.18	−21.6	−22.4	−0.8

*Means for three years only.

In the United States, the mean temperature of the air was below the normal from the Rocky mountains eastward to the Atlantic, except in the New England states and in the Florida peninsula, where it was about normal. West of the Rocky mountains, the temperature was above the normal. In Canada, the mean temperature was above the normal in all parts of the Dominion, except in the province of Ontario, where it was less than the normal.

In Europe, the mean temperature of the air was below the normal in the northern part of the continent, while, in the southern sections, it was above the normal. In British India, the highest mean temperature was 86°.8 Fah. (30°.4 Cent.), at Nagpur, and the lowest was 66°.4 Fah. (19°.1 Cent.), at Sibsigar.

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

Highest.	Fah.	Cent.	Lowest.	Fah.	Cent.
	°	°		°	°
Freetown, Africa	86.0	30.0	York Factory, B. A.	—22.4	—30.2
Bridgetown, Barbadoes	81.1	27.3	Nertchinsk, Siberia	—13.5	—25.3
Manila, Philippine Islands	80.2	26.8	Yeniseisk, Siberia	— 5.3	—20.7
Peurto Berrio, C. A.	79.0	26.1	Upernavik, Greenland	— 3.5	—19.7

In the United States, the prevailing winds were: northwesterly on the Atlantic coast from Maine to North Carolina, and northerly and easterly from North Carolina to Florida. In the interior of the country and in the lake region, the winds were northerly and easterly; on the Pacific coast, they were southeasterly and southwesterly. In Canada, the prevailing winds were northwesterly in the Maritime Provinces; elsewhere they were generally westerly. Over the north Atlantic ocean, the prevailing winds were as follows: from the coast of North America north of the thirty-fifth parallel, eastward to the fortieth meridian, northwesterly. East of the fortieth meridian the winds were mostly southwesterly, except near the coasts of the British Isles, where northeasterly winds prevailed. South of the thirtieth parallel, the winds were northeasterly. In Europe, the winds were easterly and northeasterly over the British Isles, the Scandinavian peninsula, and along the northwestern coasts of the continent; elsewhere they were southeasterly and southerly, except over the Italian peninsula, where they were northerly and northwesterly. In Japan and in eastern China, the prevailing direction of the wind was northerly.

The rainfall (including melted snow) of the month was above the average in the United States and Canada. In Europe, it was below the average in the northeastern part of central Europe, while in the southwestern section it was above the average. In the British Isles, the rainfall was greater than the average.

For the month of March, 1881, the mean atmospheric pressure over the northern hemisphere was distributed as follows: the most marked area of low pressure occupied the Arctic region to the north of Scandinavia, and included within its limits the extreme northern part of Norway. The barometric gradients increase very slowly to the south and southwestward, but to the eastward the pressure rapidly increases. An area of low mean pressure, inclosed by the isobar of 29.6 (751.8), occupies the Atlantic ocean from the Banks of Newfoundland eastward to the thirtieth meridian, the pressure increasing but slowly on all sides of the central depression. The regions of barometric maxima appear in Siberia and in the territory near Hudson's bay; in the former, the mean pressure is 30.5 (774.7), and in the latter it is 30.2 (767.1).

Compared with the chart for the preceding month, (February, 1881,) a very decided change has taken place in the distribution of pressure, the greatest changes occurring over northern Europe, the Atlantic ocean, and the North American continent. In central Europe, the pressure has increased very slightly; in Algeria and Tunis, it has increased .05, while over the Azores and the Madeira islands, the decrease of pressure averages .25 inch. In Asia, the changes in pressure are unimportant, except over British India, where there is a decrease of about .09 inch. In the United States, the decrease in pressure averages from .15 inch, in the interior of the country, to .45 inch, in the New England states. In Canada, the decrease was equally noteworthy. On the Pacific coast, the decrease averaged about .1 inch. In Greenland, the pressure has increased slightly, while in Iceland, it has decreased about .14 inch.

Compared with the corresponding month of previous years, the mean atmospheric pressure is below the normal in the United States from the one-hundredth meridian eastward to the Atlantic; the region of greatest departures being the middle Atlantic and the New England states. Between the one-hundredth meridian and the Sierra Nevada mountains, the pressure was normal in the southern, and slightly above the normal in the northern districts. In California, it was slightly below the normal. In Canada, the pressure was everywhere much below the normal, the departures ranging between .15 and .25 inch. In Europe, the pressure was slightly below the normal, no very large deviations being shown.

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

Countries.	Mean pressure.			Mean temperature.		
	Mar., 1877, 1878, 1879, 1880.	Mar., 1881.	Departure.	Mar., 1877, 1878, 1879, 1880.	Mar., 1881.	Departure.
				°	°	°
Algeria	30.07	30.07	Normal	62.4	67.3	+4.9
Austria	29.95	29.93	—0.02	43.2	44.5	+1.3
British Isles	29.96	29.88	—0.08	45.3	45.2	—0.1
Denmark	29.88	29.83	—0.05	37.5	35.5	—2.0
France	30.01	29.99	—0.02	52.8	53.4	+0.6
Germany	29.97	29.95	—0.02	41.0	40.5	—0.5
*India	29.78	29.87	+0.09	85.1	81.0	—4.1
Italy	29.97	29.98	+0.01	54.8	55.4	+0.6
Norway	29.78	29.74	—0.04	35.7	30.8	—4.9
Portugal	30.07	29.95	—0.12	59.0	60.0	+1.0
Russia	29.86	29.90	+0.04	33.1	32.2	—0.9
Spain	30.06	29.97	—0.09	58.7	63.0	+4.3
Sweden	29.79	29.70	—0.09	30.1	24.3	—5.8

* Means for three years only.

The accompanying table shows the deviations in pressure and temperature at isolated stations during March, 1881, as compared with the means of four years:—

Stations.	Mean pressure.			Mean temperature.		
	March, 1877, '78, '79, '80.	March, 1881.	Departure.	March, 1877, '78, '79, '80.	March, 1881.	Departure.
				°	°	°
San José, Costa Rica, C. A.*	.....	.....	.....	66.5	64.2	— 2.3
Gibraltar	30.04	30.03	— 0.01	61.5	63.7	+ 2.2
Malta, Mediterranean sea	29.97	29.98	+ 0.01	60.5	64.5	+ 4.0
Sandwick Manse, Orkney islands	29.84	29.65	— 0.19	40.4	37.7	— 2.7
Bridgetown, Barbadoes	29.99	29.99	normal	80.0	83.0	+ 3.0
Cape Town, Cape Good Hope	30.00	29.98	— 0.02	76.9	79.0	+ 2.1
Fort Napier, Natal, South Africa	29.90	29.85	— 0.05	78.4	72.0	— 6.4
Free Town, Sierra Leone	29.90	29.87	— 0.03	87.5	86.7	— 0.8
Mauritius, Indian ocean	29.95	29.95	normal	81.3	81.3	normal
Melbourne, New South Wales	30.09	30.10	+ 0.04	62.4	62.2	— 0.2
Nassau, Bahamas	30.10	30.01	— 0.09	72.7	70.5	— 2.2
Godthaab, Greenland	29.78	29.83	+ 0.05	19.3	20.7	+ 1.4
Stykkisholm, Iceland	29.66	29.71	+ 0.05	32.0	8.2	—23.8
Thorshavn, Faroe islands	29.80	29.65	— 0.15	39.2	34.3	— 4.9
Zi-Ka-Wei, China	30.23	30.35	+ 0.12	44.6	40.5	— 4.1
Athens, Greece	29.98	30.00	+ 0.02	57.7	60.6	+ 2.9
Cagliari, Sardinia, Italy	29.95	29.97	+ 0.02	58.5	62.2	+ 3.7
Tokei, Japan*	30.00	30.14	+ 0.14	43.4	39.8	— 3.6
Angra, Azores	30.20	29.74	— 0.46	58.2	57.2	— 1.0
Funchal, Madeira islands	30.15	30.00	— 0.15	63.9	64.4	+ 0.7
Ponta Delgado, Azores	30.21	29.80	— 0.41	60.6	60.4	— 0.2
Archangel, Russia	29.66	29.68	+ 0.02	22.0	21.2	— 0.8
Tiflis, Russia	29.95	29.97	+ 0.02	54.0	57.4	+ 3.4
Astrakhan, Russia	29.95	30.05	+ 0.10	40.8	40.5	— 0.3
Ekaterinburg, Russia	29.87	30.21	+ 0.34	25.6	28.6	+ 3.0
Nukuss, Toorkistan, Asia	30.00	30.08	+ 0.08	53.8	55.0	+ 1.2
Tashkend, Toorkistan, Asia	30.16	30.03	— 0.13	54.9	59.2	+ 4.3
Barnaul, Siberia, Asia	30.21	30.47	+ 0.26	23.5	20.8	— 2.7
Pekin, China	30.18	30.37	+ 0.19	43.2	41.0	— 2.2
Nikolaievsk on the Amoor, Asia	.....	.....	.....	8.4	4.5	— 3.9
San Juan de Puerto Rico, W. I.*	30.06	30.05	— 0.01	76.5	74.1	— 2.4
Beirut, Turkey in Asia	29.98	30.00	+ 0.02	63.7	63.9	+ 0.2
Mexico, Mexico*	30.18	30.19	+ 0.01	49.9	49.8	— 0.1
Havana, Cuba, W. I.	30.06	30.03	— 0.03	73.0	71.6	— 1.4
Paramaribo, D. Guiana, S. A.	30.02	30.00	— 0.02	80.4	77.8	— 2.6
York Factory, B. A.	30.00	30.28	+ 0.28	—13.1	— 9.5	+ 3.6

* Means for three years only.

In the United States, the mean temperature of the air was below the normal in the southern and central sections of the country, while in the northern part of the country the temperature was normal, or above the normal. In Canada, the temperature was above the normal. In Europe, the mean temperature of the air was below the normal in the northern part of the continent, and above the normal in the southern districts. At the close of the month, frosts were reported in many parts of northern Europe, and abundant snowfalls occurred. Many of the harbors were filled with ice, and navigation was more or less interrupted until the middle of April. In British India, the highest mean temperature, 91° .3 Fahr., (32° .9 Cent.) was reported at Poona, and the lowest, 70° .4 Fahr., (21° .3 Cent.) at Sibsagar.

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

Highest.	Fahr.	Cent.	Lowest.	Fahr.	Cent.
	°	°		°	°
Freetown, Africa	86.7	30.4	York Factory, B. A.	− 9.5	−23.1
Bridgetown, Barbadoes	83.0	28.3	Jacobshavn, Greenland	− 3.5	−19.7
Mauritius, Indian ocean	81.3	27.4	Nikolaievsk on the Amoor	+ 4.5	−15.3
Cape Town, South Africa	79.0	26.1	Stykkisholm, Iceland	+ 8.2	−13.2

In the United States, the prevailing wind-directions were westerly and northwesterly from the ninety-seventh meridian eastward to the Atlantic. In Texas, the winds were southerly and southeasterly. On the Pacific coast, they were generally southerly. Over the north Atlantic ocean, the prevailing winds were mostly westerly and northwesterly from the coast of the United States eastward to the fiftieth meridian; from that meridian eastward to the European coasts, and from N. 25° to N. 45°, the winds were southwesterly. North of the forty-fifth parallel, the winds were mostly northeasterly. In Europe, the winds were mostly westerly and southwesterly. In eastern China and in Japan, the prevailing wind was northerly.

The rainfall during the month of March, 1881, was generally below the average in the United States, except in the lake region and in the northeastern districts of the country, where there was a slight excess. In Canada, the rainfall was below the average, except in the Maritime Provinces, where the precipitation was in excess of the average. In Europe, the rainfall was much above the average.

The following extract, relating to the low temperatures of the winter of 1880—81, is taken from the "Monatliche Uebersicht der Witterung," for March, 1881, published by Professor Dr. G. Neumayer, of Hamburg, Germany:—

"Nature," a periodical published at Christiania, Norway, states: "The past winter has been characterized by long-continued frosts in Norway and the whole of northern Europe. From October, 1880 to March, 1881, a full half year, without interruption, the monthly mean temperatures remained below the normal over the whole of Norway, from Cape Lindesnaes (the Naze), to North Cape, and from the west coast to the frontiers of Sweden. At most of the Norwegian stations, the lowest temperatures ever recorded have been observed during the past winter. The absolute minimum temperature was observed at Karasjok (in Finmark, N. 69° 35′, E. 25° 6′), on February 4th, when the thermometer registered —50°.6 C. (—59° Fahr.). On the 15th of January, at the same place, —50°.5 C. (—58°.9 Fahr.) was also recorded, being only one-tenth of a degree less. So low a temperature as the above, has, so far as known, never before been recorded in this country, and it was only by the use of reliable spirit-thermometers, that such an intense degree of cold could be measured." * * *

Chart v. exhibits the paths of barometric minima for the month of February, 1881, which have been traced from the daily international charts.

The data are charted for each day of the month, on the maps accompanying each issue of the "International Bulletin," and from these charts and from additional reports, are traced the movements of the centres of barometric minima. Twenty-four of the more important atmospheric depressions that have appeared over the northern hemisphere have thus been traced. The following concerns the general distribution of these depressions:—

Eight appeared in the United States and Canada; of these, three developed in the southwestern part of the United States; one appeared on the Pacific coast; and three apparently developed in the North-West Territories of British America. Two depressions, numbers i. and vii., have been traced from the North American continent eastward over the Atlantic to the European coasts.

Eleven depressions appeared over Europe; one of these apparently originating in mid-ocean. One storm developed in Greenland and moved in a southeasterly direction over the British Isles, and four depressions are shown over the southern part of Europe.

Three areas of low pressure are exhibited over Asia; two of these occupied eastern Asia, and one appeared in the western part of the continent.

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

I.—This disturbance was in eastern Tennessee on the morning of the 1st, and was probably a continuation of low-area xi., of the January chart. During the day, it passed eastward into the Atlantic, attended by strong northeasterly gales along the coast of the United States; and on the 2d, it was central near N. 40°, W. 58°. On that date, the s. s. "Illinois," in N. 41° 06′, W. 58° 08′, reported barometer 29.31 (744.5), wind e., force 7; rough easterly sea and rainy weather; and the s. s. "Rhein," in N. 44°, W. 56°, had a strong se. gale and heavy snow-storm. During the 2d, the depression moved northeastward, with decreasing pressure at the centre, and on the 3d, was central near N. 48°, W. 47°; the s. s. "Pennsylvania," in N. 45° 32′, W. 49° 18′, reported barometer 28.83 (732.3), wind w., force 6, cloudy; while strong westerly gales of force 7 to 9 were reported by vessels in the southern quadrants. On the morning of the 4th, the disturbance occupied nearly the same position as on the preceding day, but the pressure appears to have increased at the centre, and the wind diminished in force; during the 4th, the disturbance apparently moved slowly northeastward, and on the 5th, the region of least pressure was transferred to about N. 51°, W. 32°. On that day, the s. s. "Adriatic," in N. 49° 13′, W. 26° 55′, reported barometer 29.59 (751.6), wind s., force 6; and the s. s. "Illinois," in N. 46° 45′, W. 37° 42′, reported barometer 29.67 (753.6), wind wnw., force 5, fair. During the 6th, the disturbance moved toward the coasts of the British Isles, and on the 7th, it appeared as a somewhat deep depression, central north of Ireland. This storm is hereafter described as low-area xiii. of this chart.

II.—This storm appeared off the north Pacific coast on the 1st, causing very heavy rains in Oregon and Washington Territory. The disturbance moved southeastward with increasing pressure, and finally disappeared in Missouri on the 2d.

III.—From the 4th to the 9th, the barometer remained low and fluctuating, over the country west of the one-hundredth meridian, but on the morning of the last-mentioned date, the storm-centre became well defined in the Gulf states, where the lowest barometer, 29.46 (748.3), was reported at Vicksburg, Mississippi. During the day, the depression moved nearly due northward, attended by very heavy rains, and, on the morning of the 10th, the storm-centre appeared in the lake region, the lowest barometer, 29.37 (746.0), being reported from Alpena, Michigan. A rapid increase of pressure then set in, and the depression moved with greatly diminished energy over the Canadian provinces, and disappeared probably in Labrador.

From the 5th to the 7th, a severe storm prevailed over the eastern part of the Gulf of Mexico, during which numerous shipping disasters occurred. The data in connection therewith are too indefinite to admit of a charting of the track of this storm.

IV.—This storm was a secondary development of low-area iii., and, on the morning of the 11th, it appeared as a large

depression over the Gulf states, with its centre probably near Memphis, Tennessee. It moved in a path nearly parallel to that of low-area iii., and on the 12th, was central in Michigan, the barometer within the region of least pressure ranging from 29.23 (742.4), to 29.40 (746.7), while rain prevailed in the southern and eastern, and light snow in the western quadrants of the depression. On the 12th, the course changed to the eastward, and the depression moved down the Saint Lawrence valley, attended by rain and snow. During the 13th, the storm moved in a northeasterly direction over the Gulf of Saint Lawrence and disappeared on the 14th, to the northward of Newfoundland.

V.—From the 15th to the 17th, the atmospheric pressure was very unsteady in the southwest, but, on the 17th, a marked decrease of pressure occurred in Texas, accompanied by light rains and a decided rise in temperature. During the 18th and 19th, the disturbance moved east-northeastward, and on the last-named day, it was shown as a trough of low pressure, occupying the Atlantic coast states from North Carolina northeastward to the Canadian Maritime Provinces, attended by heavy rains in the middle Atlantic and New England states. On the 19th, the storm moved northeastward along the coast, skirting the coast of Nova Scotia, and on the following day, it disappeared to the northeastward of Newfoundland.

VI.—This depression probably developed in the Saskatchewan valley during the 18th, and on the 19th, it appeared as a storm of slight energy in Montana, and moving eastward during the day, was central over Lake Superior on the 20th. On the morning of the 21st, the region of least pressure was transferred to the Atlantic; the disturbance then moved northeastward along the coast, causing heavy snow in the Canadian Maritime Provinces. On the 23d, the depression was central south of Newfoundland, the storm having developed increased energy after reaching the ocean, but it apparently dissipated on the following day.

VII.—This disturbance appeared in the northwest on the 21st; it moved eastward and appeared as a well-defined area of low barometer over the lake region on the 22d. On the 23d, the disturbance occupied the Saint Lawrence valley, the Maritime Provinces and the New England states, in the form of an elongated area of low barometer. On the 24th, the centre of disturbance was in Nova Scotia, the pressure decreasing as the depression moved eastward. After the passage of this disturbance the barometer rose rapidly and strong northwesterly gales occurred at stations on the lakes, and in Canada. On the 25th, the storm-centre was near N. 46°, W. 44°, the s. s. "Scythia," in N. 45° 22′, W. 44° 41′, reporting barometer 29.51 (749.5), wind se., force 3, cloudy; and the s. s. "Wisconsin," in N. 45°, W. 46°, had a strong e. to nw. gale with snow. From the 26th to the close of the month, the disturbance appears to have remained nearly stationary over mid-ocean, attended by moderate to strong gales and snow.

VIII.—This disturbance developed in the North-West Territories of British America, and on the 25th, it appeared as an extensive depression in Dakota and Montana. During the day, the disturbance moved in a southeasterly track and by the morning of the 26th, was central in Kansas; southerly and southeasterly winds prevailed at stations to the east of the centre, with rainy weather in the southeastern quadrant. On the 27th, the course changed to the eastward, and the disturbance was central in Illinois and Indiana; the region of least pressure extending from central Michigan to northern Kentucky, within which region, cloudy weather and light rains prevailed. During the 27th, the depression moved slowly eastward, and on the 28th, the region of least pressure was apparently in Ontario, causing heavy rain in the Maritime Provinces.

The following descriptions relate to the storms that occurred over the Atlantic and in Europe during the month:—

IX.—On the 1st, an elliptical area of low pressure, inclosed by the isobar of 29.4 (746.7) occupied the north Atlantic ocean between the parallels of forty and fifty, north latitude, and the meridians of thirty and fifty, west longitude. On the morning of the 2d; the isobaric line of 29.6 (751.8) extended from the British Isles westward to Newfoundland and the Canadian Maritime Provinces; within this area were apparently two storm-centres; one, (low area i.), to the southward of Newfoundland, and the other probably in the vicinity of N. 51°, W. 23°, as on that day the s. s. "Suevia," in N. 49°, W. 22°, reported strong sw. winds with very heavy rain squalls and high sea. By the morning of the 3d, the storm-centre became more marked and was then very near to the western coast of Ireland, causing a rise in temperature with rainy weather and strong southerly winds over England and Ireland. Moving northeastward along the Irish coast, the disturbance, on the 4th, was shown in northern Scotland; on the morning of the 5th, it was over the North sea, the area of decreasing pressure extending in a southeasterly direction, and causing a barometric fall over the northeastern part of England, southern Norway, and northern Germany. On the morning of the 6th, the disturbance appeared as an enlongated area of low pressure covering the whole of the Scandinavian peninsula, the lowest barometric readings being in southern Sweden; the wind changed to northerly over the British Isles, and the pressure rapidly increased, attended by lower temperature; but over Scandinavia there was a decided rise in temperature and light rains fell at stations in the southern quadrants of the depression. The track of the depression appears to have changed to the northeastward and the disturbance moved toward the White sea, where it was central on the 7th, accompanied by a rise in temperature and strong southerly winds. On the morning of the 8th, the depression maintained the same position as on the preceding day, but it gradually disappeared during the day.

X.—This is a continuation of the disturbance traced as low-area xxvi., on chart v., for January, 1881. On the morning of February 1st, the disturbance was central, with increasing pressure, off the coast of southern Norway, and on the following day, the depression filled up under the influence of an area of high pressure which was gradually extending over the Scandinavian peninsula.

XI.—This disturbance appeared over the Mediterranean on the 5th; by the 6th, the area of least pressure was situated over southern Italy and was accompanied by rain. On the 7th, the depression was probably central near the entrance to the Adriatic sea, the wind having changed to northwesterly over the Italian peninsula. On the 8th, a slight increase of pressure occurred, but this again gave way on the following day. During the 9th and 10th, the region of least pressure was over the Archipelago, attended by rain at Constantinople on the latter date. On the 11th, the disturbance disappeared near the Caspian sea.

XII.—This disturbance formed apparently to the southeastward of the Bermudas during the 6th and 7th. On the 7th, the bark "Commewyne," in N. 32° 02′, W. 55° 29′, reported barometer 29.79 (756.7), being a fall of .2 inch, wind shifting from nw. to ne., force 2; the schooner "Annie R. Lewis," in N. 22° 31′, W. 56° 08′, reported barometer 29.81 (757.2), wind sw., force 5, and strong northerly gales were reported by vessels to the westward. On the 8th, the pressure decreased, and the area of the disturbance apparently became more extensive, but the region of least pressure moved very slowly, while the winds increased in force in all quadrants of the depression. The bark "Commewyne," in N. 31° 45′, W. 55° 14′, reported barometer 29.58 (751.3), wind nne., force 9, drizzling; the schooner "Annie R. Lewis," in N. 20° 11′, W. 55° 34′, barometer 29.69 (754.1), wind nw., force 7, overcast. During the 9th and 10th, the barometer remained low over the region between 20° and 30° north latitude, and 50° and 60° west longitude; the ship "Yorkshire," off Bermuda (no latitude or longitude given), encountered a heavy gale lasting from the 7th to the 9th, during which she had bulwarks stove, decks swept, and sustained other damage. On the 10th, the barome-

ter began to rise, and generally fair weather set in over the region above named.

XIII.—This is a continuation of the storm described as low-area i. of the present chart. On the morning of the 7th, the depression appeared off the Irish coast, causing a rise in temperature and severe southerly and southeasterly gales, with rain and snow in all parts of the British Isles. On the 8th, the centre of disturbance was over the North sea and off the eastern coast of Scotland, the lowest barometric reading being 28.94 (735.1), at Aberdeen, wind wnw., while strong westerly and northwesterly gales prevailed at all stations west of the centre. During the 8th, the depression moved, in a course slightly south of east, over the Scandinavian peninsula, and, on the 19th, was central over the Baltic, causing rain and snow over nearly all parts of northwestern Europe. On the 10th, the disturbance passed into northwestern Russia, and gradually disappeared.

XIV.—This was a deep depression, 28.60 (726.4), which appeared off the north of Ireland on the 10th, and caused a rapid decrease of pressure over western Europe. Strong westerly and southwesterly gales occurred over England and Ireland, and equally strong southeasterly gales prevailed in Scotland, while rain fell in the British Isles and the northwestern coast of Europe, except in the northern part of Scotland, were the precipitation was in the form of snow. During the 10th, the disturbance moved quickly eastward, having assumed an elliptical form, and on the 11th, the region of least pressure was situated over the eastern part of the Baltic. A brisk increase of pressure followed immediately in rear of the depression, and the barometric gradients became steep over the British Isles, causing strong northerly and northwesterly gales over these islands.

XV.—This was probably a secondary development of the preceding storm, low-area xiv. It apparently moved in a southeasterly direction over England and the North sea, and on the 11th, was central in Germany. By the 12th, it appeared as a well-defined storm-centre in the southeastern part of Austro-Hungary. During the 13th, 14th, and 15th, the disturbance occupied southwestern Russia and the Black sea, causing higher temperature and cloudy weather, with moderate to strong breezes over that region. On the 16th, the disturbance disappeared in the Caucasus.

XVI.—On the 11th, the pressure decreased about .45 inch in southern Greenland, and on the 12th, a well-defined storm-centre appeared to the southwestward of Iceland, causing a strong easterly gale of force 8, at Stykkisholm, while strong westerly gales were experienced by vessels near the fifty-second parallel. During the 12th, the disturbance appears to have moved due southward, and on the 13th, was central near N. 55°, W. 30°; the s. s. "Celtic," in N. 49° 29′, W. 31° 27′, reported barometer 29.13 (739.9), wind nw., force 6, cloudy, and the s. s. "Belgenland," in N. 49° 13′, W. 25° 20′, barometer 29.03 (737.3), wind sw., force 9, showery. On the 14th, the disturbance was central off the southwest coast of Ireland, causing moderate southerly gales, with rain or snow at stations in northwestern France. On the 15th, the disturbance was over the southern part of the Bay of Biscay, where it appears to have dissipated during the day.

XVII.—This depression developed in Greenland during the 14th and 15th, and disappeared north of Iceland on the following day, without exhibiting any special energy. From the 16th to the 20th, the barometric readings remained low over Greenland and Iceland.

XVIII.—This was a slight depression which appeared off the northwestern coast of Spain on the 18th, and moved in a southeasterly direction over the peninsula during the 19th and 20th. The disturbance was attended by rising temperatures and rain at most stations in Spain, but no high winds were reported.

XIX.—On the 23d, there was a decrease of pressure over the Madeira islands, accompanied by southwesterly winds and rain, while vessels near the fortieth parallel experienced strong easterly and northeasterly winds, indicating the presence of an atmospheric disturbance near the Madeiras. By the 25th, the disturbance appeared as a well-defined storm-centre near the straits of Gibraltar, causing rain at stations in Spain, and high southerly winds in Algeria. On the 26th, an elongated area of low pressures occupied the western part of the Mediterranean, Algeria, the Iberian peninsula, and the Atlantic ocean westward as far as the fortieth meridian: within this area, the lowest barometric readings appeared to be over the Mediterranean, where generally stormy weather prevailed; these conditions being maintained until the close of the month.

XX.—This is a slight depression which appeared in northern Germany on the 25th; it moved northeastward, and on the morning of the 26th, was central over the Baltic; the isobaric line of 29.8 (756.9), which indicated the region of least pressure, having an elliptical form. Strong northerly gales, with snow, prevailed over the Baltic, and a slight rise in temperature occurred during the passage of the disturbance. During the 27th and 28th, the depression moved slowly northeastward, and, at the close of the month, it occupied northwestern Russia.

XXI.—This disturbance probably developed in the southern part of the Bay of Biscay during the 27th, and by the morning of the 28th, was central in France, causing moderate winds and rain at stations on the shores of the Bay of Biscay. A continuation of the track of this depression will probably appear on the chart for March, 1881.

The following descriptions are given of the storms that appeared in Asia during the month:—

XXII.—This depression appeared west of the Ural mountains on the 4th, attended by rising temperature and snow. On the 5th, the disturbance moved slowly eastward, causing a strong southwesterly gale at Akmolinski, Asiatic Russia, where the wind reached a velocity of forty miles an hour. On the 6th, the disturbance moved through Siberia, and on the 7th, it passed beyond the stations of observation.

XXIII.—From the 4th to the 7th, an area of low pressure occupied Tartary and the region near the Sea of Okhotsk. On the 5th, the barometer at Nikolaievsk on the Amoor, read 29.09 (738.9), and a strong westerly gale occurred at that station.

XXIV.—This disturbance probably developed in the interior of the Chinese Empire, and moved slowly northeastward. On the 22d, the depression passed northeastward, probably at some distance from Zi-Ka-Wei, China, causing a decrease of pressure at that station. On the 23d, the depression passed into the Yellow sea, the wind at Zi-Ka-Wei shifting to northerly and blowing a gale accompanied by thunder and lightning and heavy rain, and a decided fall in temperature. During the 24th and 25th, the disturbance passed over Japan, causing strong gales over the Yellow sea after the passage of the centre, and finally disappeared in the Pacific ocean on the last-mentioned date.

Mr. Marc Dechrevens, of Zi-Ka-Wei Observatory, in the "Bulletin Mensuel," for February, 1881, states that eight atmospheric depressions were registered during the month of February. These passed to the northward of Zi-Ka-Wei, causing southeasterly shifting to westerly and northwesterly winds at that station; the northwest winds generally exhibiting the greatest force.

GENERAL REMARKS.

All data which appear in the DAILY BULLETIN OF SIMULTANEOUS METEOROLOGICAL OBSERVATIONS are copied from the regular exchanges of this office. The barometer readings for land stations, in the first and second columns, are reduced to freezing and their respective standards; those in the third and fourth columns to sea-level. When necessary, corrections for instrumental error, temperature, and reduction to sea-level are applied at this office. In the naval and marine series, corrections for temperature and reduction to sea-level are always applied, while those for instrumental error, only when such corrections can be ascer-

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

ALGERIAN SERIES.—The originals give the barometer in millimetres reduced to sea-level; temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The rainfall is measured at 7 a. m., local time, and the amount indicated in millimetres.

AUSTRALIAN SERIES.—At Melbourne, the conversions are published as given in the originals. The movement of the air is indicated by velocity in miles per hour.

AUSTRO-HUNGARIAN SERIES.—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. At the following stations rainfall is measured at local time: Lemburg, 7 p. m.; Vienna, 2 p. m.; Trieste, 7 a. m. The weather is given by the Vienna symbols or in general terms.

BRITISH SERIES.—In general the originals do not give rainfall or distinction between upper and lower clouds. Relative humidity, except for Bradford and Silloth Rectory, is not given on the originals, but is computed from hygrometrical observations. At Cardington, Galway, Oxford, and Sandwick Manse the barometers are given as read off. The movement of the air is indicated by force, on a scale of 0 to 12, except pounds pressure per square foot at Greenwich. At the following stations rainfall is measured at local time: Bradford, 9 a. m., and Aberdeen, 10 a. m. The wind direction is given to 32 points and weather by the Beaufort notation.

CANADIAN SERIES.—The originals give the barometer reduced to sea-level in English inches and the temperature in Fahrenheit.

CAPE COLONY SERIES.—At Cape Town, the barometer is given on the original as corrected for temperature only. Upper and lower clouds are given on a scale of 0 to 10 and the kind occasionally indicated by abbreviating Poëy's classification.

CHINESE SERIES.—At Zi-Ka-Wei, the originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is given in metres per second and the directions to 16 points. The kind of clouds is occasionally given, and the degree of cloudiness on the scale of 0 to 10; distinction between upper and lower clouds is sometimes made. The weather is given in general (French) terms. The rainfall is given in millimetres and measured at the moment of simultaneous observation. At Hankow the originals give the barometer in inches, temperature in Fahrenheit and force on scale of 0 to 10.

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

FRENCH SERIES.—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in metres per second, for Mont Louis and Perpignan. In general, the rainfall is measured at 9 a. m., local time, but at Lyons at the moment of simultaneous observation. The direction of upper and lower clouds is given, but no distinction is made as to kind. The degree of cloudiness is given on a scale of 0 to 4 at Clermont-Ferrand, Commune de Greasque and Puy de Dome, while at other stations the scale of 0 to 10 is employed, or general weather terms, from which the amount of cloudiness is inferred. The weather is given in general terms, except occasionally by the Vienna symbols at Mont Louis and Perpignan. At Guéret, the observations are taken at 12, instead of 12.16. At Gap, the observations are taken at 12.03 p. m., instead of 12.32 p. m.

GERMAN SERIES.—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The kind of clouds is occasionally given, but no distinction is made between upper and lower clouds. Distinction is also made as to direction and kind, but not as to amount. The amount is given on a scale of 0 to 10, but the kind is rarely given. The weather is given in Vienna symbols or in general terms. At Berlin, observations are taken at 2 p. m., instead of 1.02 p. m.

GREEK SERIES.—The originals give the barometer corrected for temperature only and the thermometer in Centigrade. Hygrometrical observations are not given. The kind of clouds is occasionally given, and the amount is inferred from the general weather terms. The movement of the air is indicated by force on the scale of 0 to 10.

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

ITALIAN SERIES.—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometres per hour, or by force on a scale of 0 to 4 as at Mondovi, Florence, and Cagliari. No distinction is made between upper and lower clouds and the amount is given on a scale of 0 to 10.

JAPANESE SERIES.—The rainfall is measured at 9.30 a. m., local time, and the conversions are all published as given in the originals. Distinction is generally made between upper and lower clouds and the amount is given on the scale of 0 to 10. The weather is given in general terms.

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

MEXICAN SERIES.—All conversions (subject to correction at this office) are published as given in the originals. The kind of clouds is given, and also the direction and amount of both upper and lower. The degree of cloudiness is indicated on the scale of 0 to 10.

NETHERLANDS SERIES.—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by pressure in kilograms per square metre, except at Hellevoetsluis, which gives force on the scale of 0 to 12. The humidity is not given on the originals, but for two stations it is computed from the hygrometrical observations. The weather is only given for Utrecht, from which the amount of cloudiness at that station is inferred.

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

PORTUGUESE SERIES.—In the originals the barometer is given in millimetres and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometres per hour. The weather is occasionally given by the Vienna symbols. The rainfall is measured at noon of each day.

RUSSIAN SERIES.—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. At Astrakhan, the barometer-cistern is below sea-level. The movement of the air is indicated by velocity in metres per second. No distinction is made between upper and lower clouds; the amount is given on the scale of 0 to 10 and the kind occasionally. The weather is occasionally given by the Vienna symbols. At Barnaul, observations are taken at 6.18 p. m., local time.

SCOTTISH SERIES.—The originals give the barometer as read off and the movement of the air as indicated by force on a scale of 0 to 6. Distinction is made between upper and lower clouds as to degree, and the amount of cloudiness is given on a scale of 0 to 10. The direction of upper clouds is given separately. The rainfall, temperature, and humidity are not given at North Unst. The wind direction is given to 32 points.

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

SWEDISH SERIES.—The originals give the barometer in millimetres reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in metres per second for Upsala. The kind of clouds is not given, but the degree of cloudiness is indicated on a scale of 0 to 10. The rainfall is measured at 8 a. m., local time, and the weather is occasionally given by the Vienna symbols.

SWISS SERIES.—The originals give the barometer in millimetres, corrected for temperature only, and the thermometer in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10, and at Zurich on a scale of 0 to 4. The rainfall at Zurich is measured at 9 a. m., local time, and the remainder of the observation is taken at 1.13 p. m., local time.

TURKISH SERIES.—The originals give the barometer in millimetres reduced to sea-level. The temperature is given in Centigrade. The movement of the air is indicated by force on a scale of 0 to 7 for Valona, and on a scale of 0 to 12 for Beirut. At Constantinople the velocity is given in metres per second. The kind of clouds is not given, but the amount is indicated on a scale of 0 to 10, except at Valona, at which station it is inferred from the general weather terms.

UNITED STATES SERIES.—The originals generally give the barometer reduced to sea-level and the temperature in Fahrenheit. At Bogota and Navassa, the barometer is corrected for temperature only; at Puerto Berrio, is given as read off, and at Rivas, is omitted. The movement of the air is generally indicated by velocity in miles per hour, except on a scale of 0 to 10 for Bogota, Paramaribo, and Rivas, and 0 to 12 for Puerto Berrio. The wind direction is generally given to 16 points, except 8 points for Bogota and 32 points for Rivas.

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

PORTUGUESE NAVAL SERIES.—The originals give the barometer in millimetres, corrected for temperature only and the thermometer in Centigrade. The movement of the air is indicated by force on the scale of 0 to 10. The humidity is not given, but is computed from the hygrometrical observations. The kind of clouds is not given, but the amount is indicated on the scale of 0 to 10; the direction of movement is given without distinction between upper and lower. The height of sea-disturbance is given on the scale of 0 to 9, and the weather by the Beaufort notation. The rainfall is not measured, but the duration is generally given in hours and minutes.

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

UNITED STATES NAVAL SERIES.—The originals give the barometer as read off. The humidity is not given, but is computed from the hygrometrical observations. The sea-swell and weather are given in general terms. The direction of the wind is compass direction, corrected for variation.

MERCHANT-MARINE SERIES.—Same as U. S. Naval.

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

ERRATA.

MONTHLY SUMMARY, February, 1881, page 2, Cape Colony series, Cape Town, temperature 45.5° F., 7.5° C., should read 81.2° F., 27.3° C.; page 4, Russian series, Ekaterinburg, temperature 34.3° F., 1.3° C., should read 12.0° F., or —11.1° C.

July, 1881, page 1, British series, Silloth Rectory, the letter

"a" opposite this station, representing one observation missing, should be omitted.

DAILY BULLETIN, February 9, 1882, page 1, Cape Colony series, Cape Town, reduced barometer 29.09 inches, should read 29.99 inches.

12th, page 7, Portuguese Naval, Quanza, barometer 762.1 mm., should read 761.9 mm.

14th, page 3, Italian series, Cosenza, velocity 1.0 metres, should read 1.9 metres; page 12, Miscellaneous, bk. "Pilgrim," W. 12° 39′, should read 29° 39′.

17th, page 6, Ooglaamie, Point Barrow, Alaska, temperature —18.6° F., should read —8.6° F; United States sub-series, York Factory, B. A., reduced barometer 30.88 inches, should read 30.78 inches.

19th, page 10, Ocean S. S. Co., s. s. "Seminole," S. 35° 05′, should read N. 35° 05′.

22d, page 6, New Shoreham, Rhode Island, reduced barometer 29.69 inches, should read 29.66 inches.

23d, page 5, Cape May, New Jersey, velocity 6.5 metres, should read 16.5 metres.

28th, page 2, Canadian series, Chatham, N. B., rainfall 0.03 inches, should read 0.01 inches.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj Gen'l,
Chief Signal Officer, U. S. A.

Office of the Chief Signal Officer,

UNITED STATES ARMY.

Charted from Actual Observations taken Simultaneously, Series commencing November, 1877.

Storm-tracks in *Black*. The Arabic numerals show location of the centres of Low Barometer, at 7:00 A. M., Washington mean time, of that date.

Broken or dotted lines, are doubtful.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

Brig. & Bvt. Maj. Gen'l.
Chief Signal Officer, U. S. A.

INTERNATIONAL CHART.

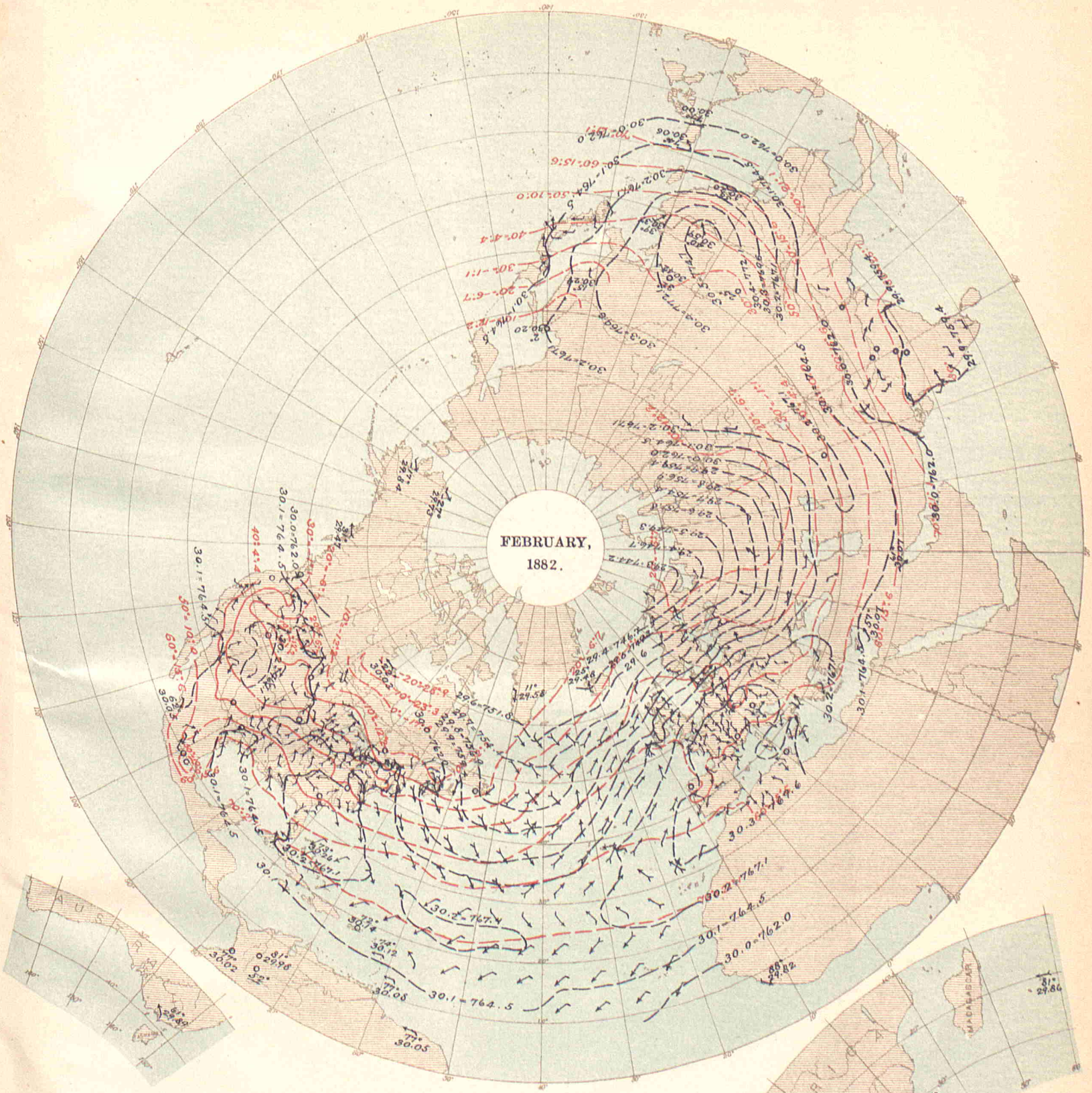
Showing Tracks of Centres of Low Barometer for February, 1881,

Heliotype Printing Co. Boston.

Office of the Chief Signal Officer,

UNITED STATES ARMY.

Charted from Actual Observations taken Simultaneously, Series commencing January, 1877.



PREVAILING WINDS.

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

Symbols.	Force.	Velocity.	
		Miles per hour.	Metres per second.
O	0	0	0
	1, 2	0 to 9	0 to 4.0
	3, 4	9.1 to 22.5	4.1 to 10.1
	5, 6	22.6 to 40.5	10.1 to 18.1
	7, 8	40.6 to 67.5	18.1 to 30.2
	9, 10	67.6 up.	30.2 & over.

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Chief Signal Officer, U. S. A.

Heliotype Printing Co. Boston.

ISOBARS AND ISOTHERMS.

Isobars in *black;* detached barometer means in English inches.

Isotherms in *red;* detached temperature means in degrees Fahrenheit.

Broken lines, are doubtful.

INTERNATIONAL MONTHLY CHART.

Showing mean pressure, mean temperature, mean force and prevailing direction of winds at 7:00 A. M., Washington mean time, for the month of February, 1882, based on the daily charts of the International Bulletin.